

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the fiscal year ended March 31, 2019

OR

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the transition period from _____ to _____

Commission File Number: 0-21184



MICROCHIP TECHNOLOGY INCORPORATED

(Exact Name of Registrant as Specified in Its Charter)

Delaware

86-0629024

(State or Other Jurisdiction of Incorporation or Organization)

(IRS Employer Identification No.)

2355 W. Chandler Blvd., Chandler, AZ 85224-6199
(Address of Principal Executive Offices, Including Zip Code)

(480) 792-7200
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.001 Par Value Per Share	MCHP	NASDAQ® Global Market

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by checkmark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Aggregate market value of the voting and non-voting common equity held by non-affiliates as of September 30, 2018 based upon the closing price of the common stock as reported by the NASDAQ Global Market on such date was approximately \$18,239,644,611.

Number of shares of Common Stock, \$0.001 par value, outstanding as of May 28, 2019: 237,926,508 shares

Documents Incorporated by Reference

Document
Proxy Statement for the 2019 Annual Meeting of Stockholders

Part of Form 10-K
III

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES

FORM 10-K

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PART I

This Form 10-K contains certain forward-looking statements that involve risks and uncertainties, including statements regarding our strategy and future financial performance and those statements identified under "Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations – Note Regarding Forward-looking Statements." Our actual results could differ materially from the results described in these forward-looking statements as a result of certain factors including those set forth under "Item 1A – Risk Factors," beginning below at page 12, and elsewhere in this Form 10-K. Although we believe that the matters reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on these forward-looking statements. We disclaim any obligation to update information contained in any forward-looking statement. In this Form 10-K, "we," "us," "our," and "Microchip" each refers to Microchip Technology Incorporated and its subsidiaries.

Item 1. BUSINESS

We develop, manufacture and sell specialized semiconductor products used by our customers for a wide variety of embedded control applications. Our product portfolio comprises general purpose and specialized 8-bit, 16-bit, and 32-bit microcontrollers, 32-bit microprocessors, field-programmable gate array (FPGA) products, a broad spectrum of high-performance linear, mixed-signal, power management, thermal management, discrete diodes and Metal Oxide Semiconductor Field Effect Transistors (MOSFETS), radio frequency (RF), timing, timing systems, safety, security, wired connectivity and wireless connectivity devices, as well as Serial Electrically Erasable Programmable Read Only Memory (EEPROM), Serial Flash memories, Parallel Flash memories, Serial Electrically Erasable Random Access Memory (EERAM) and Serial Static Random Access Memory (SRAM). We also license Flash-IP solutions that are incorporated in a broad range of products. Our synergistic product portfolio targets thousands of applications worldwide and a growing demand for high-performance designs in the automotive, aerospace, defense, space, communications, computing, consumer and industrial control markets. We comply with several quality systems, including: ISO9001 (2015 version), IATF16949 (2016 version), AS9100 (2016 version), and TL9000.

Microchip Technology Incorporated was incorporated in Delaware in 1989. Our executive offices are located at 2355 West Chandler Boulevard, Chandler, Arizona 85224-6199 and our telephone number is (480) 792-7200.

Our Internet address is www.microchip.com. We post the following filings on our website as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission:

- our annual report on Form 10-K
- our quarterly reports on Form 10-Q
- our current reports on Form 8-K
- our proxy statement
- any amendments to the above-listed reports filed or furnished pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934

All of our SEC filings on our website are available free of charge. The information on our website is **not** incorporated into this Form 10-K.

Acquisition of Microsemi

On May 29, 2018, we completed our acquisition of Microsemi Corporation (Microsemi), a publicly traded company headquartered in Aliso Viejo, California. We paid an aggregate of approximately \$8.19 billion in cash to the stockholders of Microsemi. The total consideration transferred in the acquisition, including approximately \$53.9 million of non-cash consideration for the exchange of certain share-based payment awards of Microsemi for stock awards of Microchip, was approximately \$8.24 billion. In addition to the consideration transferred, we recognized in our consolidated financial statements \$3.23 billion in liabilities of Microsemi consisting of debt, taxes payable and deferred, pension obligations, restructuring, and contingent and other liabilities of which \$2.06 billion of existing debt was paid off. We financed the purchase price using approximately \$8.10 billion of borrowings consisting of \$3.10 billion of loans under our revolving line of credit (the "Revolving Credit Facility"), \$3.00 billion of term loans ("Term Loan Facility") provided under our amended and restated Credit Agreement, and \$2.00 billion in newly issued senior secured notes. We incurred \$22.0 million in costs related to the acquisition. As a result of the acquisition, Microsemi became a wholly owned subsidiary of Microchip. Microsemi offers a comprehensive portfolio of semiconductor and system solutions for aerospace and defense, communications, data center and industrial markets. Our primary reason for this acquisition was to expand our range of solutions, products and capabilities by extending our served available market.

Industry Background

Competitive pressures require original equipment manufacturers (OEM) of a wide variety of products to expand product functionality and provide differentiation while maintaining or reducing cost. To address these requirements, manufacturers often use integrated circuit-based embedded control systems that enable them to:

- differentiate their products
- replace less efficient electromechanical control devices
- reduce the number of components in their system
- add product functionality
- reduce the system level energy consumption
- make systems safer to operate
- decrease time to market for their products
- significantly reduce product cost

Embedded control systems have been incorporated into thousands of products and subassemblies in a wide variety of applications and markets worldwide, including:

- automotive comfort, safety, information and entertainment applications
- remote control devices
- handheld tools
- large and small home appliances
- portable computers and accessories
- robotics
- energy monitoring
- thermostats
- motor controls
- security systems
- smoke and carbon monoxide detectors
- consumer electronics
- power supplies
- applications needing touch buttons, touch screens and graphical user interfaces
- medical devices
- avionics
- actuators
- satellite power systems
- routers and video surveillance systems
- storage and server systems
- communication infrastructure systems

Embedded control systems typically incorporate a microcontroller as the principal active, and sometimes sole, component. A microcontroller is a self-contained computer-on-a-chip consisting of a central processing unit, often with on-board non-volatile program memory for program storage, random access memory for data storage and various analog and digital input/output peripheral capabilities. In addition to the microcontroller, a complete embedded control system often incorporates application-specific software, various analog, mixed-signal, timing, connectivity, security and non-volatile memory components such as EEPROMs and Flash memory.

The increasing demand for embedded control has made the market for microcontrollers a significant segment of the semiconductor market at \$19 billion in calendar year 2018. Microcontrollers are primarily available in 8-bit through 32-bit architectures. 8-bit microcontrollers remain very cost-effective for a wide range of high-volume embedded control applications and, as a result, continue to represent a significant portion of the overall microcontroller market. 16-bit and 32-bit microcontrollers provide higher performance and functionality, and are generally found in more complex embedded control applications. FPGAs are programmable integrated circuits that are used to implement complex logic functions and can be re-programmed at any time, allowing for multiple implementations and revisions during or after the end customer system is manufactured. Some versions of FPGAs also include a microcontroller or microprocessor core to provide additional system on chip functionality for compute intensive tasks. The analog and mixed-signal segment of the semiconductor market is very large at \$56 billion in calendar year 2018, and this market is fragmented into a large number of sub segments.

Our Products

Our strategic focus is on embedded control solutions, including:

- general purpose and specialized microcontrollers and 32-bit microprocessors
- wired and wireless connectivity products
- development tools and related software
- FPGA products
- analog, interface, mixed signal, timing, timing systems and security products
- discrete diodes and MOSFETS
- memory products
- technology licensing

We provide cost-effective embedded control solutions that also offer the advantages of small size, high performance, extreme low power usage, wide voltage range operation, mixed signal integration, and ease of development, thus enabling timely and cost-effective integration of our solutions by our customers in their end products.

Microcontrollers

We offer a broad family of proprietary general purpose microcontroller products marketed under multiple brand names. We believe that our microcontroller product families provide leading function and performance characteristics in the worldwide microcontroller market. With over 3,700 microcontrollers in our product portfolio, we target the 8-bit, 16-bit, and 32-bit microcontroller and 32-bit embedded microprocessor markets. We have shipped more than 25 billion microcontrollers to customers worldwide since 1990. We also offer specialized microcontrollers for automotive, industrial, computing, communications, lighting, power supplies, motor control, human machine interface, security, wired connectivity and wireless connectivity.

We leverage our circuit design, process technologies, development tools, applications knowledge, and manufacturing experiences to enable our customers to implement various embedded control functions in their end systems with our microcontrollers.

Development Tools

We offer a comprehensive set of low-cost and easy-to-learn application development tools. These tools enable system designers to quickly and easily program our microcontroller products for specific applications and, we believe, they are an important factor for facilitating design wins.

Our family of development tools for our microcontroller products range from entry-level systems, which include an assembler and programmer or in-circuit debugging hardware, to fully configured systems that provide in-circuit emulation capability. We also offer a complete suite of compilers, software code configurators and simulators. Customers moving from entry-level designs to those requiring real-time emulation are able to preserve their investment in learning and tools as they migrate to future microcontroller devices in our portfolio.

Many independent companies also develop and market application development tools that support our microcontroller product architectures, including an extensive amount of third-party tool suppliers whose products support our microcontroller architectures.

We believe that familiarity with and adoption of development tools from Microchip as well as third-party development tool partners by an increasing number of product designers will be an important factor in the future selection of our embedded control products. These development tools allow design engineers to develop thousands of application-specific products from our standard microcontrollers.

Field-Programmable Gate Array (FPGA) Products

Our FPGA product line was primarily acquired as a part of our acquisition of Microsemi. Our portfolio of non-volatile FPGAs range in densities from 100 to 481,000 logic elements and are recognized for their low power, high security and extended reliability. We market and sell our FPGA products and related solutions into a broad range of applications with the industrial, defense, aviation, space and communication markets.

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We offer a comprehensive set of development tools for our FPGA products. These tools enable system designers to visualize, implement, simulate and program complex logic functions in the FPGA. Our development tool suite manages the entire design flow from design entry, simulation, synthesis, through place-and-route, timing, and power analysis. We also provide C/C++ development and debugging environment to support our FPGAs that implement embedded microcontrollers or microprocessor cores.

Analog, Power, Interface, Mixed Signal and Timing Products

Our analog, power, interface, mixed signal and timing products consist of several families with over 7,850 power management, linear, mixed-signal, high voltage, thermal management, discrete diodes and MOSFETS, radio frequency (RF), drivers, safety, security, timing, USB, ethernet, wireless and other interface products.

We market and sell our analog, power, interface, mixed signal and timing products into our microcontroller, microprocessor and FPGA customer base, and to customers who use microcontrollers and FPGA products from other suppliers and to customers who use other products that may not fit our traditional microcontroller, FPGA and memory products customer base.

Memory Products

Our memory products consist of EEPROMs, Serial Flash memories, Parallel Flash memories, Serial SRAM memories and EERAM. Serial EEPROMs, Serial Flash memories, Serial SRAMs and EERAM have a very low I/O pin requirement, permitting production of very small footprint devices. We sell our memory products primarily into the embedded control market, complementing our microcontroller offerings.

Technology Licensing

Our technology licensing business generates license fees and royalties associated with technology licenses for the use of our SuperFlash[®] embedded flash and Smartbits[®] one time programmable NVM technologies. We also generate fees for engineering services related to these technologies. We license our NVM technologies to foundries, integrated device manufacturers and design partners throughout the world for use in the manufacture of their advanced microcontroller products, gate array, RF, analog and neuromorphic compute products that require embedded non-volatile memory.

Multi-Market and Other

Our multi-market and other business offers manufacturing services (wafer foundry and assembly and test subcontracting), legacy application specific integrated circuits, complex programmable logic devices, products for aerospace applications and timing systems.

Manufacturing

Our manufacturing operations include wafer fabrication, wafer probe, assembly and test. The ownership of a substantial portion of our manufacturing resources is an important component of our business strategy, enabling us to maintain a high level of manufacturing control, resulting in us being one of the lowest cost producers in the embedded control industry. By owning wafer fabrication facilities and our assembly and test operations, and by employing statistical techniques (statistical process control, designed experiments and wafer level monitoring), we have been able to achieve and maintain high production yields. Direct control over manufacturing resources allows us to shorten our design and production cycles. This control also allows us to capture a portion of the wafer manufacturing and assembly and testing profit margin. We do outsource a significant portion of our manufacturing requirements to third parties and the amount of our outsourced manufacturing has increased in recent years due to our acquisitions of Microsemi and other companies that outsource all or substantial portions of their manufacturing.

Our manufacturing facilities are located in:

- United States
 - Chandler, Arizona (wafer probe)
 - Tempe, Arizona (Fab 2)
 - Gresham, Oregon (Fab 4)
 - Colorado Springs, Colorado (Fab 5)
 - Garden Grove, California (manufacturing, R&D and administrative)

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- San Jose, California (design, R&D, and administrative)
- Simsbury, Connecticut (manufacturing, R&D and administrative)
- Beverly, Massachusetts (manufacturing)
- Lawrence, Massachusetts (manufacturing and administrative)
- Lowell, Massachusetts (wafer fabrication, assembly and test, R&D, warehousing and administrative)
- Mt. Holly Springs, Pennsylvania (manufacturing, R&D and administrative)
- Thailand
 - Chacherngsao (wafer probe, assembly and test)
- Philippines
 - Calamba, Laguna (wafer probe and test)
- France
 - Nantes, Loire-Atlantique (design, engineering, test, probe, administrative and warehousing)
- Ireland
 - Ennis, County Clare (manufacturing)
- Germany
 - Neckarbischofsheim, Baden-Württemberg (manufacturing and administrative)
 - Teltow, Brandenburg (wafer fabrication, assembly and test, wafer probe, R&D, warehousing and administrative)

Wafer Fabrication

Fab 2 currently produces 8-inch wafers and supports various manufacturing process technologies, but predominantly utilizes our 0.5 microns to 1.0 microns processes. During fiscal 2019, we increased Fab 2's capacity to support more advanced technologies by making process improvements, upgrading existing equipment, and adding equipment.

Fab 4 currently produces 8-inch wafers using predominantly 0.13 microns to 0.5 microns manufacturing processes. During fiscal 2019, we increased Fab 4's capacity to support more advanced technologies by making process improvements, upgrading existing equipment, and adding equipment. A significant amount of additional clean room capacity in Fab 4 can be brought on line in the future to support incremental wafer fabrication capacity needs.

Fab 5 is a 6-inch wafer fabrication facility that currently utilizes processes from 0.25 microns to 1.0 microns. During fiscal 2019, we made use of the existing capacity of Fab 5 to support demand.

We believe the combined capacity of Fab 2, Fab 4, and Fab 5 will provide sufficient capacity to allow us to respond to increases in future demand over the next several years with modest incremental capital expenditures.

We continue to transition products to more advanced process technologies to reduce future manufacturing costs. We believe that our ability to successfully transition to more advanced process technologies is important for us to remain competitive.

We augment our internal manufacturing capabilities by outsourcing a portion of our wafer production requirements to third-party wafer foundries. As a result of our acquisitions in recent years, we have become more reliant on outside wafer foundries for our wafer fabrication requirements. In fiscal 2019, approximately 57% of our sales came from products that were produced at outside wafer foundries.

As a result of our acquisition of Microsemi, we acquired several smaller wafer fabrication facilities, which utilize older technologies that are appropriate for the discrete products they manufacture. We plan to operate these fabrication facilities with modest investment to keep them operational with the exception of the facility in Bend, Oregon, which discontinued production in March 2019.

Assembly and Test

We perform product assembly and test at various facilities located around the world. During fiscal 2019, we increased capacity at our Thailand and Philippines facilities to support more technologies by making process improvements, upgrading existing equipment, and adding equipment. During fiscal 2019, approximately 38% of our assembly requirements were being performed in our internal facilities and approximately 49% of our test requirements were performed in internal facilities. We use third-party assembly and test contractors for the balance of our assembly and test requirements. Over time, we intend to continue to migrate a portion of the outsourced assembly and test activities to our internal facilities.

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General Matters Impacting Our Manufacturing Operations

Due to the high fixed costs inherent in semiconductor manufacturing, consistently high manufacturing yields have significant positive effects on our gross profit and overall operating results. Our continuous focus on manufacturing productivity has allowed us to maintain excellent manufacturing yields at our facilities. Our manufacturing yields are primarily driven by a comprehensive implementation of statistical process control, extensive employee training and effective use of our manufacturing facilities and equipment. Maintenance of manufacturing productivity and yields are important factors in the achievement of our operating results. The manufacture of integrated circuits, particularly non-volatile, erasable complementary metal-oxide semiconductor (CMOS) memory and logic devices, such as those that we produce, are complex processes. These processes are sensitive to a wide variety of factors, including the level of contaminants in the manufacturing environment, impurities in the materials used and the performance of our manufacturing personnel and equipment. As is typical in the semiconductor industry, we have from time to time experienced lower than anticipated manufacturing yields. Our operating results will suffer if we are unable to maintain yields at or above approximately the current levels.

Historically, we have relied on our ability to respond quickly to customer orders as part of our competitive strategy, resulting in customers placing orders with relatively short delivery schedules. In order to respond to such requirements, we have historically maintained a significant work-in-process and finished goods inventory.

The following table summarizes our long-lived assets (consisting of property, plant and equipment) by geography at the end of fiscal 2019, fiscal 2018 and fiscal 2017 (in millions).

	March 31,		
	2019	2018	2017
United States	\$ 521.1	\$ 393.3	\$ 388.5
Thailand	209.3	215.5	178.0
Various other countries	266.3	159.1	116.8
Total long-lived assets	<u>\$ 996.7</u>	<u>\$ 767.9</u>	<u>\$ 683.3</u>

We have many suppliers of raw materials and subcontractors which provide our various materials and service needs. We generally seek to have multiple sources of supply for our raw materials and services, but, in some cases, we may rely on a single or limited number of suppliers.

Sales and Distribution

General

We market and sell our products worldwide primarily through a network of direct sales personnel and distributors.

Our direct sales force focuses on a wide variety of strategic accounts in three geographical markets: the Americas, Europe and Asia. We currently maintain sales and technical support centers in major metropolitan areas in all three geographic markets. We believe that a strong technical service presence is essential to the continued development of the embedded control market. Many of our client engagement managers, embedded system engineers (ESEs), and sales management have technical degrees or backgrounds and have been previously employed in high technology environments. We believe that the technical knowledge of our sales force is a key competitive advantage in the sale of our products. The primary mission of our ESE team is to provide technical assistance to customers and to conduct periodic training sessions for the balance of our sales team. ESEs also frequently conduct technical seminars and workshops in major cities around the world.

Our licensing division has dedicated sales, technology, design, product, test and reliability personnel that support the requirements of our licensees.

For information regarding our revenue, results of operations, and total assets for each of our last three fiscal years, refer to our financial statements included in this Form 10-K.

Distribution

Our distributors focus primarily on servicing the product requirements of a broad base of diverse customers. We believe that distributors provide an effective means of reaching this broad and diverse customer base. We believe that customers recognize us for our products and brand name and use distributors as an effective supply channel.

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In fiscal 2019, we derived 51% of our net sales through distributors and 49% of our net sales from customers serviced directly by us. In fiscal 2018, we derived 54% of our net sales through distributors and 46% of our net sales from customers serviced directly by us. In fiscal 2017, we derived 55% of our net sales through distributors and 45% of our net sales from customers serviced directly by us. With the exception of Arrow Electronics, our largest distributor, which made up 10% of our net sales, no other distributor or end customer accounted for more than 10% of our net sales in fiscal 2019. In fiscal 2018 and fiscal 2017, no distributor or end customer accounted for more than 10% of our net sales.

We do not have long-term agreements with our distributors and we, or our distributors, may each terminate our relationship with little or no advanced notice. The loss of, or the disruption in the operations of, one or more of our distributors could reduce our future net sales in a given quarter and could result in an increase in inventory returns.

Backlog

As of April 30, 2019, our backlog was approximately \$2,378.9 million, compared to \$1,833.9 million as of April 30, 2018. Our backlog includes all purchase orders scheduled for delivery within the subsequent 12 months.

We primarily produce standard products that can be shipped from inventory within a relatively short time after we receive an order. Our business and, to a large extent, that of the entire semiconductor industry, is characterized by short-term orders and shipment schedules. Orders constituting our current backlog are subject to changes in delivery schedules, or to cancellation at the customer's option without significant penalty. Thus, while backlog is useful for scheduling production, backlog as of any particular date may not be a reliable measure of our sales for any future period.

Competition

The semiconductor industry is intensely competitive and has been characterized by price erosion and rapid technological change. We compete with major domestic and international semiconductor companies, some of which have greater market recognition and greater financial, technical, marketing, distribution and other resources than we have with which to pursue engineering, manufacturing, marketing and distribution of their products. We also compete with a number of companies that we believe have copied, cloned, pirated or reverse engineered our proprietary product lines in such countries as China and Taiwan. We are continuing to take actions to vigorously and aggressively defend and protect our intellectual property on a worldwide basis.

We currently compete principally on the basis of the technical innovation and performance of our embedded control products, including the following product characteristics:

- performance
- analog, digital and mixed signal functionality and level of functional integration
- field programmability
- memory density
- low power consumption
- extended voltage ranges
- reliability
- packaging alternatives
- completeness of development tool line

We believe that other important competitive factors in the embedded control market include:

- ease of use
- functionality of application development systems
- dependable delivery, quality and availability
- technical and innovative service and support
- time to market
- price

We believe that we compete favorably with other companies on all of these factors, but we may be unable to compete successfully in the future, which could harm our business.

Patents, Licenses and Trademarks

We maintain a portfolio of U.S. and foreign patents, expiring on various dates through 2038. We also have numerous additional U.S. and foreign patent applications pending. We do not expect that the expiration of any particular patent will have a material impact on our business. While our intention is to continue to patent our technology and manufacturing processes, we believe that our continued success depends primarily on the technological skills and innovative capabilities of our personnel and our ability to rapidly commercialize new and enhanced products. As with any operating company, the scope and strength of our intellectual property assets, including our pending and existing patents, trademarks, copyrights, and other intellectual property rights may be insufficient to provide meaningful protection or commercial advantage. Moreover, pursuing violations of intellectual property rights on a worldwide basis is a complex challenge involving multinational patent, trademark, copyright and trade secret laws. Further, the laws of particular foreign countries often fail to protect our intellectual property rights to the same extent as the laws of the U.S.

We have also entered into certain intellectual property licenses and cross-licenses with other companies and those licenses relate to semiconductor products and manufacturing processes. As is typical in the semiconductor industry, we and our customers from time to time receive, and may continue to receive, demand letters from third parties asserting infringement of patent and other intellectual property rights. We diligently investigate all such notices and respond as we believe appropriate. In most cases we believe that we can obtain necessary licenses on commercially reasonable terms, however, we cannot be certain that this would be the case, or that litigation or damages for any past infringement could be avoided. Litigation, which could result in substantial costs and require significant attention from management, may be necessary to enforce our intellectual property rights, or to defend against claimed infringement of the rights of others. The failure to obtain necessary licenses, or the necessity of engaging in defensive litigation, could harm our business.

Environmental Regulation

We must comply with many different federal, state, local and foreign governmental regulations related to the use, storage, discharge and disposal of certain chemicals and gases used in our manufacturing processes. Our facilities have been designed to comply with these regulations and we believe that our activities are conducted in material compliance with such regulations. Any changes in such regulations or in their enforcement could require us to acquire costly equipment or to incur other significant expenses to comply with environmental regulations. Any failure by us to adequately control the storage, use, discharge and disposal of regulated substances could result in significant future liabilities.

Increasing public attention has been focused on the environmental impact of electronic manufacturing operations. While we have not experienced any materially adverse effects on our operations from recently adopted environmental regulations, our business and results of operations could suffer if for any reason we fail to control the storage or use of, or to adequately restrict the discharge or disposal of, hazardous substances under present or future environmental regulations.

Employees

As of March 31, 2019, we had 18,286 employees. We have never had a work stoppage and believe that our employee relations are good.

Executive Officers of the Registrant

The following sets forth certain information regarding our executive officers as of April 30, 2019:

Name	Age	Position
Steve Sanghi	63	Chief Executive Officer and Chairman of the Board
Ganesh Moorthy	59	President and Chief Operating Officer
J. Eric Bjornholt	48	Senior Vice President, Chief Financial Officer
Stephen V. Drehobl	57	Senior Vice President, MCU8 and MCU16 Business Units
Mitchell R. Little	67	Senior Vice President, Worldwide Client Engagement
Richard J. Simoncic	55	Senior Vice President, Analog Power and Interface Business Units

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Mr. Sanghi has served as Chief Executive Officer since October 1991, and as Chairman of the Board since October 1993. He served as President from August 1990 to February 2016 and has served as a director since August 1990. Mr. Sanghi holds an M.S. degree in Electrical and Computer Engineering from the University of Massachusetts and a B.S. degree in Electronics and Communication from Punjab University. In November 2016, Mr. Sanghi joined the Board of Directors of Myomo, Inc., a publicly traded commercial stage medical robotics company that offers expanded mobility for those suffering from neurological disorders and upper-limb paralysis. In February 2018, Mr. Sanghi joined the board of Mellanox Technologies Ltd., a publicly traded supplier of end-to-end Ethernet and InfiniBand intelligent interconnect solutions and services for servers, storage, and hyper-converged infrastructure.

Mr. Moorthy has served as President since February 2016 and as Chief Operating Officer since June 2009. He also served as Executive Vice President from October 2006 to August 2012 and as a Vice President in various roles since he joined Microchip in 2001. Prior to this time, he served in various executive capacities with other semiconductor companies. Mr. Moorthy holds an M.B.A. in Marketing from National University, a B.S. degree in Electrical Engineering from the University of Washington and a B.S. degree in Physics from the University of Mumbai, India. Mr. Moorthy was elected to the Board of Directors of Rogers Corporation in July 2013.

Mr. Bjornholt was promoted to Senior Vice President in 2019 and has served as Vice President of Finance since 2008 and as Chief Financial Officer since January 2009. He has served in various financial management capacities since he joined Microchip in 1995. Mr. Bjornholt holds a Master's degree in Taxation from Arizona State University and a B.S. degree in Accounting from the University of Arizona.

Mr. Drehobl was promoted to Senior Vice President in 2019 and has served as Vice President of the MCU8 business unit and various other divisions and business units since July 2001. He has been employed by Microchip since August 1989 and has served as a Vice President in various roles since February 1997. Mr. Drehobl holds a Bachelor of Technology degree from the University of Dayton.

Mr. Little was promoted to Senior Vice President in 2019 and has served as Vice President of Worldwide Sales since July 2000. He has been employed by Microchip since 1989 and has served as a Vice President in various roles since September 1993. Mr. Little holds a B.S. degree in Engineering Technology from United Electronics Institute.

Mr. Simoncic was promoted to Senior Vice President in 2019 and has served as Vice President, Analog Power and Interface Business Units since September 1999. From October 1995 to September 1999, he served as Vice President in various roles. Since joining Microchip in 1990, Mr. Simoncic held various roles in Design, Device/Yield Engineering and Quality Systems. Mr. Simoncic holds a B.S. degree in Electrical Engineering Technology from DeVry Institute of Technology.

Item 1A. Risk Factors

When evaluating Microchip and its business, you should give careful consideration to the factors listed below, in addition to the information provided elsewhere in this Form 10-K and in other documents that we file with the Securities and Exchange Commission.

Our operating results are impacted by global economic conditions and may fluctuate in the future due to a number of factors that could reduce our net sales and profitability.

Our operating results are affected by a wide variety of factors that could reduce our net sales and profitability, many of which are beyond our control. Some of the factors that may affect our operating results include:

- general economic, industry or political conditions in the U.S. or internationally;
- changes in demand or market acceptance of our products and products of our customers, and market fluctuations in the industries into which such products are sold;
- changes in tax regulations and policies in the U.S. and other countries in which we do business including the impact of the Tax Cuts and Jobs Act of 2017 (the "Act");
- new accounting pronouncements or changes in existing accounting standards and practices;
- our ability to continue to realize the expected benefits of our acquisitions including our acquisition of Microsemi;
- our ability to ramp our factory capacity to meet customer demand;
- our ability to secure sufficient wafer foundry, assembly and testing capacity;
- changes or fluctuations in customer order patterns and seasonality;
- changes in utilization of our manufacturing capacity and fluctuations in manufacturing yields;
- the mix of inventory we hold and our ability to satisfy orders from our inventory;
- levels of inventories held by our customers;
- risk of excess and obsolete inventories;
- competitive developments including pricing pressures;
- unauthorized copying of our products resulting in pricing pressure and loss of sales;
- availability of raw materials and equipment;
- our ability to successfully transition products to more advanced process technologies to reduce manufacturing costs;
- the level of orders that are received and can be shipped in a quarter, including the impact of product lead times;
- the level of sell-through of our products through distribution;
- fluctuations in our mix of product sales;
- trade restrictions and changes in tariffs, including those impacting China;
- announcements of other significant acquisitions by us or our competitors;
- disruptions in our business or our customers' businesses due to cybersecurity incidents, terrorist activity, armed conflict, war, worldwide oil prices and supply, public health concerns, fires, natural disasters or disruptions in the transportation system;
- constrained availability from other electronic suppliers impacting our customers' ability to ship their products, which in turn may adversely impact our sales to those customers;
- costs and outcomes of any current or future tax audits or any litigation or claims involving intellectual property, our Microsemi acquisition, customers or other issues;
- fluctuations in commodity or energy prices; and
- property damage or other losses, whether or not covered by insurance.

We believe that period-to-period comparisons of our operating results are not necessarily meaningful and that you should not rely upon any such comparisons as indications of our future performance. In future periods, our operating results may fall below our public guidance or the expectations of public market analysts and investors, which would likely have a negative effect on the price of our common stock. Uncertain global economic conditions, the ongoing economic recovery and uncertainty surrounding the strength and duration of such recovery have caused our operating results to fluctuate significantly and make comparability between periods less meaningful.

We may not fully realize the anticipated benefits of our completed or future acquisitions or divestitures including our acquisition of Microsemi.

We have acquired, and expect in the future to acquire, additional businesses that we believe will complement or augment our existing businesses. On May 29, 2018, we completed our acquisition of Microsemi, which was our largest and most complex acquisition ever. In addition, in April 2016, we completed our acquisition of Atmel; and in August 2015, we

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completed our acquisition of Micrel. The integration process for our acquisitions is complex and may be costly and time consuming and include unanticipated issues, expenses and liabilities. We may not be able to successfully or profitably integrate, operate, maintain and manage any newly acquired operations or employees. We may not be able to maintain uniform standards, procedures and policies and we may be unable to realize the expected synergies and cost savings from the integration. There may be increased risk due to integrating financial reporting and internal control systems. We may have difficulty in developing, manufacturing and marketing the products of a newly acquired company, or in growing the business at the rate we anticipate. Following an acquisition, we may not achieve the revenue or net income levels that justify the acquisition. We may suffer loss of key employees, customers and strategic partners of acquired companies and it may be difficult to implement our corporate culture at acquired companies. We have been and may in the future be subject to claims from terminated employees, shareholders of Microchip or the acquired companies and other third parties related to the transaction. In particular, in connection with our Microsemi and Atmel acquisitions, we became involved with third-party claims, litigation and disputes related to such businesses and transactions. See Note 13 to our consolidated financial statements for information regarding pending litigation. Acquisitions may also result in charges (such as acquisition-related expenses, write-offs, restructuring charges, or future impairment of goodwill), contingent liabilities, adverse tax consequences, additional share-based compensation expense and other charges that adversely affect our operating results. To fund our acquisition of Microsemi, we used a significant portion of our cash balances and incurred approximately \$8.10 billion of additional debt. We may fund future acquisitions of new businesses or strategic alliances by utilizing cash, borrowings under our Revolving Credit Facility, raising debt, issuing shares of our common stock, or other mechanisms.

Further, if we decide to divest assets or a business, we may encounter difficulty in finding or completing divestiture opportunities or alternative exit strategies on acceptable terms or in a timely manner. These circumstances could delay the achievement of our strategic objectives or cause us to incur additional expenses with respect to assets or a business that we want to dispose of, or we may dispose of assets or a business at a price or on terms that are less favorable than we had anticipated. Even following a divestiture, we may be contractually obligated with respect to certain continuing obligations to customers, vendors, landlords or other third parties. We may also have continuing obligations for pre-existing liabilities related to the assets or businesses. Such obligations may have a material adverse impact on our results of operations and financial condition.

In addition to acquisitions, we have in the past, and expect in the future, to enter into joint development agreements or other business or strategic relationships with other companies. These transactions are subject to a number of risks similar to those we face with our acquisitions including our ability to realize the expected benefits of any such transaction, to successfully market and sell any products resulting from such transactions or to successfully integrate any technology developed through such transactions.

Our financial condition and results of operations could be adversely affected if we do not effectively manage our current or future debt.

As of March 31, 2019, the principal amount of our outstanding indebtedness was \$11.66 billion. In connection with our acquisition of Microsemi, which closed on May 29, 2018, we incurred debt consisting of \$3.10 billion under our revolving line of credit, \$3.00 billion under our new term loan facility, and \$2.00 billion in newly issued senior secured notes. At March 31, 2019, we had \$3.27 billion in outstanding borrowings under our revolving line of credit which provides \$3.60 billion of revolving loan commitments that terminate in 2023. At March 31, 2019, we had \$1.91 billion of outstanding borrowings under the term loan facility. In February 2017, we issued \$2.65 billion of aggregate principal value of senior and junior convertible debt.

As a result of such transactions, we have a substantially greater amount of debt than we had maintained in the past. Our maintenance of substantial levels of debt could adversely affect our ability to take advantage of corporate opportunities and could adversely affect our financial condition and results of operations. We may need or desire to refinance our convertible debt, senior debt, term loan debt or any other future indebtedness and there can be no assurance that we will be able to refinance any of our indebtedness on commercially reasonable terms, if at all.

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Servicing our current debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to fund future payments.

Our ability to make scheduled payments of principal, to pay interest on or to refinance our indebtedness, including our outstanding convertible debt and debt incurred to finance our acquisition of Microsemi, depends on our future performance, which is subject to economic, financial, competitive and other factors. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and to fund capital expenditures, dividend payments, share repurchases or acquisitions. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time.

We are dependent on orders that are received and shipped in the same quarter and therefore have limited visibility to future product shipments.

Our net sales in any given quarter depend upon a combination of shipments from backlog and customer orders that are both received and shipped in that same quarter, which we refer to as turns orders. We measure turns orders at the beginning of a quarter based on the orders needed to meet the shipment targets that we set entering the quarter. Historically, we have relied on our ability to respond quickly to customer orders as part of our competitive strategy, resulting in customers placing orders with relatively short delivery schedules. Shorter lead times generally mean that turns orders as a percentage of our business are relatively high in any particular quarter and reduce our backlog visibility on future product shipments. Turns orders correlate to overall semiconductor industry conditions and product lead times. Because turns orders are difficult to predict, varying levels of turns orders make it more difficult to forecast net sales. As a significant portion of our products are manufactured at foundries, foundry lead times may affect our ability to satisfy certain turns orders. If we do not achieve a sufficient level of turns orders in a particular quarter relative to our revenue targets, our revenue and operating results will likely suffer.

Intense competition in the markets we serve may lead to pricing pressures, reduced sales of our products or reduced market share.

The semiconductor industry is intensely competitive and has been characterized by price erosion and rapid technological change. We compete with major domestic and international semiconductor companies, many of which have greater market recognition and substantially greater financial, technical, marketing, distribution and other resources than we do. The semiconductor industry has experienced significant merger and acquisition activity and consolidation in recent years which has resulted in several of our competitors becoming much larger in terms of revenue, product offerings and scale. We may be unable to compete successfully in the future, which could harm our business. Our ability to compete successfully depends on a number of factors both within and outside our control, including, but not limited to:

- the quality, performance, reliability, features, ease of use, pricing and diversity of our products;
- our success in designing and manufacturing new products including those implementing new technologies;
- our ability to ramp production and increase capacity, as needed, at our wafer fabrication and assembly and test facilities;
- the rate at which customers incorporate our products into their own applications and the success of such applications;
- the rate at which the markets that we serve redesign and change their own products;
- our ability to obtain adequate foundry and assembly and test capacity and supplies of raw materials and other supplies at acceptable prices;
- changes in demand in the markets that we serve and the overall rate of growth or contraction of such markets, including but not limited to the automotive, personal computing and consumer electronics markets;
- product introductions by our competitors;
- the number, nature and success of our competitors in a given market;
- our ability to protect our products and processes by effective utilization of intellectual property rights;
- our ability to remain price competitive against companies that have copied our proprietary product lines, especially in countries where intellectual property rights protection is difficult to achieve and maintain;
- our ability to address the needs of our customers; and
- general market and economic conditions.

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Historically, average selling prices in the semiconductor industry decrease over the life of any particular product. The average selling prices of our microcontroller and proprietary analog, interface, mixed signal and timing products have remained relatively constant, while average selling prices of our memory and non-proprietary analog, interface, mixed signal and timing products have declined over time. The overall average selling price of our products is affected by these trends; however, variations in our product and geographic mix of sales can cause wider fluctuations in our overall average selling price in any given period.

We have experienced, and expect to continue to experience, modest pricing declines in certain of our more mature proprietary product lines, primarily due to competitive conditions. We have been able to moderate average selling price declines in many of our proprietary product lines by continuing to introduce new products with more features and higher prices. However, there can be no assurance that we will be able to do so in the future. We have experienced in the past, and expect to continue to experience in the future, varying degrees of competitive pricing pressures in our memory and non-proprietary analog, interface, mixed signal and timing products. We may be unable to maintain average selling prices for our products as a result of increased pricing pressure in the future, which could adversely impact our operating results.

We are dependent on wafer foundries and other contractors to perform key manufacturing functions for us, and our licensees of our SuperFlash and other technologies also rely on foundries and other contractors.

We rely on outside wafer foundries for a significant portion of our wafer fabrication needs. Specifically, during fiscal 2019 and fiscal 2018, approximately 57% and 42%, respectively, of our net sales came from products that were produced at outside wafer foundries. We also use several contractors located primarily in Asia for a portion of the assembly and testing of our products. Specifically, during fiscal 2019, approximately 62% of our assembly requirements and 51% of our test requirements were performed by third party contractors compared to approximately 58% of our assembly requirements and 36% of our test requirements during fiscal 2018. Our reliance on third party contractors and foundries increased as a result of our acquisitions of Microsemi, Atmel, Micrel, SMSC, Supertex and ISSC. The disruption or termination of any of our contractors could harm our business and operating results.

Our use of third parties somewhat reduces our control over the subcontracted portions of our business. Our future operating results could suffer if any contractor were to experience financial, operational or production difficulties or situations when demand exceeds capacity, or if they were unable to maintain manufacturing yields, assembly and test yields and costs at approximately their current levels, or if the countries in which such contractors are located were to experience political upheaval or infrastructure disruption. If these third parties are unable or unwilling to timely deliver products or services conforming to our quality standards, we may not be able to qualify additional manufacturing sources for our products in a timely manner on terms favorable to us, or at all. Additionally, these subcontractors could abandon fabrication processes that are important to us, or fail to adopt advanced manufacturing technologies that we desire to control costs. In any such event, we could experience an interruption in production, an increase in manufacturing and production costs or a decline in product reliability, and our business and operating results could be adversely affected. Further, our use of subcontractors increases the risks of potential misappropriation of our intellectual property.

Certain of our SuperFlash and other technology licensees also rely on outside wafer foundries for wafer fabrication services. If our licensees were to experience any disruption in supply from outside wafer foundries, this would reduce the revenue we receive in our technology licensing business and would harm our operating results.

Our operating results will suffer if we ineffectively utilize our manufacturing capacity or fail to maintain manufacturing yields.

The manufacture and assembly of integrated circuits, particularly non-volatile, erasable CMOS memory and logic devices such as those that we produce, are complex processes. These processes are sensitive to a wide variety of factors, including the level of contaminants in the manufacturing environment, impurities in the materials used, the performance of our wafer fabrication and assembly and test personnel and equipment, and other quality issues. As is typical in the semiconductor industry, we have from time to time experienced lower than anticipated manufacturing yields. Our operating results will suffer if we are unable to maintain yields at or above approximately the current levels. This could include delays in the recognition of revenue, loss of revenue or future orders, and customer-imposed penalties for our failure to meet contractual shipment deadlines. Our operating results are also adversely affected when we operate at less than optimal capacity. In fiscal 2019, we operated at below normal capacity levels resulting in an unabsorbed capacity charge of \$19.0 million. We operated at normal capacity levels during fiscal 2018.

Our operating results are impacted by both seasonality and the wide fluctuations of supply and demand in the semiconductor industry.

The semiconductor industry is characterized by seasonality and wide fluctuations of supply and demand. Historically, since a significant portion of our revenue is from consumer markets and international sales, our business tends to generate stronger revenues in the first and second quarters and comparatively weaker revenues in the third and fourth quarters of our fiscal year. Broad fluctuations in our overall business, changes in semiconductor industry and global economic conditions, and our acquisition activity (including our acquisition of Microsemi) have had and can have a more significant impact on our results than seasonality. As a result, in periods when these broad fluctuations, changes in business conditions or acquisitions occur, it is difficult to assess the impact of seasonal factors on our business. The semiconductor industry has also experienced significant economic downturns, characterized by diminished product demand and production over-capacity. We have sought to reduce our exposure to this industry cyclically by selling proprietary products, that cannot be easily or quickly replaced, to a geographically diverse customer base across a broad range of market segments. However, we have experienced substantial period-to-period fluctuations in operating results and expect, in the future, to experience period-to-period fluctuations in operating results due to general industry or economic conditions.

Our business is dependent on distributors to service our end customers.

Sales to distributors accounted for approximately 51% of our net sales in fiscal 2019 and approximately 54% of our net sales in fiscal 2018. We do not have long-term agreements with our distributors, and we and our distributors may each terminate our relationship with little or no advance notice.

Any future adverse conditions in the U.S. or global economies or in the U.S. or global credit markets could materially impact the operations of our distributors. Any deterioration in the financial condition of our distributors or any disruption in the operations of our distributors could adversely impact the flow of our products to our end customers and adversely impact our results of operation. In addition, during an industry or economic downturn, it is possible there will be an oversupply of products and a decrease in demand for our products from our distributors, which could reduce our net sales in a given period and result in an increase in inventory returns. Violations of the Foreign Corrupt Practices Act, or similar laws, by our distributors or other channel partners could have a material adverse impact on our business.

Our success depends on our ability to introduce new products on a timely basis.

Our future operating results depend on our ability to develop and timely introduce new products that compete effectively on the basis of price and performance and which address customer requirements. The success of our new product introductions depends on various factors, including, but not limited to:

- effective new product selection;
- timely completion and introduction of new product designs;
- procurement of licenses for intellectual property rights from third parties under commercially reasonable terms;
- timely filing and protection of intellectual property rights for new product designs;
- availability of development and support tools and collateral literature that make complex new products easy for engineers to understand and use; and
- market acceptance of our customers' end products.

Because our products are complex, we have experienced delays from time to time in completing new product development. In addition, our new products may not receive or maintain substantial market acceptance. We may be unable to timely design, develop and introduce competitive products, which could adversely impact our future operating results.

Our success also depends upon our ability to develop and implement new design and process technologies. Semiconductor design and process technologies are subject to rapid technological change and require significant R&D expenditures. We and other companies in the industry have, from time to time, experienced difficulties in effecting transitions to advanced process technologies and, consequently, have suffered reduced manufacturing yields or delays in product deliveries. Our future operating results could be adversely affected if any transition to future process technologies is substantially delayed or inefficiently implemented.

We may lose sales if suppliers of raw materials, components or equipment fail to meet our or our customers' needs or increase costs due to increased tariffs or other factors.

Our semiconductor manufacturing operations require raw and processed materials and equipment that must meet exacting standards. We generally have more than one source for these supplies, but there are only a limited number of suppliers capable of delivering various materials and equipment that meet our standards. The materials and equipment necessary for our business could become more difficult to obtain as worldwide use of semiconductors in product applications increases. Additionally, consolidation in our supply chain due to mergers and acquisitions may reduce the number of suppliers or change the relationships that we have with our suppliers. Also, the application of trade restrictions or tariffs by the U.S. or other countries may adversely impact the industry supply chain. For example, the U.S. government has recently increased tariffs on products that have China as their country of origin and which are imported into the U.S. Likewise, the China government has increased tariffs on products that have the U.S. as their country of origin and which are imported into China. We have taken steps to mitigate the costs of these tariffs on our business. Although these increases in tariffs did not result in significant increases to the operating costs of our business, they did, however, adversely impact demand for our products during fiscal 2019. The recent additional tariffs imposed on components or equipment that we or our suppliers source from China will increase our costs and could have a material adverse impact on our operating results in the three months ending June 30, 2019 or future periods. We may also incur increases in manufacturing costs in mitigating the impact of tariffs on our operations. This could also impair sourcing flexibility. We have experienced supply shortages from time to time in the past, and on occasion our suppliers have told us they need more time than expected to fill our orders or that they will no longer support certain equipment with updates or spare and replacement parts. In particular, we have recently experienced longer lead times for equipment which we need for capacity expansion at certain of our manufacturing facilities. An interruption of any materials or equipment sources, or the lack of supplier support for a particular piece of equipment, could harm our business.

Our customers may also be adversely affected by these same issues. The materials, components and equipment necessary for their businesses could become more difficult to obtain for various reasons not limited to business interruptions of suppliers, consolidation in their supply chain due to mergers and acquisitions, or application of trade restrictions or tariffs that impair sourcing flexibility or increase costs. If our customers are not able to produce their products, then their need for our products will decrease. Such interruptions of our customers' businesses could harm our business.

Interruptions in our IT systems, unauthorized access to our IT systems or improper handling of data, could adversely affect our business.

We rely on the efficient and uninterrupted operation of complex IT systems and networks to operate our business. Any significant disruption to our systems or networks, including, but not limited to, new system implementations, computer viruses, security breaches, facility issues, natural disasters, terrorism, war, telecommunication failures or energy blackouts could have a material adverse impact on our operations, sales and operating results. Such disruption could result in a loss of our intellectual property or the release of sensitive competitive information or supplier, customer or employee personal data. Any loss of such information could harm our competitive position, result in a loss of customer confidence, and cause us to incur significant costs to remedy the damages caused by any such disruptions or security breaches. Additionally, any failure to properly manage the collection, handling, transfer or disposal of personal data of employees and customers may result in regulatory penalties, enforcement actions, remediation obligations, litigation, fines and other sanctions.

From time to time, we have experienced verifiable attacks on our data, attempts to breach our security and attempts to introduce malicious software into our IT systems. For example, we have learned of an ongoing compromise of our computer networks by what is believed to be sophisticated hackers. We have engaged experienced legal counsel and a leading forensic investigatory firm with experience in such matters. We have taken steps to identify malicious activity on our network including a compromise of our network and, as of the date of this filing, we are implementing a containment plan. We are continuing to evaluate the effectiveness of the containment plan and the amount and content of the information that was compromised and to implement additional remedial actions. At this time, we do not believe that this IT system compromise has had a material adverse effect on our business or resulted in any material damage to us. However, we are still evaluating the amount and type of data that was compromised and there can be no assurance as to what the impact of this IT system compromise will be. As a result of the IT system compromise, our management, including our chief executive officer and our chief financial officer, has concluded that our internal controls related to IT system access were not effective as of March 31, 2019 resulting in a material weakness in our internal controls. For additional information, refer to Item 9A "Controls and Procedures."

Were any future attacks to be successful, we may be unaware of the incident, its magnitude, or its effects until significant harm is done. In recent years, we have implemented improvements to our protective measures which include, but are not limited to, the following: firewalls, antivirus measures, patches, log monitors, event correlation tools, routine backups with offsite retention of storage media, system audits, data partitioning and routine password modifications. As a result of the

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material weakness in our internal controls resulting from the IT systems compromise, we have taken remediation actions and implemented additional controls. There can be no assurance that such system improvements will be sufficient to prevent or limit the damage from any future cyber attacks or disruptions. Any such attack or disruption could result in additional costs related to rebuilding of our internal systems, defending litigation, responding to regulatory actions, or paying damages. Such attacks or disruptions could have a material adverse impact on our business, operations and financial results.

Third-party service providers, such as wafer foundries, assembly and test contractors, distributors, credit card processors and other vendors have access to certain portions of our and our customers' sensitive data. In the event that these service providers do not properly safeguard the data that they hold, security breaches and loss of data could result. Any such loss of data by our third-party service providers could negatively impact our business, operations and financial results, as well as our relationship with our customers.

If we fail to remediate our recently identified material weaknesses and achieve and maintain proper and effective internal control and remediate current or future deficiencies, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and investors' views of us.

As discussed in Item 9A "Controls and Procedures" in this report on Form 10-K, in the fourth quarter of fiscal 2019, we identified a material weakness in our internal controls related to accounting for income taxes and we also identified a material weakness in our internal controls related to IT system access. Internal controls related to such matters are important to accurately reflect our financial position and results of operations in our financial reports. We are in the process of remediating the material weaknesses, but our efforts may not be successful. If we are unable to remediate the material weaknesses in an appropriate and timely manner, or if we identify additional control deficiencies that individually or together constitute significant deficiencies or material weaknesses, our ability to accurately record, process, and report financial information and consequently, our ability to prepare financial statements within required time periods, could be adversely affected. Failure to maintain effective internal controls could result in violations of applicable securities laws, stock exchange listing requirements, and the covenants under our debt agreements, subject us to litigation and investigations, negatively affect investor confidence in our financial statements, and adversely impact our stock price and ability to access capital markets.

Ensuring that we have adequate internal financial and accounting controls and procedures so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with United States generally accepted accounting principles. We are required to comply with Section 404 of the Sarbanes-Oxley Act of 2002 which requires an annual management assessment of the effectiveness of our internal control over financial reporting and a report by our independent auditors. In addition to the recently identified material weaknesses related to accounting for income taxes and to IT system access, we have from time to time identified significant deficiencies related to other matters. If we fail to remediate our material weaknesses or significant deficiencies or to maintain proper and effective internal control over financial reporting in the future, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, harm our ability to operate our business and reduce the trading price of our stock.

Our reported financial results may be adversely affected by new accounting pronouncements or changes in existing accounting standards and practices.

We prepare our financial statements in conformity with accounting principles generally accepted in the U.S. These accounting principles are subject to interpretation or changes by the Financial Accounting Standards Board (FASB) and the SEC. New accounting pronouncements and varying interpretations of accounting standards and practices have occurred in the past and are expected to occur in the future. New accounting pronouncements or a change in the interpretation of existing accounting standards or practices may have a significant effect on our reported financial results and may even affect our reporting of transactions completed before the change is announced or effective.

Business interruptions to our operations or the operations of our key vendors, subcontractors, licensees or customers, whether due to natural disasters, cybersecurity incidents, or other events, could harm our business.

Operations at any of our facilities, at the facilities of any of our wafer fabrication or assembly and test subcontractors, or at any of our significant vendors or customers may be disrupted for reasons beyond our control. These reasons may include work stoppages, power loss, cyber attacks, incidents of terrorism or security risk, political instability, public health issues, telecommunications, transportation or other infrastructure failure, radioactive contamination, fire, earthquake, floods, volcanic eruptions or other natural disasters. We have taken steps to mitigate the impact of some of these events should they occur;

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however, we cannot be certain that our actions will be effective to avoid a significant impact on our business in the event of a disaster or other business interruption.

In particular, Thailand has experienced periods of severe flooding in recent years. While our facilities in Thailand have continued to operate normally, there can be no assurance that any future flooding in Thailand would not have a material adverse impact on our operations. If operations at any of our facilities, or our subcontractors' facilities are interrupted, we may not be able to shift production to other facilities on a timely basis, and we may need to spend significant amounts to repair or replace our facilities and equipment. If we experienced business interruptions, we would likely experience delays in shipments of products to our customers and alternate sources for production may be unavailable on acceptable terms. This could result in reduced revenues and profits and the cancellation of orders or loss of customers. Although we maintain business interruption insurance, such insurance will likely not be enough to compensate us for any losses that may occur and any losses or damages incurred by us as a result of business interruptions could significantly harm our business.

Additionally, operations at our customers and licensees may be disrupted for a number of reasons. In the event of customer disruptions, sales of our products may decline and our revenue, profitability and financial condition could suffer. Likewise, if our licensees are unable to manufacture and ship products incorporating our technology, or if there is a decrease in product demand due to a business disruption, our royalty revenue may decline.

Our technology licensing business exposes us to various risks.

Our technology licensing business is based on our SuperFlash and other technologies. The success of our licensing business depends on the continued market acceptance of these technologies and on our ability to further develop and enhance such technologies and to introduce new technologies in the future. To be successful, any such technology must be able to be repeatably implemented by licensees, provide satisfactory yield rates, address licensee and customer requirements, and perform competitively. The success of our technology licensing business depends on various other factors, including, but not limited to:

- proper identification of licensee requirements;
- timely development and introduction of new or enhanced technology;
- our ability to protect and enforce our intellectual property rights for our licensed technology;
- our ability to limit our liability and indemnification obligations to licensees;
- availability of sufficient development and support services to assist licensees in their design and manufacture of products integrating our technology;
- availability of foundry licensees with sufficient capacity to support OEM production; and
- market acceptance of our customers' end products.

Because our licensed technologies are complex, there may be delays from time to time in developing and enhancing such technologies. There can be no assurance that our existing or any enhanced or new technology will achieve or maintain substantial market acceptance. Our licensees may experience disruptions in production or lower than expected production levels which would adversely affect the revenue that we receive from them. Our technology license agreements generally include an indemnification clause that indemnifies the licensee against liability and damages (including legal defense costs) arising from intellectual property matters. We could be exposed to substantial liability for claims or damages related to intellectual property matters or indemnification claims. Any claim, with or without merit, could result in significant legal fees and require significant attention from our management. Any of the foregoing issues may adversely impact the success of our licensing business and adversely affect our future operating results.

We are exposed to various risks related to legal proceedings or claims.

We are currently, and in the future may be, involved in legal proceedings or claims regarding patent infringement, other intellectual property rights, product failures, our Microsemi acquisition, contracts and other matters. As is typical in the semiconductor industry, we receive notifications from third parties from time to time who believe that we owe them indemnification or other obligations related to claims made against us, our direct or indirect customers or our licensees. These legal proceedings and claims, even if meritless, could result in substantial costs to us and divert our resources. If we are not able to resolve a claim, settle a matter, obtain necessary licenses on commercially reasonable terms, reengineer our products or processes to avoid infringement, provide a cost-effective remedy, or successfully prosecute or defend our position, we could incur uninsured liability in any of them, be required to take an appropriate charge to operations, be enjoined from selling a material portion of our products or using certain processes, suffer a reduction or elimination in the value of our inventories, and our business, financial condition or results of operations could be harmed.

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It is also possible that from time to time we may be subject to claims related to the manufacture, performance or use of our products. These claims may be due to injuries, economic damage or environmental exposures related to manufacturing, a product's nonconformance to our specifications or specifications agreed upon with the customer, changes in our manufacturing processes, or unexpected customer system issues due to the integration of our products or insufficient design or testing by our customers. We could incur significant expenses related to such matters, including, but not limited to:

- costs related to writing off the value of our inventory of nonconforming products;
- recalling nonconforming products;
- providing support services, product replacements, or modifications to products and the defense of such claims;
- diversion of resources from other projects;
- lost revenue or a delay in the recognition of revenue due to cancellation of orders or unpaid receivables;
- customer imposed fines or penalties for failure to meet contractual requirements; and
- a requirement to pay damages or penalties.

Because the systems into which our products are integrated have a higher cost of goods than the products we sell, the expenses and damages we are asked to pay may be significantly higher than the sales and profits we received from the products involved. While we specifically exclude consequential damages in our standard terms and conditions, certain of our contracts may not exclude such liabilities. Further, our ability to avoid such liabilities may be limited by applicable law. We do have liability insurance which covers certain damages arising out of product defects, but we do not expect that insurance will cover all claims or be of a sufficient amount to fully protect against such claims. Costs or payments we may make in connection with these customer claims may adversely affect the results of our operations.

Further, we sell to customers in industries such as automotive, aerospace, defense, safety, security, and medical, where failure of the systems in which our products are integrated could cause damage to property or persons. We may be subject to claims if our products, or the integration of our products, cause system failures. We will face increased exposure to claims if there are substantial increases in either the volume of our sales into these applications or the frequency of system failures integrating our products.

Failure to adequately protect our intellectual property could result in lost revenue or market opportunities.

Our ability to obtain patents, licenses and other intellectual property rights covering our products and manufacturing processes is important for our success. To that end, we have acquired certain patents and patent licenses and intend to continue to seek patents on our technology and manufacturing processes. The process of seeking patent protection can be long and expensive, and patents may not be issued from currently pending or future applications. In addition, our existing and new patents, trademarks and copyrights that issue may not have sufficient scope or strength to provide meaningful protection or commercial advantage to us. We may be subject to, or may ourselves initiate, interference proceedings in the U.S. Patent and Trademark Office, patent offices of a foreign country or U.S. or foreign courts, which can require significant financial and management resources. In addition, the laws of certain foreign countries do not protect our intellectual property rights to the same extent as the laws of the U.S. Infringement of our intellectual property rights by a third party could result in uncompensated lost market and revenue opportunities for us. Although we continue to vigorously and aggressively defend and protect our intellectual property on a worldwide basis, there can be no assurance that we will be successful in our endeavors.

Our operating results may be adversely impacted if economic conditions impact the financial viability of our licensees, customers, distributors, or suppliers.

We regularly review the financial performance of our licensees, customers, distributors and suppliers. However, any downturn in global economic conditions may adversely impact the financial viability of our licensees, customers, distributors or suppliers. The financial failure of a large licensee, customer or distributor, an important supplier, or a group thereof, could have an adverse impact on our operating results and could result in our not being able to collect our accounts receivable balances, higher reserves for doubtful accounts, write-offs for accounts receivable, and higher operating costs as a percentage of net sales.

We are highly dependent on foreign sales and operations, which exposes us to foreign political and economic risks including risks from recent increases in tariffs.

Sales to foreign customers account for a substantial portion of our net sales. During fiscal 2019, approximately 80% of our net sales were made to foreign customers, including 22% in China and 13% in Taiwan. During fiscal 2018, approximately 85% of our net sales were made to foreign customers, including 30% in China and 11% in Taiwan. In fiscal 2019, our acquisition of Microsemi and our transition to sell-in revenue recognition contributed to the changes in net sales by country.

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A strong position in the Chinese market is a key component of our global growth strategy. The market for integrated circuit products in China is highly competitive, and both international and domestic competitors are aggressively seeking to increase their market share. Increased competition or economic weakness in the China market may make it difficult for us to achieve our desired sales volumes in China. In particular, the trade relationship between the U.S. and China has worsened, economic conditions in China remain uncertain, and we are unable to predict whether such uncertainty will continue or worsen in future periods. The U.S. government has increased tariffs on products that have China as their country of origin and which are imported into the U.S. Likewise, the China government has increased tariffs on products that have the U.S. as their country of origin and which are imported into China. We have taken steps to mitigate the costs of these tariffs on our business. Although these increases in tariffs did not result in significant increases to the operating costs of our business, they did, however, adversely impact demand for our products during fiscal 2019. The recent additional tariffs imposed on components or equipment that we or our suppliers source from China will increase our costs and could have a material adverse impact on our operating results in the three months ending June 30, 2019 or future periods. Additionally, tariffs on our customers' products could impact their sales of such end products, resulting in lower demand for our products. We may also incur increases in manufacturing costs in mitigating the impact of tariffs on our customers.

We purchase a substantial portion of our raw materials and equipment from foreign suppliers. In addition, we own product assembly and testing facilities near Bangkok, Thailand, which has experienced periods of political instability in the past. A large portion of our finished goods inventory is maintained in Thailand. From time to time, Thailand has also experienced periods of severe flooding. There can be no assurance that any future flooding or political instability in Thailand would not have a material adverse impact on our operations. As part of our Atmel acquisition, we acquired a test facility in Calamba, Philippines. We use various foundries and other foreign contractors for a significant portion of our assembly and testing and wafer fabrication requirements.

Our reliance on foreign operations, foreign suppliers, maintenance of substantially all of our finished goods inventory at foreign locations and significant foreign sales exposes us to foreign political and economic risks, including, but not limited to:

- political, social and economic instability;
- trade restrictions and changes in tariffs;
- potentially adverse tax consequences;
- economic uncertainty in the worldwide markets served by us;
- import and export license requirements and restrictions;
- changes in rules and laws related to taxes, environmental, health and safety, technical standards and consumer protection in various jurisdictions;
- currency fluctuations and foreign exchange regulations;
- difficulties in staffing and managing international operations;
- employment regulations;
- disruptions due to cybersecurity incidents;
- disruptions in international transport or delivery;
- public health conditions; and
- difficulties in collecting receivables and longer payment cycles.

If any of these risks materialize, or are worse than we anticipate, our sales could decrease and our operating results could suffer, we could face an increase in the cost of components, production delays, general business interruptions, delays from difficulties in obtaining export licenses for certain technology, tariffs and other barriers and restrictions, longer payment cycles, increased taxes, restrictions on the repatriation of funds and the burdens of complying with a variety of foreign laws, any of which could ultimately have a material adverse effect on our business.

Further changes in trade policy, tariffs, additional taxes, or restrictions on supplies, equipment, and raw materials including rare earth minerals, may limit our ability to produce products, increase our selling and/or manufacturing costs, decrease margins, reduce the competitiveness of our products, or inhibit our ability to sell products or purchase necessary equipment and supplies, which could have a material adverse effect on our business, results of operations, or financial conditions.

Our contractual relationships with our customers expose us to risks and liabilities.

We do not typically enter into long-term contracts with our non-distributor customers, and therefore we cannot be certain about future order levels from our customers. When we do enter into customer contracts, the contract is generally cancelable at the convenience of the customer. Even though we had over 121,000 customers and our ten largest direct customers made up approximately 11% of our total revenue for fiscal 2019 and six of our top ten direct customers are contract manufacturers that

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perform manufacturing services for many customers, cancellation of customer contracts could have an adverse impact on our revenue and profits.

We have contracts with certain customers that differ from our standard terms of sale. For several of the significant markets that we sell into, such as the automotive and personal computer markets, our current or potential customers may possess significant leverage over us in negotiating the terms and conditions of supply as a result of their market size and position. For example, under certain contracts we may commit to supply specific quantities of products on scheduled delivery dates, or agree to extend our obligations for certain liabilities such as warranties or indemnification for quality issues or claims of intellectual property infringement. If we are unable to supply the customer as required under the contract, the customer may incur additional production costs, lost revenues due to subsequent delays in their own manufacturing schedule, or quality-related issues. We may be liable for the customer's costs, expenses and damages associated with their claims and we may be obligated to defend the customer against claims of intellectual property infringement and pay the associated legal fees. While we try to minimize the number of contracts which contain such provisions, manage the risks underlying such liabilities, and set caps on our liability exposure, sometimes we are not able to do so. In order to win important designs, avoid losing business to competitors, maintain existing business, or be permitted to bid on new business, we have been, and may in the future be, forced to agree to uncapped liability for such items as intellectual property infringement, product failure, or confidentiality. Such provisions expose us to risk of liability far exceeding the purchase price of the products we sell under such contracts, the lifetime revenues we receive from such products, or various forms of potential consequential damages. Further, where we do not have negotiated contracts with our customers, the terms of our customer's orders may govern the transaction and contain terms that are not favorable to us. These significant additional risks could result in a material adverse impact on our results of operations and financial condition.

Reliance on government contracts and sales to governmental agencies could have a material adverse effect on our results of operations.

A significant portion of the sales of Microsemi (which we acquired in May 2018) are from or are derived from government agencies or customers whose principal sales are to U.S. government agencies. Such sales are subject to uncertainties regarding governmental spending levels, spending priorities and policy changes. Future sales to U.S. government agencies or customers are also subject to uncertain government appropriations and national defense policies and priorities, including the constraints of the budgetary process, changes in the timing and potential spending priorities and the impact of any past or future government shutdowns, contract terminations or renegotiations, or future sequestrations. Such sales are also subject to uncertainties related to monetary, regulatory, tax and trade policies implemented by current or future administrations or by the U.S. Congress.

In the past, Microsemi has experienced delays and reductions in appropriations on programs that included its products. For example, there were federal government shutdowns from January 20, 2018 to January 23, 2018 and from December 22, 2018 through January 25, 2019. Further delays, reductions in or terminations of government contracts or subcontracts, including those caused by any past or future shutdown of the U.S. federal government, could materially and adversely affect our operating results. If the U.S. government fails to complete its annual budget process or to provide for a continuing resolution to fund government operations, another federal government shutdown may occur, during which time we may experience further delays and reductions in appropriations or reductions in or terminations of government contracts or subcontracts, which could materially and adversely affect our operating results. While we generally function as a subcontractor in these type of transactions, further changes in U.S. government procurement regulations and practices, particularly surrounding initiatives to reduce costs, may adversely impact the contracting environment and our operating results.

The U.S. government and its contractors may terminate their contracts with Microsemi or us at any time. For example, in 2014, Microsemi had a \$75 million contract terminated for convenience by the U.S. government. Uncertainty with respect to government spending and termination of contracts associated with government related projects could have a material adverse impact on the revenue and other benefits we achieve from our Microsemi acquisition. Our business related to U.S. governmental agencies or customers requires us to comply with applicable governmental regulations, particularly for our facilities, systems and personnel that service such customers. Maintaining compliance with these regulations, including any audit requirements, requires that we devote significant resources to such matters in terms of training, personnel, information technology and facilities. Any failure to maintain compliance with these requirements may result in fines and penalties and loss of current or future business that may materially and adversely affect our operating results.

We must attract and retain qualified personnel to be successful, and competition for qualified personnel can be intense.

Our success depends upon the efforts and abilities of our senior management, engineering, manufacturing and other personnel. The competition for qualified engineering and management personnel can be intense. We may be unsuccessful in retaining our existing key personnel or in attracting and retaining additional key personnel that we require. The loss of the

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services of one or more of our key personnel or the inability to add key personnel could harm our business. The loss of, or any inability to attract personnel, even if not key personnel, if experienced in sufficient numbers could harm our business. We have no employment agreements with any member of our senior management team.

Fluctuations in foreign currency exchange rates could adversely impact our operating results.

We use forward currency exchange contracts in an attempt to reduce the adverse earnings impact from the effect of exchange rate fluctuations on our non-U.S. dollar net balance sheet exposures. Nevertheless, in periods when the U.S. dollar significantly fluctuates in relation to the non-U.S. currencies in which we transact business, the value of our non-U.S. dollar transactions can have an adverse effect on our results of operations and financial condition. In particular, in periods when a foreign currency significantly declines in value in relation to the U.S. dollar, customers transacting in that foreign currency may find it more difficult to fulfill their previously committed contractual obligations or to undertake new obligations to make payments or purchase products. In periods when the U.S. dollar is significantly declining in relation to the British pound, Euro, Thai baht, Taiwan dollar and Malaysian ringgit, the operational costs in our European and Thailand subsidiaries are adversely affected. Although our business has not been materially adversely impacted by recent changes in the value of the U.S. dollar, there can be no assurance as to the future impact that any weakness or strength in the U.S. dollar will have on our business or results of operations.

The occurrence of events for which we are self-insured, or which exceed our insurance limits, may adversely affect our profitability and liquidity.

We have insurance contracts with independent insurance companies related to many different types of risk; however, we self-insure for some potentially significant risks and obligations. In these circumstances, we believe that it is more cost effective for us to self-insure certain risks than to pay the high premium costs. The risks and exposures that we self-insure include, but are not limited to certain property, product defects, cybersecurity matters, employment risks, environmental matters, political risks, and intellectual property matters. Should there be a loss or adverse judgment or other decision in an area for which we are self-insured, then our financial condition, results of operations and liquidity may be adversely affected.

We are subject to stringent environmental and other regulations, which may force us to incur significant expenses.

We must comply with all applicable federal, state, local and foreign governmental regulations related to the use, storage, discharge and disposal of toxic, volatile or otherwise hazardous substances used in our products and manufacturing processes. Our failure to comply with applicable regulations could result in fines, suspension of production, cessation of operations or future liabilities. Such environmental regulations have required us in the past, and could require us in the future, to buy costly equipment or to incur significant expenses to comply with such regulations. Our failure to control the use of, or adequately restrict the discharge of, hazardous substances could impact the health of our employees and others and could impact our ability to operate. Such failure could also restrict our ability to ship certain products to certain countries, require us to modify our operations' logistics, or require us to incur other significant costs and expenses. There is a continuing expansion in environmental laws with a focus on reducing or eliminating hazardous substances and substances of high concern in electronic products and shipping materials. These and other future environmental regulations could require us to reengineer certain of our existing products and may make it more expensive for us to manufacture, sell and ship our products. In addition, the number and complexity of laws focused on the energy efficiency of electronic products and accessories, the recycling of electronic products, and the reduction in the quantity and the recycling of packing materials have expanded significantly. It may be difficult for us to timely comply with these laws and we may not have sufficient quantities of compliant products to meet customers' needs, thereby adversely impacting our sales and profitability. We may also have to write off inventory in the event that we hold unsaleable inventory as a result of changes to regulations or customer requirements. We expect these risks and trends to continue. In addition, we anticipate increased customer requirements to meet voluntary criteria related to the reduction or elimination of substances of high concern in our products, energy efficiency measures, and supplier practices associated with sourcing and manufacturing. These requirements may increase our own costs, as well as those passed on to us by our supply chain.

Customer demands for us to implement business practices that are more stringent than existing legal requirements may reduce our revenue opportunities or cause us to incur higher costs.

Some of our customers and potential customers are requiring that we implement operating practices that are more stringent than what is required by applicable laws with respect to workplace and labor requirements, the type of materials we use in our products, environmental matters or other items. To comply with such requirements, we may have to pass these same operating practices on to our suppliers. Our suppliers may refuse to implement these operating practices, or may charge us more for complying with them. The cost to implement such practices may cause us to incur higher costs and reduce our profitability, and

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if we choose not to implement such practices, such customers may disqualify us as a supplier, resulting in decreased revenue opportunities. Developing, administering, monitoring and auditing these customer-requested practices at our own sites and those in our supply chain will increase our costs and may require that we hire more personnel.

Customer demands and regulations related to conflict-free minerals may force us to incur additional expenses.

As required by the Dodd-Frank Wall Street Reform and Consumer Protection Act, in August 2012, the SEC released investigation, disclosure and reporting requirements regarding the use of "conflict" minerals mined from the Democratic Republic of Congo and adjoining countries and which are necessary to the functionality or production of products. We filed a report on Form SD with the SEC regarding such matters on May 23, 2018. Other countries are considering similar regulations. If we cannot certify that we are using conflict-free minerals, customers may demand that we change the sourcing of minerals and other materials used in the manufacture of our products, even if the costs for compliant minerals and materials significantly increases and availability is limited. If we make changes to materials or suppliers, there will likely be costs associated with qualifying new suppliers and production capacity and quality could be negatively impacted. Our relationships with customers and suppliers may be adversely affected if we are unable to certify that our products are "conflict-free." We have incurred, and expect in the future to incur, additional costs associated with complying with these new disclosure requirements, such as costs related to determining the source of any conflict minerals used in our products. We may also encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict free in a materially different manner than advocated by the Responsible Minerals Initiative or the Dodd-Frank Wall Street Reform and Consumer Protection Act. If we are not able to meet customer requirements, customers may choose to disqualify us as a supplier and we may have to write off inventory in the event that it cannot be sold.

Regulatory authorities in jurisdictions into or from which we ship our products could levy fines, restrict or delay our ability to export or transfer products, or increase costs associated with the manufacture or transfer of products.

A significant portion of our sales are made through the exporting and importing of products. In addition to local jurisdictions' trade regulations, our U.S.-manufactured products or products based on U.S. technology are subject to U.S. laws and regulations governing international trade, including, but not limited to the Foreign Corrupt Practices Act, Export Administration Regulations, International Traffic in Arms Regulations and trade sanctions against embargoed countries and denied entities administered by the U.S. Department of the Treasury, Office of Foreign Assets Control (OFAC). Licenses or proper license exceptions are required for the shipment of our products to certain countries. A determination by the U.S. or foreign government that we have failed to comply with trade or export regulations or anti-bribery regulations can result in penalties which may include denial of export privileges, fines, civil or criminal penalties, and seizure of products. Such penalties could have a material adverse effect on our business, sales and earnings. Further, a change in these laws and regulations could restrict our ability to transfer product to previously permitted countries, customers, distributors or other third parties. Any one or more of these sanctions or a change in laws or regulations could have a material adverse effect on our business, financial condition and results of operations.

For certain of our products associated with our Microsemi acquisition, we rely on U.S. export licenses to ship our products to non-U.S. customers. In 2018, there was a federal government shutdown from January 20, 2018 to January 23, 2018 and a second shutdown from December 22, 2018 through January 25, 2019. Due to the U.S. federal government shutdown, the agency that approves these export licenses was temporarily closed. This resulted in a delay in certain shipments that were scheduled to ship within the quarter. Although this delay did not result in a material adverse impact on our revenue in previous quarters, it could have a material adverse impact on our revenue within the quarter of any future government shutdown, and in the following quarter depending on the ability of the governmental agency to expedite processing of licenses delayed during the shutdown.

The U.S. and other countries have levied tariffs and taxes on certain goods. Trade tensions between the U.S. and China escalated in 2018 and 2019, including the U.S. increasing tariffs on Chinese origin goods, and China increasing tariffs on U.S. goods. Some of our products were affected and are continuing to be affected by the increased tariffs. Higher duties on existing tariffs and further rounds of tariffs have been recently announced or threatened by the U.S. and Chinese administrations. We have taken steps to mitigate the costs of these tariffs on our business. Although these increases in tariffs did not result in significant increases to the operating costs of our business, they did, however, adversely impact demand for our products during fiscal 2019. The recent additional tariffs imposed on components or equipment that we or our suppliers source from China will increase our costs and could have a material adverse impact on our operating results in the three months ending June 30, 2019 or future periods. Increased tariffs on our customers' products could impact their sales of their products, and increased tariffs on our products in comparison to those of our competitors, could each result in lower demand for our products. Further changes in trade policy, tariffs, additional taxes, restrictions on exports or other trade barriers, may limit our ability to produce products,

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increase our selling and/or manufacturing costs, decrease margins, reduce the competitiveness of our products, or inhibit our ability to sell products, which could have a material adverse effect on our business, results of operations or financial conditions.

The outcome of future examinations of our income tax returns could have an adverse effect on our results of operations.

We are subject to examination of our income tax returns by the IRS and other tax authorities for fiscal 2007 and later. We are subject to certain income tax examinations in foreign jurisdictions for fiscal 2007 and later.

We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes and have reserved for potential adjustments that may result from the current examinations. There can be no assurance that the final determination of any of these or any future examinations will not have an adverse effect on our effective tax rates, financial position and results of operations.

Exposure to greater than anticipated income tax liabilities, changes in tax rules and regulations (including the Act), changes in the interpretation of tax rules and regulations, or unfavorable assessments from tax audits could affect our effective tax rates, financial condition and results of operations

We are a U.S.-based multinational company subject to tax in multiple U.S. and foreign tax jurisdictions. Our income tax obligations could be affected by many factors, including but not limited to changes to our corporate operating structure, intercompany arrangements and tax planning strategies.

Our income tax expense is computed based on tax rates at the time of the respective financial period. Our future effective tax rates, financial condition and results from operations could be unfavorably affected by changes in the tax rates in jurisdictions where our income is earned, by changes in the tax rules and regulations or the interpretation of tax rules and regulations in the jurisdictions in which we do business or by changes in the valuation of our deferred tax assets.

Currently, a majority of our revenue is generated from customers located outside the U.S., and a substantial portion of our assets, including employees, are located outside of the U.S. The adoption of the Act significantly changed the taxation of U.S.-based multinational corporations, by, among other things, reducing the U.S. corporate income tax rate, adopting elements of a territorial tax system, assessing a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, and creating new taxes on certain foreign-sourced earnings. The new legislation is unclear in some respects and will require interpretations and implementing regulations by the Internal Revenue Service, as well as state tax authorities, and the legislation could be subject to potential amendments and technical corrections, any of which could lessen or increase certain adverse impacts of the legislation. A significant portion of our earnings are earned by our subsidiaries outside the U.S. Changes to the taxation of certain foreign earnings resulting from the Act, along with the state tax impact of these changes and potential future cash distributions, will likely have an adverse effect on our effective tax rate. Furthermore, changes to the taxation of undistributed foreign earnings could change our future intentions regarding reinvestment of such earnings. The foregoing items could have a material adverse effect on our business, cash flow, results of operations or financial conditions.

The future trading price of our common stock could be subject to wide fluctuations in response to a variety of factors.

The market price of our common stock has fluctuated significantly in the past and is likely to fluctuate in the future. The future trading price of our common stock could be subject to wide fluctuations in response to a variety of factors, many of which are beyond our control, including, but not limited to:

- quarterly variations in our operating results or the operating results of other technology companies;
- our ability to continue to realize the expected benefits of our acquisition of Microsemi;
- general conditions in the semiconductor industry;
- global economic and financial conditions;
- changes in our financial guidance or our failure to meet such guidance;
- changes in analysts' estimates of our financial performance or buy/sell recommendations;
- any other acquisitions we pursue or complete; and
- actual or anticipated announcements of technical innovations or new products by us or our competitors.

In addition, the stock market has from time to time experienced significant price and volume fluctuations that have affected the market prices for many companies and that often have been unrelated to the operating performance of such companies. These broad market fluctuations and other factors have harmed and may harm the market price of our common stock. Some or all of the foregoing factors could also cause the market price of our convertible debentures to decline or fluctuate substantially.

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Anti-takeover defenses in our charter documents and under Delaware law could discourage takeover attempts, which could also reduce the market price of our common stock.

Our certificate of incorporation and bylaws contain provisions that could delay or prevent a change in control of Microchip. These provisions could also make it difficult for stockholders to elect directors that are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the requirement that a special meeting of stockholders may be called only by the holders of 50% or more of the combined voting power of all classes of our capital stock, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the ability of our board of directors, by majority vote, to amend the bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquiror to amend the bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. The application of Section 203 also could have the effect of delaying or preventing a change in control of us.

Any of these provisions could, under certain circumstances, depress the market price of our common stock.

As a result of our acquisition activity, our goodwill and intangible assets have increased significantly in recent years and we may in the future incur impairments to goodwill or intangible assets.

When we acquire a business, a substantial portion of the purchase price of the acquisition is allocated to goodwill and other identifiable intangible assets. The amount of the purchase price which is allocated to goodwill is determined by the excess of the purchase price over the net identifiable assets acquired. As of March 31, 2019, we had goodwill of \$6.66 billion and net intangible assets of \$6.69 billion. In connection with the completion of our acquisition of Microsemi in May 2018, our balance of goodwill and intangible assets increased significantly. We review our indefinite-lived intangible assets, including goodwill, for impairment annually in the fourth fiscal quarter or whenever events or changes in circumstances indicate that the carrying amount of those assets is more likely than not impaired. Factors that may be considered in assessing whether goodwill or intangible assets may be impaired include a decline in our stock price or market capitalization, reduced estimates of future cash flows and slower growth rates in our industry. Our valuation methodology for assessing impairment requires management to make judgments and assumptions based on historical experience and to rely heavily on projections of future operating performance. Because we operate in highly competitive environments, projections of our future operating results and cash flows may vary significantly from our actual results. No goodwill impairment charges were recorded in fiscal 2019 or fiscal 2018. In fiscal 2019, we recognized \$3.1 million of intangible asset impairment charges. No material intangible asset impairment charges were recorded in fiscal 2018. If in future periods, we determine that our goodwill or intangible assets are impaired, we will be required to write down these assets which would have a negative effect on our consolidated financial statements.

Our foreign pension plans are unfunded, and any requirement to fund these plans in the future could negatively affect our cash position and operating capital.

In connection with our acquisitions of Microsemi and Atmel, we assumed defined benefit pension plans that cover certain of our French and German employees. Plan benefits are managed in accordance with local statutory requirements. Benefits are based on years of service and employee compensation levels. The projected benefit obligation totaled \$72.7 million at March 31, 2019. Most of these plans are unfunded in compliance with local statutory regulations, and we have no immediate

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intention of funding these plans. Benefits are paid when amounts become due, commencing when participants retire. We expect to pay approximately \$1.3 million in fiscal 2020 for benefits earned. Should legislative regulations require complete or partial funding of these plans in the future, it could negatively affect our cash position and operating capital.

From time to time we receive grants from governments, agencies and research organizations. If we are unable to comply with the terms of those grants, we may not be able to receive or recognize grant benefits or we may be required to repay grant benefits previously paid to us and recognize related charges, which would adversely affect our operating results and financial position.

From time to time, we receive economic incentive grants and allowances from European governments, agencies and research organizations targeted at increasing employment at specific locations. The subsidy grant agreements typically contain economic incentive, headcount, capital and research and development expenditure and other covenants that must be met to receive and retain grant benefits, and these programs can be subjected to periodic review by the relevant governments. Noncompliance by us with the conditions of the grants could result in our forfeiture of all or a portion of any future amounts to be received, as well as the repayment of all or a portion of amounts received to date.

Conversion of our debentures will dilute the ownership interest of our existing stockholders.

The conversion of some or all of our outstanding debentures will dilute the ownership interest of existing stockholders to the extent we deliver common stock upon conversion of the debentures. Upon conversion, we may satisfy our conversion obligation by delivering cash, shares of common stock or any combination, at our option. If upon conversion we elect to deliver cash for the lesser of the conversion value and principal amount of the debentures, we would pay the holder the cash value of the applicable number of shares of our common stock. Upon conversion, we intend to satisfy the lesser of the principal amount or the conversion value of the debentures in cash. If the conversion value of a debenture exceeds the principal amount of the debenture, we may also elect to deliver cash in lieu of common stock for the conversion value in excess of the one thousand dollars principal amount (i.e., the conversion spread). There would be no adjustment to the numerator in the net income per common share computation for the cash settled portion of the debentures as that portion of the debt instrument will always be settled in cash. The conversion spread will be included in the denominator for the computation of diluted net income per common share. Any sales in the public market of any common stock issuable upon conversion of our debentures could adversely affect prevailing market prices of our common stock. In addition, the existence of the debentures may encourage short selling by market participants because the conversion of the debentures could be used to satisfy short positions, or anticipated conversion of the debentures into shares of our common stock could depress the price of our common stock.

Climate change regulations and sustained adverse climate change pose regulatory and physical risks that could harm our results of operations or affect the way we conduct business.

Climate change regulations at the federal, state or local level or in international jurisdictions could require us to limit emissions, change our manufacturing processes, obtain substitute materials which may cost more or be less available, increase our investment in control technology for greenhouse gas emissions, fund offset projects or undertake other costly activities. These regulations could significantly increase our costs and restrict our manufacturing operations by virtue of requirements for new equipment. New permits may be required for our current operations, or expansions thereof. Failure to timely receive permits could result in fines, suspension of production, or cessation of operations at one or more facilities. In addition, restrictions on carbon dioxide or other greenhouse gas emissions could result in significant costs such as higher energy costs, and utility companies passing down carbon taxes, emission cap and trade programs and renewable portfolio standards. The cost of complying, or of failing to comply, with these and other climate change and emissions regulations could have an adverse effect on our operating results.

Further, any sustained adverse change in climate could have a direct adverse economic impact on us, such as water and power shortages, and higher costs of water or energy to control the temperature of our facilities. Certain of our operations are located in arid or tropical regions, such as Arizona, Thailand, and the Philippines. Some environmental experts predict that these regions may become vulnerable to storms, severe floods and droughts due to climate change. While we maintain business recovery plans that are intended to allow us to recover from natural disasters or other events that can interrupt our business, we cannot be certain that our plans will protect us from all such disasters or events.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

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Item 2. PROPERTIES

At March 31, 2019, we owned and used the facilities described below:

Location	Approximate Total Sq. Ft.	Uses
Gresham, Oregon	826,500	Wafer Fabrication (Fab 4); R&D Center; Administrative Offices; and Warehousing
Chandler, Arizona	687,000	Executive and Administrative Offices; Wafer Probe; R&D Center; Sales and Marketing; and Computer and Service Functions
Chacherngsao, Thailand	489,000	Assembly and Test; Wafer Probe; Sample Center; Warehousing; and Administrative Offices
Colorado Springs, Colorado	480,000	Manufacturing, Test, Research and Development, Computer and Service Functions, Design and Engineering
Calamba, Philippines	460,000	Wafer Probe, Test, Warehousing and Administrative Offices
Tempe, Arizona	457,000	Wafer Fabrication (Fab 2); R&D Center; Administrative Offices; and Warehousing
Bangalore, India	294,000	Research and Development; Sales and Marketing Support, and Administrative Offices
Chacherngsao, Thailand	215,000	Assembly and Test; Warehousing; and Administrative Offices
Rousset, France	170,000	Design, Engineering, Test and Administrative
Lawrence, Massachusetts	160,000	Manufacturing and Administrative offices
Mount Holly Springs, Pennsylvania	100,000	Manufacturing, R&D and Administrative offices
Garden Grove, California	98,100	Manufacturing, R&D and Administrative offices
San Jose, California	98,000	Design, Engineering, and Administrative
Chennai, India	91,000	Design and Engineering
Neckarbischofsheim, Germany	80,000	Manufacturing and Administrative offices
Nantes, France	77,000	Design, Engineering, Test and Probe, Administrative and Warehousing
San Jose, California	71,000	Design, Engineering, and Administrative
San Jose, California	57,000	Design, Engineering, and Administrative
Beverly, Massachusetts	52,103	Manufacturing
Heilbronn, Germany	46,000	Design, Engineering and Administrative
Karlsruhe, Germany	43,000	Design, Engineering and Administrative
Ennis County, Ireland	40,000	Manufacturing
Simsbury, Connecticut	32,500	Manufacturing, R&D and Administrative offices
Shanghai, China	21,000	Research and Development; Marketing Support, and Administrative Offices
Hsinchu, Taiwan	15,000	Design, Engineering and Administrative

Our Chennai, India facility is currently under construction which will add 96,000 square feet of office space.

In addition to the facilities we own, we lease several research and development facilities and sales offices in North America, Europe and Asia. Our aggregate monthly rental payment for our leased facilities is approximately \$4.6 million.

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We currently believe that our existing facilities are suitable and will be adequate to meet our requirements for at least the next 12 months.

See page 46 for a discussion of the capacity utilization of our manufacturing facilities.

Item 3. LEGAL PROCEEDINGS

Refer to Note 13 to our consolidated financial statements for information regarding legal proceedings.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

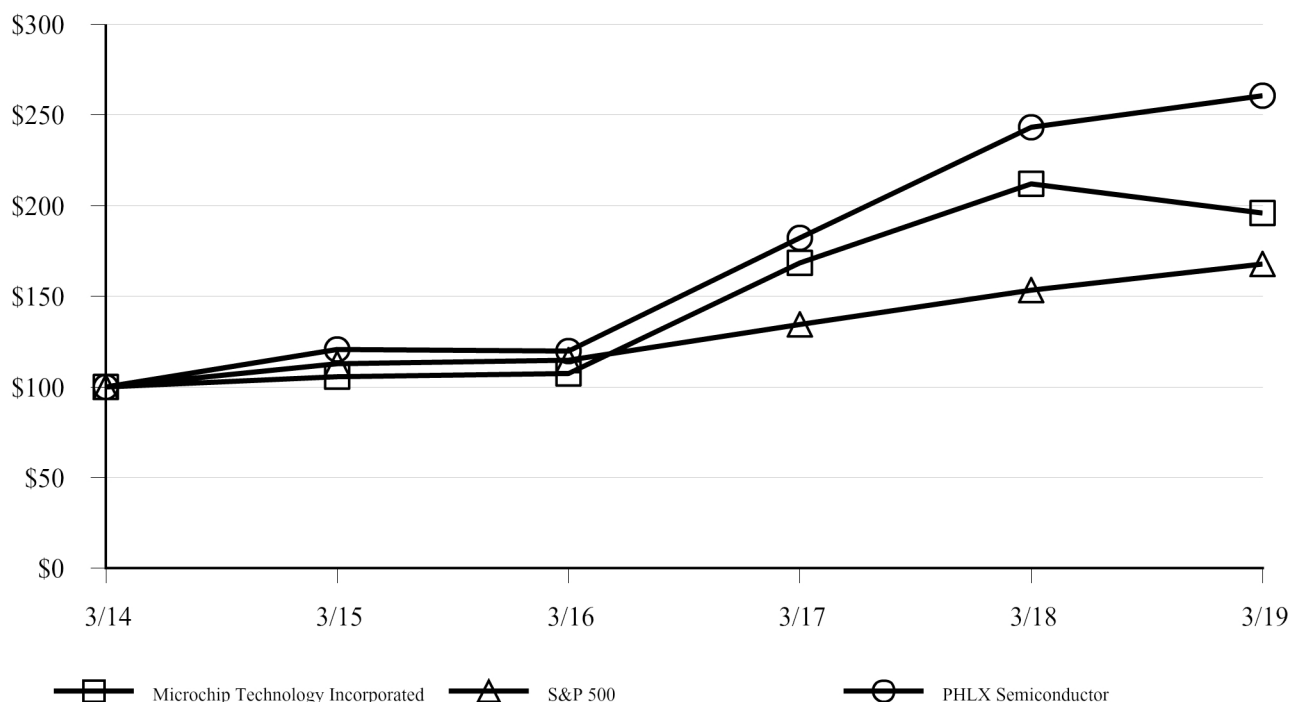
Our common stock is traded on the NASDAQ Global Market under the symbol "MCHP."

Stock Price Performance Graph

The following graph and table show a comparison of the five-year cumulative total stockholder return, calculated on a dividend reinvestment basis, for Microchip Technology Incorporated, the Standard & Poor's (S&P) 500 Stock Index, and the Philadelphia Semiconductor Index.

Comparison of 5 year Cumulative Total Return*

Among Microchip Technology Incorporated, the S&P 500 Index and the PHLX Semiconductor Index



*\$100 invested on March 31, 2014 in stock or index, including reinvestment of dividends
Fiscal year ending March 31.

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	Cumulative Total Return					
	March 2014	March 2015	March 2016	March 2017	March 2018	March 2019
Microchip Technology Incorporated	100.00	105.55	107.37	168.33	212.04	195.92
S&P 500 Stock Index	100.00	112.73	114.74	134.45	153.26	167.81
Philadelphia Semiconductor Index	100.00	120.57	119.69	182.14	243.30	260.60

Data acquired by Research Data Group, Inc. (www.researchdatagroup.com)

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On May 14, 2019, there were approximately 564 holders of record of our common stock. This figure does not reflect beneficial ownership of shares held in nominee names.

Refer to "Item 12 - Security Ownership Of Certain Beneficial Owners And Management And Related Stockholder Matters," at page 58 below, for the information required by Item 201(d) of Regulation S-K with respect to securities authorized for issuance under our equity compensation plans at March 31, 2019.

Issuer Purchases of Equity Securities

In May 2015, our Board of Directors authorized the repurchase of up to 20.0 million shares of our common stock in the open market or in privately negotiated transactions. As of March 31, 2016, we had repurchased 8.6 million shares under this authorization for approximately \$363.8 million. In January 2016, our Board of Directors authorized an increase in the existing share repurchase program to 15.0 million shares of common stock from the approximately 11.4 million shares remaining under the prior authorization. There were no repurchases of common stock during fiscal 2019. There is no expiration date associated with this repurchase program.

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Item 6. SELECTED FINANCIAL DATA

You should read the following selected consolidated financial data for the five-year period ended March 31, 2019 in conjunction with our consolidated financial statements and notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Items 7 and 8 of this Form 10-K. Our consolidated statements of income data for each of the years in the three-year period ended March 31, 2019, and the balance sheet data as of March 31, 2019 and 2018, are derived from our audited consolidated financial statements, included in Item 8 of this Form 10-K. The statement of income data for the years ended March 31, 2016 and 2015 and balance sheet data as of March 31, 2017, 2016 and 2015 have been derived from our audited consolidated financial statements not included herein (in the tables below all amounts are in millions, except per share data).

	Year ended March 31,				
	2019 ⁽¹⁾	2018	2017 ⁽¹⁾	2016	2015
Consolidated Statements of Income data:					
Net sales	\$ 5,349.5	\$ 3,980.8	\$ 3,407.8	\$ 2,173.3	\$ 2,147.0
Special charges and other, net ⁽²⁾	\$ 33.7	\$ 17.5	\$ 98.6	\$ 4.0	\$ 2.8
Loss on settlement of debt ⁽³⁾	\$ (12.6)	\$ (16.0)	\$ (43.9)	\$ —	\$ (50.6)
Net income from continuing operations	\$ 355.9	\$ 255.4	\$ 170.6	\$ 323.9	\$ 365.3
Basic net income per common share from continuing operations	\$ 1.51	\$ 1.10	\$ 0.79	\$ 1.59	\$ 1.84
Diluted net income per common share from continuing operations	\$ 1.42	\$ 1.03	\$ 0.73	\$ 1.49	\$ 1.65
Dividends declared per common share	\$ 1.457	\$ 1.449	\$ 1.441	\$ 1.433	\$ 1.425
Consolidated Balance Sheets data:					
Total assets	\$ 18,350.0	\$ 8,257.2	\$ 7,686.9	\$ 5,537.9	\$ 4,780.7
Net long-term debt and capital lease obligations, less current maturities ⁽³⁾	\$ 8,956.0	\$ 1,769.1	\$ 2,912.1	\$ 2,465.8	\$ 1,840.0
Microchip Technology stockholders' equity	\$ 5,287.5	\$ 3,279.8	\$ 3,270.7	\$ 2,150.9	\$ 2,044.7

⁽¹⁾ Refer to Note 2 to our consolidated financial statements for an explanation of our material business combinations during fiscal 2019 and fiscal 2017.

⁽²⁾ Refer to Note 4 to our consolidated financial statements for a discussion of the special charges and other, net.

⁽³⁾ Refer to Note 12 Debt and Credit Facility for further discussion.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Note Regarding Forward-looking Statements

This report, including "Item 1 – Business," "Item 1A – Risk Factors," and "Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations," contains certain forward-looking statements that involve risks and uncertainties, including statements regarding our strategy, financial performance and revenue sources. We use words such as "anticipate," "believe," "plan," "expect," "future," "continue," "intend" and similar expressions to identify forward-looking statements. Our actual results could differ materially from the results anticipated in these forward-looking statements as a result of certain factors including those set forth under "Risk Factors," beginning at page 12 and elsewhere in this Form 10-K. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on these forward-looking statements. We disclaim any obligation to update information contained in any forward-looking statement. These forward-looking statements include, without limitation, statements regarding the following:

- The effects that uncertain global economic conditions and fluctuations in the global credit and equity markets may have on our financial condition and results of operations;
- The effects and amount of competitive pricing pressure on our product lines and modest pricing declines in certain of our more mature proprietary product lines;
- Our ability to moderate future average selling price declines;
- The effect of product mix, capacity utilization, yields, fixed cost absorption, competition and economic conditions on gross margin;
- The amount of, and changes in, demand for our products and those of our customers;
- The impact of trade restrictions and changes in tariffs, including those impacting China;
- Our expectation that in the future we will acquire additional businesses that we believe will complement our existing businesses;
- Our expectation that in the future we will enter into joint development agreements or other business or strategic relationships with other companies;
- The level of orders that will be received and shipped within a quarter, including the impact of our product lead times;
- Our expectation that our June 2019 days of inventory levels will be down 8 days to up 11 days compared to the March 2019 levels. Our belief that our existing level of inventory will allow us to maintain competitive lead times and provide strong delivery performance to our customers;
- The effect that distributor and customer inventory holding patterns will have on us;
- Our belief that customers recognize our products and brand name and use distributors as an effective supply channel;
- Anticipating increased customer requirements to meet voluntary criteria related to the reduction or elimination of substances in our products;
- Our belief that deferred cost of sales are recorded at their approximate carrying value and will have low risk of material impairment;
- Our belief that our direct sales personnel combined with our distributors provide an effective means of reaching our customer base;
- The accuracy of our estimates of the useful life and values of our property, assets and other liabilities;
- Our ability to increase the proprietary portion of our analog and interface product lines and the effect of such an increase;
- Our belief that our processes afford us both cost-effective designs in existing and derivative products and greater functionality in new product designs;
- The impact of any supply disruption we may experience;
- Our ability to effectively utilize our facilities at appropriate capacity levels and anticipated costs;
- That we adjust capacity utilization to respond to actual and anticipated business and industry-related conditions;
- That our existing facilities will provide sufficient capacity to respond to increases in demand with modest incremental capital expenditures;
- That manufacturing costs will be reduced by transition to advanced process technologies;
- Our ability to maintain manufacturing yields;
- Continuing our investments in new and enhanced products;
- The cost effectiveness of using our own assembly and test operations;
- Our anticipated level of capital expenditures;
- Continuation and amount of quarterly cash dividends;

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- That the Atmel acquisition was structured in a manner that enabled us to utilize a substantial portion of the cash, cash equivalents, short-term investments and long-term investments held by certain of our foreign subsidiaries in a tax efficient manner and that our determinations with respect to the tax consequences of the acquisition are reasonable;
- The sufficiency of our existing sources of liquidity to finance anticipated capital expenditures and otherwise meet our anticipated cash requirements, and the effects that our contractual obligations are expected to have on them;
- The impact of seasonality on our business;
- Our belief that our IT system compromise has not had a material adverse effect on our business or resulted in any material damage to us;
- The accuracy of our estimates used in valuing employee equity awards;
- That the resolution of legal actions will not have a material effect on our business, and the accuracy of our assessment of the probability of loss and range of potential loss;
- The recoverability of our deferred tax assets;
- The adequacy of our tax reserves to offset any potential tax liabilities, having the appropriate support for our income tax positions and the accuracy of our estimated tax rate;
- That we intend to pay the one-time transition tax over a period of eight years;
- Our belief that our determinations with respect to the tax consequences of the Atmel acquisition are reasonable;
- Our belief that the expiration of any tax holidays will not have a material impact on our overall tax expense or effective tax rate;
- Our belief that the estimates used in preparing our consolidated financial statements are reasonable;
- Our actions to vigorously and aggressively defend and protect our intellectual property on a worldwide basis;
- Our ability to obtain patents and intellectual property licenses and minimize the effects of litigation;
- The level of risk we are exposed to for product liability claims or indemnification claims;
- The effect of fluctuations in market interest rates on our income and/or cash flows;
- The effect of fluctuations in currency rates;
- That we could determine to repatriate some of our offshore earnings in future periods to fund stockholder dividends, share repurchases, acquisitions or other corporate activities;
- Our intention to satisfy the lesser of the principal amount or the conversion value of our debentures in cash;
- Our intention to invest substantially all of our foreign subsidiary earnings, as well as our capital in our foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which we would incur significant, additional costs upon repatriation of such amounts.
- Changes to the taxation of undistributed foreign earnings could change our future intentions regarding reinvestment of such earnings;
- Our belief that the effect the new tax laws will have on low-taxed income of foreign subsidiaries will have the most significant, adverse impact;
- Our intent to maintain a high-quality investment portfolio that preserves principal, meets liquidity needs, avoids inappropriate concentrations and delivers an appropriate yield; and
- Our ability to collect accounts receivable.

Our actual results could differ materially from the results anticipated in these forward-looking statements as a result of certain factors including those set forth in "Item 1A – Risk Factors," and elsewhere in this Form 10-K. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on these forward-looking statements. We disclaim any obligation to update the information contained in any forward-looking statement.

Introduction

The following discussion should be read in conjunction with the consolidated financial statements and the related notes that appear elsewhere in this document, as well as with other sections of this Annual Report on Form 10-K, including "Item 1 – Business;" "Item 6 – Selected Financial Data;" and "Item 8 – Financial Statements and Supplementary Data."

We begin our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) with a summary of our overall business strategy to give the reader an overview of the goals of our business and the overall direction of our business and products. This is followed by a discussion of the Critical Accounting Policies and Estimates that we believe are important to understanding the assumptions and judgments incorporated in our reported financial results. We then discuss our Results of Operations for fiscal 2019 compared to fiscal 2018, and for fiscal 2018 compared to fiscal 2017. We then provide an analysis of changes in our balance sheet and cash flows, and discuss our financial commitments in sections titled "Liquidity and Capital Resources," "Contractual Obligations" and "Off-Balance Sheet Arrangements."

Acquisition of Microsemi

On May 29, 2018, we completed our acquisition of Microsemi Corporation, a publicly traded company headquartered in Aliso Viejo, California. We paid an aggregate of approximately \$8.19 billion in cash to the stockholders of Microsemi. The total consideration transferred in the acquisition, including approximately \$53.9 million of non-cash consideration for the exchange of certain share-based payment awards of Microsemi for stock awards of Microchip, was approximately \$8.24 billion. In addition to the consideration transferred, we recognized in our consolidated financial statements \$3.23 billion in liabilities of Microsemi consisting of debt, taxes payable and deferred, pension obligations, restructuring, and contingent and other liabilities of which \$2.06 billion of existing debt was paid off. We financed the purchase price using approximately \$8.10 billion of borrowings consisting of \$3.10 billion of loans under our revolving line of credit (the "Revolving Credit Facility"), \$3.00 billion of term loans ("Term Loan Facility") provided under our amended and restated Credit Agreement, and \$2.00 billion in newly issued senior secured notes. We incurred \$22.0 million in costs related to the acquisition. As a result of the acquisition, Microsemi became a wholly owned subsidiary of Microchip. Microsemi offers a comprehensive portfolio of semiconductor and system solutions for aerospace and defense, communications, data center and industrial markets. Our primary reason for this acquisition was to expand our range of solutions, products and capabilities by extending our served available market.

For further details, see the discussion in Note 2 of our financial statements included in this report.

Material Weaknesses in Internal Controls

As discussed in Item 9A "Controls and Procedures" in this report on Form 10-K, in the fourth quarter of fiscal 2019, we identified a material weakness in our internal controls related to accounting for income taxes and we also identified a material weakness in our internal controls related to IT system access. Internal controls related to such matters are important to accurately reflect our financial position and results of operations in our financial reports. We are in the process of remediating the material weaknesses, but our efforts may not be successful. If we are unable to remediate the material weaknesses in an appropriate and timely manner, or if we identify additional control deficiencies that individually or together constitute significant deficiencies or material weaknesses, our ability to accurately record, process, and report financial information and consequently, our ability to prepare financial statements within required time periods, could be adversely affected. Failure to maintain effective internal controls could result in violations of applicable securities laws, stock exchange listing requirements, and the covenants under our debt agreements, subject us to litigation and investigations, negatively affect investor confidence in our financial statements, and adversely impact our stock price and ability to access capital markets. For additional information, refer to Item 9A "Controls and Procedures."

IT System Compromise

We have learned of an ongoing compromise of our computer networks by what is believed to be sophisticated hackers. We have engaged experienced legal counsel and a leading forensic investigatory firm with experience in such matters. We have taken steps to identify malicious activity on our network including a compromise of our network and, as of the date of this filing, we are implementing a containment plan. We are continuing to evaluate the effectiveness of the containment plan and the amount and content of the information that was compromised and to implement additional remedial actions. At this time, we do not believe that this IT system compromise has had a material adverse effect on our business or resulted in any material damage to us. However, we are still evaluating the amount and type of data that was compromised and there can be no assurance as to what the impact of this IT system compromise will be. As described above, in connection with the IT system compromise, our management has concluded that we have a material weakness in our internal controls.

Strategy

Our goal is to be a worldwide leader in providing specialized semiconductor products for a wide variety of embedded control applications. Our strategic focus is on embedded control solutions, including general purpose and specialized 8-bit, 16-bit, and 32-bit microcontrollers, 32-bit microprocessors, field-programmable gate array (FPGA) products, a broad spectrum of high-performance linear, mixed-signal, power management, thermal management, discrete diodes and MOSFETS, radio frequency (RF), timing, timing systems, safety, security, wired connectivity and wireless connectivity devices, as well as Serial Electrically Erasable Programmable Read Only Memory (EEPROM), Serial Flash memories, Parallel Flash memories, Serial Electrically Erasable Random Access Memory (EERAM) and Serial Static Random Access Memory (SRAM). We also license Flash-IP solutions that are incorporated in a broad range of products. We provide highly cost-effective embedded control solutions that also offer the advantages of small size, high performance, extreme low power usage, wide voltage range operation, mixed signal integration and ease of development, thus enabling timely and cost-effective integration of our solutions by our customers in their end products. We license our SuperFlash technology and other technologies to wafer

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foundries, integrated device manufacturers and design partners throughout the world for use in the manufacture of advanced microcontroller products, gate array, radio frequency (RF) and analog products that require embedded non-volatile memory.

We sell our products to a broad base of domestic and international customers across a variety of industries. The principal markets that we serve include consumer, automotive, industrial, aerospace, office communication, and computing. Our business is subject to fluctuations based on economic conditions within these markets.

Our manufacturing operations include wafer fabrication, wafer probe and assembly and test. The ownership of a substantial portion of our manufacturing resources is an important component of our business strategy, enabling us to maintain a high level of manufacturing control resulting in us being one of the lowest cost producers in the embedded control industry. By owning wafer fabrication facilities and assembly and test operations, and by employing statistical process control techniques, we have been able to achieve and maintain high production yields. Direct control over manufacturing resources allows us to shorten our design and production cycles. This control also allows us to capture a portion of the wafer manufacturing and the assembly and test profit margin. We do outsource a significant portion of our manufacturing requirements to third parties. Our acquisition of Microsemi significantly increased the amount of our outsourced manufacturing requirements.

We employ proprietary design and manufacturing processes in developing our embedded control products. We believe our processes afford us both cost-effective designs in existing and derivative products and greater functionality in new product designs. While many of our competitors develop and optimize separate processes for their logic and memory product lines, we use a common process technology for both microcontroller and non-volatile memory products. This allows us to more fully leverage our process research and development costs and to deliver new products to market more rapidly. Our engineers utilize advanced computer-aided design tools and software to perform circuit design, simulation and layout, and our in-house photomask and wafer fabrication facilities enable us to rapidly verify design techniques by processing test wafers quickly and efficiently.

We are committed to continuing our investment in new and enhanced products, including development systems, and in our design and manufacturing process technologies. We believe these investments are significant factors in maintaining our competitive position. Our current research and development activities focus on the design of new microcontrollers, digital signal controllers, memory, analog and mixed-signal products, FPGAs, timing systems, Flash-IP, development systems, software and application-specific software libraries. We are also developing new design and process technologies to achieve further cost reductions and performance improvements in our products.

We market and sell our products worldwide primarily through a network of direct sales personnel and distributors. Our distributors focus primarily on servicing the product and technical support requirements of a broad base of diverse customers. We believe that our direct sales personnel combined with our distributors provide an effective means of reaching this broad and diverse customer base. Our direct sales force focuses primarily on major strategic accounts in three geographical markets: the Americas, Europe and Asia. We currently maintain sales and support centers in major metropolitan areas in North America, Europe and Asia. We believe that a strong technical service presence is essential to the continued development of the embedded control market. Many of our client engagement managers (CEMs), embedded system engineers (ESEs), and sales management personnel have technical degrees and have been previously employed in an engineering environment. We believe that the technical knowledge of our sales force is a key competitive advantage in the sale of our products. The primary mission of our ESE team is to provide technical assistance to strategic accounts and to conduct periodic training sessions for CEMs and distributor sales teams. ESEs also frequently conduct technical seminars for our customers in major cities around the world, and work closely with our distributors to provide technical assistance and end-user support.

See "Our operating results are impacted by both seasonality and the wide fluctuation of supply and demand in the semiconductor industry," on page 16 for discussion of the impact of seasonality on our business.

Critical Accounting Policies and Estimates

General

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. We review the accounting policies we use in reporting our financial results on a regular basis. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, business combinations, share-based compensation, inventories, income taxes, senior and junior subordinated

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convertible debt and contingencies. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Our results may differ from these estimates due to actual outcomes being different from those on which we based our assumptions. We review these estimates and judgments on an ongoing basis. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition (subsequent to our adoption of ASU 2014-09-Revenue from Contracts with Customers (ASC 606) on April 1, 2018)

We generate revenue primarily from sales of our semiconductor products to distributors and non-distributor customers (direct customers) and, to a lesser extent, from royalties paid by licensees of our intellectual property. We apply the following five-step approach to determine the timing and amount of revenue recognition: (1) identify the contract with the customer, (2) identify performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when the performance obligation is satisfied.

Sales to our distributors are governed by a distributor agreement, a purchase order, and an order acknowledgment. Sales to distributors do not meet the definition of a contract, as defined by ASC 606, until the distributor has sent in a purchase order, we have acknowledged the order, we have deemed the collectability of the consideration to be probable, and legally enforceable rights and obligations have been created; this generally occurs 30 days prior to the estimated ship date. As is customary in the semiconductor industry, we offer price concessions and stock rotation rights to many of our distributors. As these are forms of variable consideration, we estimate the amount of consideration to which we will be entitled using recent historical data and applying the expected value method. Usually, there is only a single performance obligation in the contract, and therefore the entire transaction price is allocated to the single performance obligation. After the transaction price has been allocated, we recognize revenue when the performance obligation is satisfied. Substantially all of the revenue generated from contracts with distributors is recognized at the time risk and title of the inventory transfers to the distributor.

Sales to our direct customers are generally governed by a purchase order and an order acknowledgment. Sales to direct customers usually do not meet the definition of a contract, as defined by ASC 606, until shipment of the product occurs. Generally, the transaction price associated with contracts with direct customers is set at the standalone selling price and is not variable. Usually, there is only a single performance obligation in the contract, and therefore the entire transaction price is allocated to the single performance obligation. After the transaction price has been allocated, we recognize revenue when the performance obligation is satisfied. Substantially all of the revenue generated from contracts with direct customers is recognized at the time risk and title of the inventory transfers to the customer.

Revenue generated from our licensees is governed by licensing agreements. Our primary performance obligation related to these agreements is to provide the licensee the right to use the intellectual property. The final transaction price is determined by multiplying the usage of the license by the royalty, which is fixed in the licensing agreement. Revenue is recognized as usage of the license occurs.

Revenue Recognition - Distributors (prior to our adoption of ASC 606 on April 1, 2018)

Our distributors worldwide generally had broad price protection and product return rights which prevented the sales pricing from being fixed or determinable at the time of shipment to our distributors. Therefore, revenue recognition was deferred until the pricing uncertainty was resolved, which generally occurred when the distributor sold the product to their customer. At the time of shipment to these distributors, we recorded a trade receivable for the selling price as there was a legally enforceable right to payment, relieved inventory for the carrying value of goods shipped since legal title had passed to the distributor, and recorded the gross margin in deferred income on shipments to distributors on our consolidated balance sheets.

Deferred income on shipments to distributors effectively represented the gross margin on the sale to the distributor; however, the amount of gross margin that we recognized in the subsequent periods was less than the deferred margin as a result of credits granted to distributors on specifically identified products and customers to allow the distributors to earn a competitive gross margin on the sale of our products to their end customers and price protection concessions related to market pricing conditions.

We sold the majority of the items in our product catalog to our distributors worldwide at a uniform list price. However, distributors resold our products to end customers at a broad range of individually negotiated price points. The majority of our distributors' resales required a reduction from the original list price paid. Often, under these circumstances, we remitted back to

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the distributor a portion of their original purchase price after the resale transaction was completed in the form of a credit against the distributors' outstanding accounts receivable balance. The credits were on a per unit basis and were not given to the distributor until they provided information to us regarding the sale to their end customer. The price reductions varied significantly based on the customer, product, quantity ordered, geographic location and other factors. Discounts to a price less than our cost have historically been rare. The effect of granting these credits established the net selling price to our distributors for the product and resulted in the net revenue recognized by us when the product was sold by the distributors to their end customers. Thus, a portion of the "deferred income on shipments to distributors" balance represented the amount of distributors' original purchase price that was credited back to the distributors in the subsequent periods. We did not reduce deferred income on shipments to distributors or accounts receivable by anticipated concessions; rather, price concessions were typically recorded against deferred income on shipments to distributors and accounts receivable when incurred, which was generally at the time the distributor sold the product. At March 31, 2018, we had approximately \$479.6 million of deferred revenue and \$145.8 million in deferred cost of sales recognized as \$333.8 million of deferred income on shipments to distributors. The deferred income on shipments to distributors that was ultimately recognized in our income statement was lower than the amount reflected on the balance sheet at March 31, 2018 due to additional price credits that were granted to the distributors when the product was sold to their customers. These additional price credits historically have resulted in the deferred income approximating the overall gross margins that we recognized in the distribution channel of our business.

Distributor advances, reflected as a reduction of deferred income on shipments to distributors on our consolidated balance sheets, totaled \$203.9 million at March 31, 2018. On sales to distributors, our payment terms generally require the distributor to settle amounts owed to us for an amount in excess of their ultimate cost. The sales price to our distributors may be higher than the amount that the distributors will ultimately owe us because distributors often negotiate price reductions after purchasing products from us and such reductions are often significant. It is our practice to apply these negotiated price discounts to future purchases, requiring the distributor to settle receivable balances, on a current basis, generally within 30 days, for amounts originally invoiced. This practice has an adverse impact on the working capital of our distributors. As such, we have entered into agreements with certain distributors whereby we advance cash to the distributors to reduce the distributors' working capital requirements. These advances are reconciled at least on a quarterly basis and are estimated based on the amount of ending inventory as reported by the distributor multiplied by a negotiated percentage. Such advances had no impact on our revenue recognition or our consolidated statements of income. We processed discounts taken by distributors against our deferred income on shipments to distributors' balance and true-up the advanced amounts generally after the end of each completed fiscal quarter. The terms of these advances are set forth in binding legal agreements and are unsecured, bear no interest on unsettled balances and are due upon demand. The agreements governing these advances can be canceled by us at any time.

We reduced product pricing through price protection based on market conditions, competitive considerations and other factors. Price protection was granted to distributors on the inventory they had on hand at the date the price protection was offered. When we reduced the price of our products, it allowed the distributor to claim a credit against its outstanding accounts receivable balances based on the new price of the inventory it had on hand as of the date of the price reduction. There was no immediate revenue impact from the price protection, as it was reflected as a reduction of the deferred income on shipments to distributors' balance.

Products returned by distributors and subsequently scrapped have historically been immaterial to our consolidated results of operations. We routinely evaluated the risk of impairment of the deferred cost of sales component of the deferred income on shipments to distributors account. Because of the historically immaterial amounts of inventory that have been scrapped, and historically rare instances where discounts given to a distributor resulted in a price less than our cost, we believe the deferred costs were recorded at their approximate carrying value.

Business Combinations

All of our business combinations are accounted for at fair value under the acquisition method of accounting. Under the acquisition method of accounting, (i) acquisition-related costs, except for those costs incurred to issue debt or equity securities, will be expensed in the period incurred; (ii) non-controlling interests will be valued at fair value at the acquisition date; (iii) in-process research and development will be recorded at fair value as an intangible asset at the acquisition date and amortized once the technology reaches technological feasibility; (iv) restructuring costs associated with a business combination will be expensed subsequent to the acquisition date; and (v) changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date will be recognized through income tax expense. The measurement of the fair value of assets acquired and liabilities assumed requires significant judgment. The valuation of intangible assets, in particular, requires that we use valuation techniques such as the income approach. The income approach includes the use of a discounted cash flow model, which includes discounted cash flow scenarios and requires the following significant estimates: revenue, expenses, capital spending and other costs, and discount rates based on the respective risks of the cash flows. Under the

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acquisition method of accounting, the aggregate amount of consideration we pay for a company is allocated to net tangible assets and intangible assets based on their estimated fair values as of the acquisition date. The excess of the purchase price over the value of the net tangible assets and intangible assets is recorded to goodwill. On an annual basis, we test goodwill for impairment and through March 31, 2019, we have never recorded an impairment charge against our goodwill balance.

Share-based Compensation

We measure at fair value and recognize compensation expense for all share-based payment awards, including grants of employee stock options, restricted stock units (RSUs) and employee stock purchase rights, to be recognized in our financial statements based on their respective grant date fair values. For the past several years, we have utilized RSUs as our primary equity incentive compensation instrument for employees. Share-based compensation cost is measured on the grant date based on the fair market value of our common stock discounted for expected future dividends and is recognized as expense on a straight-line basis over the requisite service periods. Total share-based compensation expense recognized in fiscal 2019 was \$166.4 million, of which \$151.5 million was reflected in operating expenses and \$14.9 million was reflected in cost of sales. Total share-based compensation included in our inventory balance was \$12.4 million at March 31, 2019.

During the year ended March 31, 2017, we elected to early adopt ASU 2016-09, *Compensation - Stock Compensation, Improvements to Employee Share-Based Payment Accounting (Topic 718)*. Under this standard, entities are permitted to make an accounting policy election to either estimate forfeitures on share-based payment awards, as previously required, or to recognize forfeitures as they occur. We have elected to recognize forfeitures as they occur. Prior to the adoption of ASU 2016-09, we estimated the number of share-based awards to be forfeited due to employee turnover.

If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned share-based compensation expense. Future share-based compensation expense and unearned share-based compensation will increase to the extent that we grant additional equity awards to employees or we assume unvested equity awards in connection with acquisitions.

Inventories

Inventories are valued at the lower of cost or net realizable value using the first-in, first-out method. We write down our inventory for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of inventory and the estimated net realizable value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those we projected, additional inventory write-downs may be required. Inventory impairment charges establish a new cost basis for inventory and charges are not subsequently reversed to income even if circumstances later suggest that increased carrying amounts are recoverable. In estimating our inventory obsolescence, we primarily evaluate estimates of demand over a 12-month period and record impairment charges for inventory on hand in excess of the estimated 12-month demand. Estimates for projected 12-month demand are generally based on the average shipments of the prior three-month period, which are then annualized to adjust for any potential seasonality in our business. The estimated 12-month demand is compared to our most recently developed sales forecast to further reconcile the 12-month demand estimate. Management reviews and adjusts the estimates as appropriate based on specific situations. For example, demand can be adjusted up for new products for which historic sales are not representative of future demand. Alternatively, demand can be adjusted down to the extent any existing products are being replaced or discontinued.

In periods where our production levels are substantially below our normal operating capacity, the reduced production levels of our manufacturing facilities are charged directly to cost of sales. As a result of production being below normal operating levels in our wafer fabrication facilities, approximately \$19.0 million was charged to cost of sales in fiscal 2019. There was no charge to cost of sales for reduced production levels in fiscal 2018 or fiscal 2017.

Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income within the relevant jurisdiction and to the extent we believe that recovery is not likely, we must establish a valuation allowance. We provided valuation allowances for certain of our deferred tax assets, where it is more likely than not that some portion, or all of such assets, will not be realized.

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Various taxing authorities in the U.S. and other countries in which we do business scrutinize the tax structures employed by businesses. Companies of our size and complexity are regularly audited by the taxing authorities in the jurisdictions in which they conduct significant operations. During the year ended March 31, 2019, various foreign jurisdictions finalized their audits. The close of these audits did not have an adverse impact on our financial statements. We are currently being audited by the tax authorities in the United States and in various foreign jurisdictions. At this time, we do not know what the outcome of these audits will be. We record benefits for uncertain tax positions based on an assessment of whether it is more likely than not that the tax positions will be sustained based on their technical merits under currently enacted law. If this threshold is not met, no tax benefit of the uncertain tax position is recognized. If the threshold is met, we recognize the largest amount of the tax benefit that is more than 50% likely to be realized upon ultimate settlement.

The accounting model as defined in Accounting Standards Codification ("ASC") 740 related to the valuation of uncertain tax positions requires us to presume that the tax position will be examined by the relevant taxing authority that has full knowledge of all relevant information and that each tax position will be evaluated without consideration of the possibility of offset or aggregation with other positions. The recognition requirement for the liability exists even if we believe the possibility of examination by a taxing authority or discovery of the related risk matters is remote or where we have a long history of the taxing authority not performing an exam or overlooking an issue. We will record an adjustment to a previously recorded position if new information or facts related to the position are identified in a subsequent period. All adjustments to the positions are recorded through the income statement. Generally, adjustments will be recorded in periods subsequent to the initial recognition if the taxing authority has completed an audit of the period that results in the position being effectively settled or if the statute of limitation expires. Due to the inherent uncertainty in the estimation process and in consideration of the criteria of the accounting model, amounts recognized in the financial statements in periods subsequent to the initial recognition may significantly differ from the estimated exposure of the position under the accounting model.

On December 22, 2017, the Act was enacted into law. The Act provides for numerous significant tax law changes and modifications including the reduction of the U.S. federal corporate income tax rate from 35.0% to 21.0%, the requirement for companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and the creation of new taxes on certain foreign-sourced earnings. As a fiscal year-end taxpayer, certain provisions of the Act began to impact us in our third quarter of fiscal 2018, while other provisions have become effective for us in fiscal 2019.

In addition to the impacts of tax reform on fiscal 2018, the Act also establishes new tax laws that are effective for fiscal 2019, including, but not limited to, (1) a new provision designed to tax low-taxed income of foreign subsidiaries ("GILTI"), which allows for the possibility of using foreign tax credits ("FTCs") and a deduction of up to 50% to offset the income tax liability (subject to some limitations); (2) limitations on the deductibility of certain executive compensation; (3) limitations on the deductibility of interest expense; and (4) limitations on the use of FTCs to reduce the U.S. income tax liability. While each of these provisions is expected to have an impact on our tax expense in future periods, the increase in tax expense for GILTI is the most significant.

Generally accepted accounting principles in the United States of America (US GAAP) allows taxpayers to make an accounting policy election of either (1) treating taxes due on GILTI inclusions as a current-period expense when incurred or (2) recognizing deferred taxes for temporary basis differences that are expected to reverse as GILTI in future years. We are making a policy choice to include taxes due on the future GILTI inclusion in taxable income when incurred.

Senior and Junior Subordinated Convertible Debt

We separately account for the liability and equity components of our senior and junior subordinated convertible debt in a manner that reflects our nonconvertible debt (unsecured debt) borrowing rate when interest cost is recognized. This results in a bifurcation of a component of the debt, classification of that component in equity and the accretion of the resulting discount on the debt to be recognized as part of interest expense in our consolidated statements of income. Lastly, we include the dilutive effect of the shares of our common stock issuable upon conversion of the outstanding senior and junior subordinated convertible debt in our diluted income per share calculation regardless of whether the market price triggers or other contingent conversion features have been met. We apply the treasury stock method as we have the intent and have adopted an accounting policy to settle the principal amount of the senior and junior subordinated convertible debentures in cash. This method results in incremental dilutive shares when the average fair value of our common stock for a reporting period exceeds the conversion prices per share and adjusts as dividends are recorded in the future.

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Contingencies

In the ordinary course of our business, we are exposed to various liabilities as a result of contracts, product liability, customer claims and other matters. Additionally, we are involved in a limited number of legal actions, both as plaintiff and defendant. Consequently, we could incur uninsured liability in any of those actions. We also periodically receive notifications from various third parties alleging infringement of patents or other intellectual property rights, or from customers requesting reimbursement for various costs. With respect to pending legal actions to which we are a party and other claims, although the outcomes are generally not determinable, we believe that the ultimate resolution of these matters will not have a material adverse effect on our financial position, cash flows or results of operations. Litigation and disputes relating to the semiconductor industry are not uncommon, and we are, from time to time, subject to such litigation and disputes. As a result, no assurances can be given with respect to the extent or outcome of any such litigation or disputes in the future.

We accrue for claims and contingencies when losses become probable and reasonably estimable. As of the end of each applicable reporting period, we review each of our matters and, where it is probable that a liability has been or will be incurred, we accrue for all probable and reasonably estimable losses. Where we can reasonably estimate a range of losses we may incur regarding such a matter, we record an accrual for the amount within the range that constitutes our best estimate. If we can reasonably estimate a range but no amount within the range appears to be a better estimate than any other, we use the amount that is the low end of such range. Contingencies of an acquired company that exist as of the date of the acquisition are measured at fair value if determinable, which generally is based on a probability weighted model. If fair value is not determinable, contingencies of an acquired company are recognized when they become probable and reasonably estimable.

Results of Continuing Operations

The following table sets forth certain operational data as a percentage of net sales for the fiscal years indicated:

	Year Ended March 31,		
	2019	2018	2017
Net sales	100.0%	100.0%	100.0%
Cost of sales	45.2	39.2	48.4
Gross profit	54.8	60.8	51.6
Research and development	15.4	13.3	16.0
Selling, general and administrative	12.8	11.4	14.7
Amortization of acquired intangible assets	12.6	12.2	9.9
Special charges and other, net	0.6	0.4	2.9
Operating income	13.4%	23.5%	8.1%

Net Sales

We operate in two industry segments and engage primarily in the design, development, manufacture and sale of semiconductor products as well as the licensing of our SuperFlash and other technologies. We sell our products to distributors and original equipment manufacturers, referred to as OEMs, in a broad range of markets, perform ongoing credit evaluations of our customers and generally require no collateral. In certain circumstances, a customer's financial condition may require collateral, and, in such cases, the collateral would be typically provided by letters of credit.

The following table summarizes our net sales for the periods covered by this report (dollars in millions):

	Year Ended March 31,				
	2019	% Change	2018	% Change	2017
Net sales	\$ 5,349.5	34.4%	\$ 3,980.8	16.8%	\$ 3,407.8

The increase in net sales in fiscal 2019 compared to fiscal 2018 was due primarily to our acquisition of Microsemi and was partially offset by our adoption of ASC 606 and demand fluctuations in the markets we serve. Revenue earned from Microsemi products accounted for a 39.4% increase in net sales in fiscal 2019 compared to fiscal 2018. This increase was partially offset by our adoption of ASC 606 on April 1, 2018, which affected the timing of revenue recognition with our distributors as

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discussed further in the Critical Accounting Policies and Estimates section of this Form 10-K on page 36. To a lesser extent than the adoption of ASC 606, net sales and demand were also negatively impacted by general economic conditions, trade restrictions and changes in tariffs. We sell a large number of products to a large and diverse customer base and, excluding the impacts of our Microsemi acquisition and the adoption of ASC 606, there was not any product, customer or market that accounted for a material portion of the change. The overall average selling price of our products is affected by pricing declines over the life of individual products; however, variations in our product and geographic mix of sales can cause wider fluctuations in our overall average selling price in any given period. The overall average selling price of our products increased significantly during fiscal 2019 compared to fiscal 2018 due to our acquisition of Microsemi, whose average selling price is higher than the average selling price of our historical business due to the types of products they offer and the types of customers and markets they serve.

The increase in net sales in fiscal 2018 compared to fiscal 2017 was impacted by the following two accounting factors, which occurred in fiscal 2017:

- an amount of revenue that could not be recognized under generally accepted accounting principles in the United States relating to Atmel's inventory in the distribution channel on the acquisition date; and
- the impact of the change in timing of revenue recognition for some of Atmel's distributors from shipment to the distributor to upon sale by the distributor to their customers.

Excluding the impact of the two accounting factors described above, net sales for fiscal 2018 compared to fiscal 2017 increased 14.0%. This increase was primarily due to growth in our business driven by favorable economic and semiconductor industry conditions. Approximately 6% of the increase in net sales during this period was due to increases in the overall average selling price of products sold as a result of favorable market conditions and product and geographic mix. The remaining sales growth was primarily due to a net increase in the volume of products sold. We sell a large number of products to a large and diverse customer base and there was not any product, customer or market that accounted for a material portion of the increase. The overall average selling price of our products is affected by pricing declines over the life of individual products; however, variations in our product and geographic mix of sales can cause wider fluctuations in our overall average selling price in any given period.

As discussed in the following paragraphs, there were revenue increases across many of our product lines. Key factors impacting the amount of net sales during the last three fiscal years include:

- our acquisition of Microsemi, which closed on May 29, 2018;
- our acquisition of Atmel, which closed on April 4, 2016;
- global economic conditions in the markets we serve;
- trade restrictions and changes in tariffs;
- semiconductor industry conditions;
- adoption of the new revenue recognition standard (ASC 606) on April 1, 2018;
- our new product offerings that have increased our served available market;
- customers' increasing needs for the flexibility offered by our programmable solutions;
- inventory holding patterns of our customers, including distributors;
- increasing semiconductor content in our customers' products; and
- continued market share gains in the segments of the markets we address.

Net sales by product line for fiscal 2019, 2018 and 2017 were as follows (dollars in millions):

	Year Ended March 31,					
	2019	%	2018	%	2017	%
Microcontrollers	\$ 2,921.9	54.6	\$ 2,619.1	65.9	\$ 2,147.3	63.0
Analog, interface, mixed signal and timing products	1,530.7	28.6	952.0	23.9	888.9	26.1
Field-programmable gate array products	303.8	5.7	—	—	—	—
Memory products	184.0	3.4	199.7	5.0	184.1	5.4
Technology licensing	132.4	2.5	104.8	2.6	91.2	2.7
Multi-market and other	276.7	5.2	105.2	2.6	96.3	2.8
Total net sales	\$ 5,349.5	100.0	\$ 3,980.8	100.0	\$ 3,407.8	100.0

Microcontrollers

Our microcontroller product line represents the largest component of our total net sales. Microcontrollers and associated application development systems accounted for approximately 54.6%, 65.9% and 63.0% of our net sales in fiscal 2019, 2018 and 2017, respectively. The decrease in fiscal 2019 compared to fiscal 2018 is due to our acquisition of Microsemi, whose microcontroller product line accounted for a relatively low percentage of its total net sales.

Net sales of our microcontroller products increased approximately 11.6% in fiscal 2019 compared to fiscal 2018, and increased approximately 22.0% in fiscal 2018 compared to fiscal 2017. The increase in net sales in fiscal 2019 compared to fiscal 2018 resulted primarily from our acquisition of Microsemi. The increase in net sales in fiscal 2018 compared to fiscal 2017 resulted primarily from growth in our business driven by general economic and semiconductor industry conditions and market share gains.

Historically, average selling prices in the semiconductor industry decrease over the life of any particular product. The overall average selling prices of our microcontroller products have remained relatively constant over time due to the proprietary nature of these products. We have experienced, and expect to continue to experience, moderate pricing pressure in certain microcontroller product lines, primarily due to competitive conditions. We have in the past been able to, and expect in the future to be able to, moderate average selling price declines in our microcontroller product lines by introducing new products with more features and higher prices. We may be unable to maintain average selling prices for our microcontroller products as a result of increased pricing pressure in the future, which would adversely affect our operating results. The average selling price of our microcontroller products is affected by these trends; however, variations in our product and geographic mix of sales can cause wider fluctuations in the average selling price of our microcontroller products in any given period.

Analog, Interface, Mixed Signal and Timing Products

Sales of our analog, interface, mixed signal and timing products accounted for approximately 28.6%, 23.9% and 26.1% of our net sales in fiscal 2019, 2018 and 2017, respectively. The increase in fiscal 2019 compared to fiscal 2018 is due to our acquisition of Microsemi, whose analog, interface, mixed signal and timing product line accounted for a relatively high percentage of its total net sales.

Net sales of our analog, interface, mixed signal and timing products increased approximately 60.8% in fiscal 2019 compared to fiscal 2018 and increased approximately 7.1% in fiscal 2018 compared to fiscal 2017. The increase in net sales in fiscal 2019 compared to fiscal 2018 resulted primarily from our acquisition of Microsemi. The increase in net sales in fiscal 2018 compared to fiscal 2017 resulted primarily from growth in our business driven by general economic and semiconductor industry conditions and market share gains. Additionally, some new analog products, which are integrated with a microcontroller core, are classified as microcontrollers, rather than analog. This classification adversely impacted some of the increases in net sales of analog products during fiscal 2019 compared to fiscal 2018 and during fiscal 2018 compared to fiscal 2017.

Analog, interface, mixed signal and timing products can be proprietary or non-proprietary in nature. Currently, we consider a majority of our analog, interface, mixed signal and timing products to be proprietary in nature, where prices are relatively stable, similar to the pricing stability experienced in our microcontroller products. The non-proprietary portion of our analog, interface, mixed signal and timing business will experience price fluctuations, driven primarily by the current supply and demand for those products. We may be unable to maintain the average selling prices of our analog, interface, mixed signal and timing products as a result of increased pricing pressure in the future, which would adversely affect our operating results. We anticipate the proprietary portion of our analog, interface, mixed signal and timing products will increase over time.

Field-Programmable Gate Array (FPGA) Products

Our FPGA product line was primarily acquired as part of our acquisition of Microsemi on May 29, 2018. Sales of our FPGA products accounted for approximately 5.7% of our net sales in fiscal 2019.

FPGA product pricing has historically been relatively stable because they are proprietary products with significant design in complexity and they are frequently designed into long-lived end applications.

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Memory Products

Sales of our memory products accounted for approximately 3.4%, 5.0%, and 5.4% of our net sales in fiscal 2019, 2018 and 2017, respectively. The decrease in fiscal 2019 compared to fiscal 2018 is due to our acquisition of Microsemi, whose product portfolio did not include memory products.

Net sales of our memory products decreased approximately 7.9% in fiscal 2019 compared to fiscal 2018, and increased approximately 8.5% in fiscal 2018 compared to fiscal 2017. The decrease in memory product net sales in fiscal 2019 compared to fiscal 2018 resulted primarily from customer demand conditions. The increase in memory product net sales in fiscal 2018 compared to fiscal 2017 resulted primarily from growth in our business driven by general economic and semiconductor industry conditions.

Memory product pricing has historically been cyclical in nature, with steep price declines followed by periods of relative price stability, driven by changes in industry capacity at different stages of the business cycle. We have experienced, and expect to continue to experience, varying degrees of competitive pricing pressures in our memory products. We may be unable to maintain the average selling prices of our memory products as a result of increased pricing pressure in the future, which could adversely affect our operating results.

Technology Licensing

Technology licensing revenue includes a combination of royalties associated with licenses for the use of our SuperFlash and other technologies, sales of our intellectual property, and fees for engineering services. Technology licensing accounted for approximately 2.5%, 2.6% and 2.7% of our net sales in fiscal 2019, 2018 and 2017, respectively.

Net sales related to our technology licensing increased approximately 26.3% in fiscal 2019 compared to fiscal 2018 and increased approximately 14.9% in fiscal 2018 compared to fiscal 2017. Revenue from technology licensing can fluctuate over time based on the production activities of our licensees, the sale of patents and other intellectual property, and general economic and semiconductor industry conditions.

Multi-market and Other

Multi-market and Other (MMO) consists of manufacturing services (wafer foundry and assembly and test subcontracting), legacy application specific integrated circuits, and products for aerospace applications. Revenue from these services and products accounted for approximately 5.2%, 2.6% and 2.8% of our net sales in fiscal 2019, 2018 and 2017, respectively.

Net sales related to these services and products increased approximately \$171.5 million in fiscal 2019 compared to fiscal 2018 and increased approximately \$8.9 million in fiscal 2018 compared to fiscal 2017. The increase in MMO net sales in fiscal 2019 compared to fiscal 2018 resulted primarily from our acquisition of Microsemi, which significantly increased our portfolio of timing systems products. The increase in MMO net sales in fiscal 2018 compared to fiscal 2017 resulted primarily from growth in our business driven by general economic and semiconductor industry conditions. MMO net sales can fluctuate over time based on general economic and semiconductor industry conditions as well as changes in demand for our manufacturing services (wafer foundry and assembly and test subcontracting).

Distribution

Distributors accounted for approximately 51% of our net sales in fiscal 2019, approximately 54% of our net sales in fiscal 2018 and approximately 55% of our net sales in fiscal 2017. The decrease in this percentage in fiscal 2019 compared to fiscal 2018 is due to our acquisition of Microsemi, whose distributors accounted for a smaller portion of net sales than Microchip's historical business. With the exception of Arrow Electronics, our largest distributor, which made up 10% of our net sales, no other distributor or end customer accounted for more than 10% of our net sales in fiscal 2019. In fiscal 2018 and fiscal 2017, no distributor or end customer accounted for more than 10% of our net sales. Our distributors focus primarily on servicing the product requirements of a broad base of diverse customers. We believe that distributors provide an effective means of reaching this broad and diverse customer base. We believe that customers recognize Microchip for its products and brand name and use distributors as an effective supply channel.

Generally, we do not have long-term agreements with our distributors and we, or our distributors, may terminate our relationships with each other with little or no advance notice. The loss of, or the disruption in the operations of, one or more of our distributors could reduce our future net sales in a given quarter and could result in an increase in inventory returns.

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At March 31, 2019, our distributors maintained 35 days of inventory of our products compared to 36 days at March 31, 2018 and 33 days at March 31, 2017. Over the past ten fiscal years, the days of inventory maintained by our distributors have fluctuated between approximately 27 days and 47 days. Prior to our adoption of ASC 606 on April 1, 2018, we did not believe that inventory holding patterns at our distributors materially impacted our net sales due to the fact that we recognized revenue based on when the distributor sells the product to their customer. Upon our adoption of ASC 606 commencing on April 1, 2018, we are required to recognize revenue from distributors at the time our products are sold to the distributor. As a result, beginning April 1, 2018, inventory holding patterns at our distributors may have a material impact on our net sales.

Sales by Geography

Sales by geography for fiscal 2019, 2018 and 2017 were as follows (dollars in millions):

	Year Ended March 31,					
	2019	%	2018	%	2017	%
Americas	\$ 1,353.6	25.3	\$ 717.4	18.0	\$ 641.8	18.8
Europe	1,225.2	22.9	962.1	24.2	808.6	23.7
Asia	2,770.7	51.8	2,301.3	57.8	1,957.4	57.5
Total net sales	\$ 5,349.5	100.0	\$ 3,980.8	100.0	\$ 3,407.8	100.0

Americas sales include sales to customers in the U.S., Canada, Central America and South America. Sales to foreign customers accounted for approximately 80%, 85% and 84% of our total net sales in fiscal 2019, 2018 and 2017, respectively. Substantially all of our foreign sales are U.S. dollar denominated. Sales to customers in Asia have generally increased over time due to many of our customers transitioning their manufacturing operations to Asia and growth in demand from the emerging Asian market; however, sales to Asia as a percentage of our total net sales decreased in fiscal 2019 compared to fiscal 2018 due to our acquisition of Microsemi, whose sales to customers in Asia accounted for a smaller portion of their total net sales than Microchip's historical business, and to a lesser extent, trade restrictions and changes in tariffs. Sales to customers in the Americas increased as a percentage of total sales in fiscal 2019 compared to fiscal 2018 due to our acquisition of Microsemi, which had more concentration in the aerospace and defense industry in the Americas. Our sales force in the Americas and Europe supports a significant portion of the design activity for products which are ultimately shipped to Asia.

Sales to customers in China accounted for approximately 22%, 30% and 32% of our net sales in fiscal 2019, 2018 and 2017, respectively. Sales to customers in Taiwan accounted for approximately 13%, 11% and 9% of our net sales in fiscal 2019, 2018 and 2017, respectively. We did not have sales into any other foreign countries that exceeded 10% of our net sales during fiscal 2019, 2018 or 2017. In fiscal 2019, our acquisition of Microsemi and our transition to sell-in revenue recognition contributed to the changes in net sales by country. Our transition from sell-through revenue recognition to sell-in revenue recognition contributed to the changes in net sales by country because under sell-through revenue recognition we assigned revenue to the country of our distributor's end customer and under sell-in revenue recognition we assigned revenue to the country of our distributor. For additional information on our transition from sell-through to sell-in revenue recognition, refer to Note 1 of our consolidated financial statements.

Gross Profit

Our gross profit was \$2,931.3 million in fiscal 2019, \$2,420.7 million in fiscal 2018 and \$1,757.2 million in fiscal 2017. Gross profit as a percentage of sales was 54.8% in fiscal 2019, 60.8% in fiscal 2018 and 51.6% in fiscal 2017.

The most significant factors affecting our gross profit percentage in the periods covered by this Form 10-K were:

- charges of approximately \$365.7 million in fiscal 2019 and approximately \$186.7 million in fiscal 2017 related to the recognition of acquired inventory at fair value as a result of our acquisitions which increased the value of our acquired inventory and subsequently increased our cost of sales and reduced our gross margins when the related revenue was recognized;
- for each of fiscal 2019 and fiscal 2017, inventory write-downs being higher than the gross margin impact of sales of inventory that was previously written down; and
- for fiscal 2018, inventory write-downs being lower than the gross margin impact of sales of inventory that was previously written down;
- unabsorbed capacity charges due to operating at below normal capacity in fiscal 2019; and
- fluctuations in the product mix of microcontrollers, analog, interface, mixed signal and timing products, FPGA products, memory products and technology licensing.

Other factors that impacted our gross profit percentage in the periods covered by this Form 10-K include:

- continual cost reductions in wafer fabrication and assembly and test manufacturing, such as new manufacturing technologies and more efficient manufacturing techniques;
- lower depreciation as a percentage of cost of sales; and
- economic market conditions and product mix.

We adjust our wafer fabrication and assembly and test capacity utilization as required to respond to actual and anticipated business and industry-related conditions. When production levels are below normal capacity, which we measure as a percentage of the capacity of the installed equipment, we charge cost of sales for the unabsorbed capacity. In fiscal 2019, we operated at below normal capacity levels resulting in an unabsorbed capacity charge of \$19.0 million. During fiscal 2018 and fiscal 2017, our wafer fabrication facilities and assembly and test facilities operated at normal capacity levels.

The process technologies utilized in our wafer fabrication facilities impact our gross margins. Our wafer fabrication facility located in Tempe, Arizona (Fab 2) currently utilizes various manufacturing process technologies, but predominantly utilizes our 0.5 micron to 1.0 micron processes. Our wafer fabrication facility located in Gresham, Oregon (Fab 4) predominantly utilizes our 0.13 micron to 0.5 micron processes. We continue to transition products to more advanced process technologies to reduce future manufacturing costs. All of our production in Fab 2 and Fab 4 has been on 8-inch wafers during the periods covered by this report. We consider normal capacity at Fab 2 and Fab 4 to be 90% to 95%. Our wafer fabrication facility in Colorado Springs, Colorado (Fab 5) currently utilizes processes between 0.25 micron and 1.0 micron that run on 6-inch wafers. We consider normal capacity at Fab 5 to be 70% to 75%. As a result of our acquisition of Micrel in August 2015, we acquired a 6-inch wafer fabrication facility in San Jose, California and have since transitioned products previously manufactured at this facility to our Fab 2, Fab 4 and Fab 5 facilities. During the quarter ended December 31, 2016, we decommissioned this San Jose facility and, in June 2017, we completed the sale of these assets for proceeds of \$10.0 million.

Our overall inventory levels were \$711.7 million at March 31, 2019, compared to \$476.2 million at March 31, 2018 and \$417.2 million at March 31, 2017. Our overall inventory levels increased since March 31, 2018 because of our acquisition of Microsemi, which had \$150.8 million of inventory as of March 31, 2019. We maintained 128 days of inventory on our balance sheet at March 31, 2019 compared to 112 days of inventory at March 31, 2018 and 103 days at March 31, 2017. We expect our days of inventory levels in the June 2019 quarter to be down 8 days to up 11 days compared to the March 2019 levels. We believe our existing level of inventory will allow us to maintain competitive lead times and provide strong delivery performance to our customers.

We anticipate that our gross margins will fluctuate over time, driven primarily by capacity utilization levels, the overall product mix of microcontroller, analog, interface, mixed signal and timing products, FPGA products, memory products and technology licensing revenue and the percentage of net sales of each of these products in a particular quarter, as well as manufacturing yields, fixed cost absorption, and competitive and economic conditions in the markets we serve.

We operate assembly and test facilities in Thailand, the Philippines, and other locations throughout the world. During fiscal 2019, approximately 38% of our assembly requirements were performed in our internal assembly facilities, compared to approximately 42% during fiscal 2018 and approximately 36% during fiscal 2017. During fiscal 2019, approximately 49% of our test requirements were performed in our internal test facilities compared to approximately 64% during fiscal 2018 and approximately 60% during fiscal 2017. Third-party contractors located primarily in Asia perform the balance of our assembly and test operations. The percentage of our assembly and test operations that are performed internally fluctuates over time based on supply and demand conditions in the semiconductor industry, our internal capacity capabilities and our acquisition activities.

The decreases in the percentages of assembly and test operations performed internally in fiscal 2019 compared to fiscal 2018 were primarily due to our acquisition of Microsemi, which outsources the majority of its assembly and test requirements. The increases in the percentages of assembly and test operations performed internally in fiscal 2018 compared to fiscal 2017 were primarily due to investments in assembly and test equipment, which increased our internal capacity capabilities. We believe that the assembly and test operations performed at our internal facilities provide us with significant cost savings compared to contractor assembly and test costs, as well as increased control over these portions of the manufacturing process. We plan to continue to transition certain outsourced assembly and test capacity to our internal facilities.

We rely on outside wafer foundries for a significant portion of our wafer fabrication requirements. During fiscal 2019, approximately 57% of our total net sales came from products that were produced at outside wafer foundries compared to approximately 42% during fiscal 2018 and approximately 41% during fiscal 2017. The increases were primarily due to our acquisition of Microsemi, which outsources the majority of its wafer fabrication requirements.

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Our use of third parties involves some reduction in our level of control over the portions of our business that we subcontract. While we review the quality, delivery and cost performance of our third-party contractors, our future operating results could suffer if any third-party contractor is unable to maintain manufacturing yields, assembly and test yields and costs at approximately their current levels.

Research and Development (R&D)

R&D expenses for fiscal 2019 were \$826.3 million, or 15.4% of sales, compared to \$529.3 million, or 13.3% of sales, for fiscal 2018 and \$545.3 million, or 16.0% of sales, for fiscal 2017. We are committed to investing in new and enhanced products, including development systems software, and in our design and manufacturing process technologies. We believe these investments are significant factors in maintaining our competitive position. R&D costs are expensed as incurred. Assets purchased to support our ongoing research and development activities are capitalized when related to products which have achieved technological feasibility or that have alternative future uses and are amortized over their expected useful lives. R&D expenses include labor, depreciation, masks, prototype wafers, and expenses for the development of process technologies, new packages, and software to support new products and design environments.

R&D expenses increased \$297.0 million, or 56.1%, for fiscal 2019 compared to fiscal 2018 primarily due to additional costs from our acquisition of Microsemi. R&D expenses decreased \$16.0 million, or 2.9%, for fiscal 2018 compared to fiscal 2017 primarily due to reductions in personnel and associated costs in connection with synergies realized from our Atmel acquisition and lower share-based compensation expense due to accelerated vesting of equity awards held by terminated Atmel employees during fiscal 2017.

R&D expenses fluctuate over time, primarily due to revenue and operating expense investment levels.

Selling, General and Administrative

Selling, general and administrative expenses for fiscal 2019 were \$682.9 million, or 12.8% of sales, compared to \$452.1 million, or 11.4% of sales, for fiscal 2018, and \$499.8 million, or 14.7% of sales, for fiscal 2017. Our goal is to continue to be more efficient with our operating expenses as our revenue increases. Selling, general and administrative expenses include salary expenses related to field sales, marketing and administrative personnel, advertising and promotional expenditures and legal expenses. Selling, general and administrative expenses also include costs related to our direct sales force, CEMs and ESEs who work in sales offices worldwide to stimulate demand by assisting customers in the selection and use of our products.

Selling, general and administrative expenses increased \$230.8 million, or 51.1%, for fiscal 2019 compared to fiscal 2018 primarily due to additional costs from our acquisition of Microsemi, including approximately \$41.7 million of acquisition-related legal and professional service expenses. Selling, general and administrative expenses decreased \$47.7 million, or 9.5%, for fiscal 2018 compared to fiscal 2017 due primarily to reductions in personnel and associated costs in connection with synergies realized from our Atmel acquisition and lower share-based compensation expense due to accelerated vesting of equity awards held by terminated Atmel employees during fiscal 2017.

Selling, general and administrative expenses fluctuate over time, primarily due to revenue and operating expense investment levels.

Amortization of Acquired Intangible Assets

Amortization of acquired intangible assets in fiscal 2019 was \$674.1 million compared to \$485.5 million in fiscal 2018 and \$337.7 million in fiscal 2017. The primary reason for the increase in acquired intangible asset amortization for fiscal 2019 compared to fiscal 2018 was our acquisition of Microsemi. The primary reason for the increase in acquired intangible asset amortization for fiscal 2018 compared to fiscal 2017 was amortization of in-process R&D assets from our acquisition of Atmel.

Special Charges and Other, Net

During fiscal 2019, we incurred special charges and other, net of \$33.7 million comprised primarily of restructuring charges of \$63.9 million, offset by \$30.2 million in legal contingencies. Our restructuring expenses during the fiscal year ended March 31, 2019 were related to our most recent business acquisitions, and resulted from workforce, property and other operating expense rationalizations as well as combining product roadmaps and manufacturing operations. During fiscal 2018, we incurred special charges and other, net of \$17.5 million comprised primarily of a \$19.5 million charge for fees associated with transitioning from a public utility provider in Oregon to a lower cost direct access provider. During fiscal 2017, we

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incurred special charges and other, net of \$98.6 million comprised primarily of restructuring charges. These restructuring charges included employee separation costs, contract exit costs, other operating expenses and intangible asset impairment losses recognized as a result of changes in the combined product roadmaps after our acquisition of Atmel that affected the use and life of these assets.

Other Income (Expense)

Interest income in fiscal 2019 was \$8.1 million compared to \$22.0 million in fiscal 2018 and \$3.1 million in fiscal 2017. The primary reason for the decrease in interest income in fiscal 2019 compared to fiscal 2018 relates to lower average cash and investment balances as we used a substantial portion of our cash to help finance the purchase price of our acquisition of Microsemi. The primary reason for the increase in interest income in fiscal 2018 compared to fiscal 2017 relates to higher cash and investment balances.

Interest expense in fiscal 2019 was \$502.9 million compared to \$199.0 million in fiscal 2018 and \$146.3 million in fiscal 2017. The primary reason for the increase in interest expense in fiscal 2019 compared to fiscal 2018 relates to our additional borrowings to help finance our acquisition of Microsemi. The primary reasons for the increase in interest expense in fiscal 2018 compared to fiscal 2017 relates to our issuance of \$2,645.0 million of convertible notes in February 2017 partially offset by lower interest expense on amounts borrowed under our credit facility.

Loss on settlement of debt in fiscal 2019 was \$12.6 million compared to \$16.0 million in fiscal 2018 and \$43.9 million in fiscal 2017. In fiscal 2019, we recognized a loss of \$12.6 million primarily related to the voluntary prepayment of a portion of the outstanding balance on our Term Loan Facility. In fiscal 2018 and fiscal 2017, we settled \$143.8 million and \$431.3 million, respectively, in principal of our 2007 Junior Subordinated Convertible Debt (2007 Junior Debt). Total conversions for fiscal 2018 were for a principal amount of \$32.5 million for which we settled the principal amount in cash and issued 0.5 million shares of our common stock in respect of the conversion value in excess of the principal amount for the conversions occurring prior to the call notice and \$41.0 million in cash for the conversion value in excess of the principal amount for the conversion requests received after the call notice. In June 2017, we exchanged in privately negotiated transactions \$111.3 million aggregate principal amount of our 2007 Junior Debt for (i) \$111.3 million principal amount of our 2017 Junior Subordinated Convertible Debt (2017 Junior Debt) with a market value of \$119.3 million plus (ii) the issuance of 3.2 million shares of our common stock with a value of \$254.6 million. In the case of the fiscal 2017 settlement, the principal value of \$431.3 million was settled in cash and we issued shares of our common stock in respect of the conversion value in excess of the principal amount plus a cash inducement fee of \$5.0 million.

Other loss, net in fiscal 2019 was \$2.2 million compared to other loss, net of \$5.8 million in fiscal 2018 and other income, net of \$1.3 million in fiscal 2017. The primary reasons for the change in other loss during fiscal 2019 compared to fiscal 2018 relates to lower losses on investments offset by lower net gains on foreign currency exchange rate fluctuations. The primary reasons for the change in other income (loss) during fiscal 2018 compared to fiscal 2017 relates to impairments on available for sale investments partially offset by gains on foreign currency exchange rate fluctuations. The impairments on the available for sale investments were due to the anticipated liquidation of these investments in the first quarter of fiscal 2019 to fund our acquisition of Microsemi.

Provision for Income Taxes

Our provision for income taxes reflects tax on foreign earnings and federal and state tax on U.S. earnings. Our effective tax rates for the fiscal years ended March 31, 2019 and March 31, 2018 were not meaningful due to the amount of pre-tax income and the tax benefits recorded during the period. Excluding certain tax events described below, our effective tax rates were lower than statutory rates in the U.S. primarily due to our mix of earnings in foreign jurisdictions with lower tax rates.

Our effective tax rate in fiscal 2019 includes a \$27.5 million tax benefit received from current year generated R&D credits, which reduced our effective tax rate by 13.4%. Our effective tax rate in fiscal 2019 includes a \$13.3 million tax benefit for share-based compensation deductions, which reduced our effective tax rate by 6.5%. Our effective tax rate in fiscal 2019 includes a \$75.1 million tax benefit related to audit closures and expirations of the statute of limitations on various tax reserves, which reduced our effective tax rate by 36.7%. Our effective tax rate in fiscal 2019 includes \$95.4 million tax expense for GILTI, which increased our effective tax rate by 46.7%. Our effective tax rate in fiscal 2019 includes a \$90.6 million tax benefit for business realignment, which reduced our effective tax rate by 44.3%.

Our effective tax rate in fiscal 2018 includes \$644.7 million of tax expense estimated on a provisional basis, calculated under SAB 118, related to the one-time transition tax on certain foreign earnings, \$136.7 million of tax benefit estimated on a provisional basis related to the revaluation of our deferred tax assets and liabilities to the newly enacted U.S. statutory tax rate

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of 21.0%, and \$20.5 million of tax benefit estimated on a provisional basis related to the release of valuation allowances against our foreign tax credit carryforwards. These three adjustments increased (reduced) our effective tax rate by 87.4%, (18.5%), and (2.8%), respectively. Our effective tax rate in fiscal 2018 also includes a \$17.0 million tax benefit received from current year generated R&D credits, which reduced our effective tax rate by 2.3%. Our effective tax rate in fiscal 2018 also includes a \$27.2 million tax benefit for share-based compensation deductions, which reduced our effective tax rate by 3.7%. Our effective tax rate in fiscal 2018 also includes a \$11.3 million benefit related to audit closures and expirations of the statute of limitations on various tax reserves, which reduced our effective tax rate by 1.5%.

Our effective tax rate in fiscal 2017 included \$36.3 million of benefits related to audit closures and expirations of the statute of limitations on various tax reserves and \$7.9 million of expense related to intercompany prepaid tax amortization, which reduced our effective tax rate by 40.4% and increased our effective tax rate by 8.8%, respectively. Our effective tax rate in fiscal 2017 included a \$12.8 million benefit received from current year generated R&D credits, which reduced our effective tax rate by 14.3%. Our effective tax rate in fiscal 2017 also included a \$25.0 million benefit for share-based compensation deductions, which reduced our effective tax rate by 27.8%.

We are also subject to taxation in many other jurisdictions where we have operations. The effective tax rates that we pay in these jurisdictions vary widely, but they are generally lower than our combined U.S. federal and state effective tax rate. Our domestic statutory tax rate for the fiscal year ended March 31, 2019 was approximately 22% and our domestic statutory tax rate for fiscal 2018 was approximately 33%. Our non-U.S. blended statutory tax rates for fiscal 2019 and fiscal 2018 were much lower than this amount. The difference in rates applicable in foreign jurisdictions results from a number of factors, including lower statutory rates, historical loss carry-forwards, financing arrangements and other factors. Our effective tax rate has been, and will continue to be impacted by the geographical dispersion of our earnings and losses.

Our foreign tax rate differential benefit primarily relates to our operations in Thailand, Malta and Ireland. Our Thailand manufacturing operations are currently subject to numerous tax holidays granted to us based on our investment in property, plant and equipment in Thailand. Our tax holiday periods in Thailand expire at various times in the future; however, we actively seek to obtain new tax holidays or we will be subject to tax at the statutory tax rate of 20%. We do not expect the future expiration of any of our tax holiday periods in Thailand to have a material impact on our effective tax rate. Our Microsemi operations in Malaysia are also subject to a tax holiday that effectively reduces Microsemi's income tax rate in that jurisdiction. Microsemi's tax holiday in Malaysia was granted in 2009 and is effective through December 2019, subject to continued compliance with the tax holiday's requirements. The remaining material components of foreign income taxed at a rate lower than the U.S. are earnings accrued in Ireland at a 12.5% statutory tax rate and earnings accrued in Malta at a 0% tax rate.

Various taxing authorities in the U.S. and other countries in which we do business are increasing their scrutiny of the tax structures employed by businesses. Companies of our size and complexity are regularly audited by the taxing authorities in the jurisdictions in which they conduct significant operations. For U.S. federal, and in general for U.S. state tax returns, our fiscal 2007 and later tax returns remain effectively open for examination by the taxing authorities. We are currently being audited by the tax authorities in the United States and in various foreign jurisdictions. At this time, we do not know what the outcome of these audits will be. We record benefits for uncertain tax positions based on an assessment of whether it is more likely than not that the tax positions will be sustained based on their technical merits under currently enacted law. If this threshold is not met, no tax benefit of the uncertain tax position is recognized. If the threshold is met, we recognize the largest amount of the tax benefit that is more than 50% likely to be realized upon ultimate settlement.

Results of Discontinued Operations

Discontinued operations represent the mobile touch operations that we acquired as part of our acquisition of Atmel. On November 10, 2016, we completed the sale of the mobile touch assets to Solomon Systech (Limited) International, a Hong Kong based semiconductor company. The transaction included the sale of certain semiconductor products, equipment, customer list, backlog, patents, and a license to certain other intellectual property and patents related to Atmel's mobile touch product line. We also agreed to provide certain transition services to Solomon Systech. For financial statement purposes, the results of operations for this discontinued business have been segregated from those of the continuing operations and are presented in our consolidated financial statements as discontinued operations. Net loss from discontinued operations for the year ended March 31, 2017 was \$6.0 million, consisting of a pre-tax loss from operations of \$8.2 million and a pre-tax gain on sale of \$0.6 million.

Liquidity and Capital Resources

We had \$430.9 million in cash, cash equivalents and short-term investments at March 31, 2019, a decrease of \$1.77 billion from the March 31, 2018 balance. The decrease in cash, cash equivalents and short-term investments over this time period is primarily attributable to our acquisition of Microsemi.

Net cash provided by operating activities was \$1.67 billion for fiscal 2019, \$1.42 billion for fiscal 2018 and \$1.06 billion for fiscal 2017. The increase in net cash provided by operating activities in fiscal 2019 compared to fiscal 2018 was primarily due to cash provided by our acquisition of Microsemi in fiscal 2019. The increase in net cash provided by operating activities in fiscal 2018 compared to fiscal 2017 was primarily due to higher net sales as well as operating cash flows resulting from synergies realized from our process efficiencies and restructuring efforts related to our acquisition of Atmel.

Net cash used in investing activities was \$6.81 billion for fiscal 2019 compared to \$1.01 billion for fiscal 2018 and \$2.84 billion in fiscal 2017. Fiscal 2019 investing cash flows included net cash and cash equivalents used to finance our acquisition of Microsemi of \$7.85 billion net of \$340.0 million of cash and cash equivalents acquired, offset by net cash inflows of \$1.29 billion due to the sale and maturity of available-for-sale debt securities to fund our acquisition of Microsemi, and capital expenditures of \$228.9 million. Fiscal 2018 investing cash flows primarily result from the net increase in investments of \$808.1 million due to cash from operations as well as capital purchases. Fiscal 2017 investing cash flows include net cash and cash equivalents used to finance our acquisition of Atmel of \$2.75 billion. Excluding cash flows used in acquisitions, net investing activities resulted in net cash provided of \$1.04 billion in fiscal 2019 and a use of \$90.5 million in fiscal 2017, and represented primarily the net change in our investments, capital purchases and sale of assets.

Our level of capital expenditures varies from time to time as a result of actual and anticipated business conditions. Capital expenditures were \$228.9 million, \$206.8 million, and \$75.3 million in fiscal 2019, 2018 and 2017, respectively. Capital expenditures were primarily for the expansion of production capacity, the addition of research and development equipment and new office buildings. Capital expenditures in fiscal 2017 were relatively less than we had experienced in recent years as we delayed certain purchases until we had finalized and developed plans following our acquisition of Atmel regarding technology platforms and other manufacturing activities. We currently intend to spend between \$130 million and \$150 million during the next twelve months to invest in equipment and facilities. We believe that the capital expenditures anticipated to be incurred over the next twelve months will provide sufficient manufacturing capacity to support the growth of our production capabilities for our new products and technologies and to bring in-house more of the assembly and test operations that are currently outsourced. We expect to finance our capital expenditures through our existing cash balances and cash flows from operations.

Net cash provided by financing activities was \$4.66 billion for fiscal 2019 compared to net cash used in financing activities of \$415.3 million for fiscal 2018 and net cash provided by financing activities of \$595.5 million for fiscal 2017. Fiscal 2018 financing cash outflows were primarily the result of dividend payments and payments on the settlement of our convertible debt. Fiscal 2019 and fiscal 2017 cash flows were favorably impacted by the net proceeds from amounts borrowed to fund our acquisitions of Microsemi and Atmel, respectively. Significant transactions affecting our net financing cash flows include:

- In fiscal 2019, proceeds of \$3.0 billion from term loans made under the Term Loan Facility, net proceeds of \$3.27 billion from borrowings under our Revolving Credit Facility, net proceeds of \$1.99 billion from the issuance of our Senior Secured Notes, \$2.06 billion of cash used to repay Microsemi's existing debt, and \$1.09 billion of cash used to pay down the principal of our Term Loan Facility,
- In fiscal 2017, we issued \$2.65 billion of debt, of which \$2.12 billion was used to settle debt and reduce borrowings on our credit facility, and
- In fiscal 2019, fiscal 2018 and fiscal 2017, we paid cash dividends to our stockholders of \$344.4 million, \$337.5 million, and \$315.4 million, respectively. The amount of dividends paid has increased due to an increase in the amount of dividends declared per share and in the number of shares outstanding.

On May 29, 2018, we completed the acquisition of Microsemi Corporation, a publicly traded company headquartered in Aliso Viejo, California. We paid an aggregate of approximately \$8.19 billion in cash to the stockholders of Microsemi. The total consideration transferred in the acquisition, including approximately \$53.9 million of non-cash consideration for the exchange of certain share-based payment awards of Microsemi for stock awards for our common stock, was approximately \$8.24 billion. In addition to the consideration transferred, we recognized \$3.23 billion in liabilities in our consolidated financial statements of Microsemi consisting of debt, taxes payable and deferred, pension obligations, restructuring, and contingent and other liabilities of which \$2.06 billion of existing debt was paid off. We financed the purchase price using approximately \$8.10 billion of borrowings consisting of \$3.10 billion of loans under our Revolving Credit Facility, \$3.00 billion under the Term Loan Facility, and \$2.00 billion in newly issued senior secured notes. We incurred \$22.0 million in acquisition costs related to the acquisition. During fiscal 2019, we voluntarily prepaid \$1.09 billion of principal

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under the Term Loan Facility, of which \$500.0 million was from funds borrowed under our Revolving Credit Facility. At March 31, 2019, we had \$1.91 billion of outstanding borrowings under our Term Loan Facility.

In May 2018, we entered into an amended and restated credit agreement (the "Credit Agreement") which provides for the Revolving Credit Facility in an aggregate principal amount of approximately \$3.84 billion, which was reduced to \$3.60 billion in the second quarter of fiscal 2019 through the termination of the 2020 Tranche, with a \$250.0 million foreign currency sublimit, a \$50.0 million letter of credit sublimit and a \$25.0 million swingline loan sublimit. The Credit Agreement also provides for the Term Loan Facility. The Revolving Credit Facility consists of \$3.60 billion of revolving loan commitments (the "2023 Revolving Loans") that terminate on May 18, 2023 (the "2023 Maturity Date"). The 2023 Revolving Loans bear interest, at our option, at the base rate plus a spread of 0.00% to 1.00% or an adjusted LIBOR rate plus a spread of 1.00% to 2.00%, in each case, with such spread being determined based on the consolidated senior leverage ratio for the preceding four fiscal quarter period. At March 31, 2019, we had \$3.27 billion of outstanding borrowings under the Revolving Credit Facility and no borrowings at March 31, 2018. See Note 12 of the notes to our consolidated financial statements for more information regarding our Credit Agreement.

In June 2017, in connection with the settlement of \$111.3 million of our convertible debt, we amended our credit agreement to (i) extend the time period during which we are permitted to repurchase, redeem or exchange our 2007 Junior Convertible Debt and (ii) amend the maximum total leverage ratio covenant to extend the time period for permitted refinancings or exchanges of the 2007 Junior Convertible Debt that may be excluded from the calculation of the ratio, subject to certain conditions.

In February 2017, we amended our credit agreement to, among other things, increase certain covenant compliance ratios. The February 2017 amendment included a new collateral agreement that secures our borrowings with all assets of our guarantor subsidiaries with the exception of real property. Proceeds of loans made under our credit agreement may be used for working capital and general corporate purposes.

The enactment of the Act in December 2017 imposed a tax on all previously untaxed earnings of non-U.S. subsidiaries of U.S. corporations. Due to this change, the jurisdiction in which our cash is at any given point in time, no longer has a significant impact on our liquidity. Future distributions of non-U.S. assets to the U.S. will no longer be subject to U.S. federal taxation. We intend to invest substantially all of our foreign subsidiary earnings, as well as our capital in our foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which we would incur significant, additional costs upon repatriation of such amounts. As a result of the Act, as of March 31, 2018, we recognized a one-time provisional transition tax expense of \$644.7 million on accumulated unrepatriated foreign earnings. As we concluded with our measurement period in accordance with SEC Staff Accounting Bulletin ("SAB") 118, we finalized our calculations of the transition tax expense during the period ended December 31, 2018. As such, we increased our March 31, 2018 provisional amount by \$13.1 million to \$657.8 million, of which we expect cash payments of approximately \$280.7 million after offsets by the utilization of various tax attribute carryforwards in the United States. This tax is to be paid over a period of eight years, with 8% of the transition tax paid each year for fiscal 2019 through fiscal 2023, and 15%, 20%, and 25%, respectively, to be paid during fiscal 2024, 2025 and 2026.

We enter into derivative transactions from time to time in an attempt to reduce our exposure to currency rate fluctuations. Although none of the countries in which we conduct significant foreign operations has had a highly inflationary economy in the last five years, there is no assurance that inflation rates or fluctuations in foreign currency rates in countries where we conduct operations will not adversely affect our operating results in the future. At March 31, 2019, we had no foreign currency forward contracts outstanding.

On April 4, 2016, we completed our acquisition of Atmel. Under the terms of the merger agreement executed on January 19, 2016, Atmel stockholders received \$8.15 per share consisting of \$7.00 per share in cash and \$1.15 per share in shares of Microchip common stock. We financed the purchase price of our Atmel acquisition using approximately \$2.04 billion of cash held by certain of our foreign subsidiaries, approximately \$0.94 billion from additional borrowings under our credit agreement and approximately \$486.1 million through the issuance of an aggregate of 10.1 million shares of our common stock. The acquisition price represented a total equity value of approximately \$3.47 billion, and a total enterprise value of approximately \$3.44 billion, after excluding Atmel's cash and investments net of debt on its balance sheet of approximately \$39.3 million. The acquisition was structured in a manner that enabled us to utilize a substantial portion of the cash, cash equivalents, short-term investments and long-term investments held by certain of our foreign subsidiaries in a tax efficient manner. Although we believe our determinations with respect to the tax consequences of the acquisition are reasonable, we are regularly audited by the IRS and may be audited by other taxing authorities, and there can be no assurance as to the outcome of any such audit.

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There were no repurchases of common stock during fiscal 2019, 2018, or 2017. As of March 31, 2019, we held approximately 15.6 million shares as treasury shares.

On October 28, 2002, we announced that our Board of Directors had approved and instituted a quarterly cash dividend on our common stock. The initial quarterly dividend of \$0.02 per share was paid on December 6, 2003 in the amount of \$4.1 million. To date, our cumulative dividend payments have totaled approximately \$3.8 billion. Cash dividends paid per share were \$1.457, \$1.449 and \$1.441 during fiscal 2019, fiscal 2018 and fiscal 2017, respectively. Total dividend payments amounted to \$344.4 million, \$337.5 million, \$315.4 million during fiscal 2019, fiscal 2018 and fiscal 2017, respectively. A quarterly cash dividend of \$0.3655 per share was declared on May 7, 2019 and will be paid on June 4, 2019, to stockholders of record as of May 21, 2019. We expect the aggregate cash dividend for June 4, 2019 to be approximately \$87.0 million. Our Board is free to change our dividend practices at any time and to increase or decrease the dividend paid, or not to pay a dividend, on our common stock on the basis of our results of operations, financial condition, cash requirements and future prospects, and other factors deemed relevant by our Board. Our current intent is to provide for ongoing quarterly cash dividends depending upon market conditions, our results of operations and potential changes in tax laws.

We believe that our existing sources of liquidity combined with cash generated from operations and borrowings under our Revolving Credit Facility will be sufficient to meet our currently anticipated cash requirements for at least the next 12 months. However, the semiconductor industry is capital intensive. In order to remain competitive, we must constantly evaluate the need to make significant investments in capital equipment for both production and research and development. We may increase our borrowings under our Revolving Credit Facility or seek additional equity or debt financing from time to time to maintain or expand our wafer fabrication and product assembly and test facilities, for cash dividends, for share repurchases or for acquisitions or other purposes. The timing and amount of any such financing requirements will depend on a number of factors, including our level of dividend payments, changes in tax laws and regulations regarding the repatriation of offshore cash (including the impact of the Act), demand for our products, changes in industry conditions, product mix, competitive factors and our ability to identify suitable acquisition candidates. There can be no assurance that such financing will be available on acceptable terms, and any additional equity financing would result in incremental ownership dilution to our existing stockholders.

Contractual Obligations

The following table summarizes our significant contractual obligations at March 31, 2019, and the effect such obligations are expected to have on our liquidity and cash flows in future periods (in millions):

	Payments Due by Period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	More than 5 years
Operating lease obligations ⁽¹⁾	\$ 167.1	\$ 49.0	\$ 68.4	\$ 27.1	\$ 22.6
Capital purchase obligations ⁽²⁾	18.8	18.8	—	—	—
Other purchase obligations and commitments ⁽³⁾	205.6	194.9	10.5	0.2	—
Term Loan Facility ⁽⁴⁾	2,435.4	72.5	174.7	174.4	2,013.8
Revolving Credit Facility ⁽⁵⁾	3,879.0	147.0	294.0	3,438.0	—
2023 and 2021 Senior Notes	2,293.0	82.5	1,145.5	1,065.0	—
2017 Senior Convertible Debt ⁽⁶⁾	2,339.1	33.6	67.3	67.3	2,170.9
2015 Senior Convertible Debt ⁽⁷⁾	1,893.2	28.0	56.1	56.1	1,753.0
2017 Junior Convertible Debt ⁽⁸⁾	964.0	15.4	30.9	30.9	886.8
Pension obligations ⁽⁹⁾	20.7	1.3	3.4	4.1	11.9
Transition tax obligation ⁽¹⁰⁾	245.7	9.9	44.9	64.6	126.3
Total contractual obligations ⁽¹¹⁾	<u>\$ 14,461.6</u>	<u>\$ 652.9</u>	<u>\$ 1,895.7</u>	<u>\$ 4,927.7</u>	<u>\$ 6,985.3</u>

⁽¹⁾ Operating lease obligations include \$18.1 million of future lease payments which is recorded as a liability on the balance sheet as of March 31, 2019. This obligation is due under an operating lease from our acquisition of Atmel for a building in San Jose, California.

⁽²⁾ Capital purchase obligations represent commitments for construction or purchases of property, plant and equipment. These obligations were not recorded as liabilities on our balance sheet as of March 31, 2019, as we have not yet received the related goods or taken title to the property.

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- ⁽³⁾ Other purchase obligations and commitments include payments due under various types of licenses and outstanding purchase commitments with our wafer foundries.
- ⁽⁴⁾ The Term Loan Facility matures on May 29, 2025.
- ⁽⁵⁾ For purposes of this table, we have assumed that the principal of our 2023 revolving loans outstanding at March 31, 2019 will be paid on May 18, 2023, which is the maturity date of such borrowings.
- ⁽⁶⁾ For purposes of this table, we have assumed that the principal of our 2017 senior convertible debt will be paid on February 15, 2027, which is the maturity date of such debt.
- ⁽⁷⁾ For purposes of this table, we have assumed that the principal of our 2015 Senior Convertible Debt will be paid on February 15, 2025, which is the maturity date of such debt.
- ⁽⁸⁾ For purposes of this table, we have assumed that the principal of our 2017 Junior Convertible Debt will be paid on February 15, 2037, which is the maturity date of such debt.
- ⁽⁹⁾ For purposes of this table, pension obligations due in more than 5 years represent the expected pension payments from 2025 through 2029. It excludes pension obligations subsequent to 2029.
- ⁽¹⁰⁾ During fiscal 2018, we recognized a provisionary one-time transition tax on accumulated unrepatriated foreign earnings, estimated at \$644.7 million, as a result of the recent U.S. tax reform. As of December 31, 2018, with the conclusion of the measurement period in accordance with SAB 118, we increased this amount by \$13.1 million to \$657.8 million, of which we expect cash payments of approximately \$280.7 million after offsets by the utilization of various tax attribute carryforwards in the United States. Our first payment on this obligation of \$35.0 million was made in the quarter ended September 30, 2018 and we expect future cash payments of approximately \$245.7 million. This tax is to be paid over a period of eight years, with 8% of the transition tax paid each year for fiscal 2019 through fiscal 2023, and 15%, 20%, and 25%, respectively, to be paid during fiscal 2024, 2025, and 2026.
- ⁽¹¹⁾ The contractual obligations do not include amounts related to uncertain tax positions because reasonable estimates cannot be made.

Purchase orders or contracts for the purchase of raw materials and other goods and services, with the exception of commitments to our wafer foundries, are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. For the purpose of this table, contractual obligations for the purchase of goods or services are defined as agreements that are enforceable and legally binding on us and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Our purchase orders are based on our current manufacturing needs and are fulfilled by our vendors with short time horizons. We do not have significant agreements for the purchase of raw materials or other goods specifying minimum quantities or set prices that exceed our expected requirements for three months. We also enter into contracts for outsourced services; however, the obligations under these contracts were not significant and the contracts generally contain clauses allowing for cancellation without significant penalty.

The expected timing of payment of the obligations discussed above is estimated based on current information. Timing of payments and actual amounts paid may be different depending on the time of receipt of goods or services or changes to agreed-upon amounts for some obligations.

Off-Balance Sheet Arrangements (Including Guarantees)

As of March 31, 2019, we are not involved in any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K with the exception of various operating leases for buildings and equipment entered into in the ordinary course of business. Additionally, we may provide standby letters of credit or other guarantee instruments to certain parties as required for certain transactions initiated by us or our subsidiaries. We have not recorded any liability in connection with these guarantee arrangements. Based on historical experience and information currently available, we believe we will not be required to make any payments under these guarantee arrangements. For our operating leases, we expect to make cash payments and incur expenses throughout the lives of the operating leases. We have not recorded any liability in connection with these operating leases. We will record the associated lease obligations as a liability when we adopt the provisions of the Accounting Standard Update 2016-02-Leases. Refer to Note 1 to our consolidated financial statements for additional information regarding the adoption of this accounting standard.

Recently Issued Accounting Pronouncements

Refer to Note 1 to our consolidated financial statements regarding recently issued accounting pronouncements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As of March 31, 2019, our long-term debt totaled \$11.66 billion. We have no interest rate exposure to rate changes on our fixed rate debt, which totaled \$6.48 billion as of March 31, 2019. We do have interest rate exposure with respect to the \$5.18 billion balance of our variable interest rate debt outstanding as of March 31, 2019. A 50 basis point increase in interest rates would impact our expected annual interest expense for the next 12 months by approximately \$26.0 million.

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Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements listed in the index appearing under Item 15(a)(1) hereof are filed as part of this Form 10-K. See also Index to Financial Statements below.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, as required by paragraph (b) of Rule 13a-15 or Rule 15d-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we evaluated under the supervision of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) of the Exchange Act. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that because of the material weaknesses in internal control over financial reporting described below, our disclosure controls and procedures were not effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and (ii) is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Our disclosure controls and procedures are designed to provide reasonable assurance that such information is accumulated and communicated to our management. Our disclosure controls and procedures include components of our internal control over financial reporting. Management's assessment of the effectiveness of our internal control over financial reporting is expressed at the level of reasonable assurance because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute, assurance that the control system's objectives will be met.

Material Weaknesses in Internal Control Over Financial Reporting

A material weakness (as defined in Rule 12b-2 under the Exchange Act) is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

In reviewing the accounting for certain transactions completed in fiscal 2019 as part of the realignment of our legal structure and other significant transactions, our management identified deficiencies in the operating effectiveness of controls intended to properly document and review relevant facts used to determine and apply the appropriate tax accounting under accounting standards generally accepted in the United States. Additionally, our controls did not operate to validate the completeness and accuracy of information used in the execution of certain key tax controls. These control deficiencies impacted the deferred tax, long-term income tax payable, and income tax benefit accounts and related disclosures and resulted in adjustments to our annual financial statements as of and for the year ended March 31, 2019. The errors arising from the underlying deficiencies are not material to the financial statements reported in any interim or annual period and therefore, did not result in a revision to previously filed financial statements. However, the control deficiencies could result in a failure to timely prevent or detect misstatements of the aforementioned accounts and disclosures that could be material to the annual or interim consolidated financial statements. Accordingly, our management has concluded that the deficiencies, in the aggregate, constitute a material weakness in our internal control over financial reporting.

In the fourth quarter of fiscal 2019, we also identified deficiencies in the design of our internal control over financial reporting as our management determined that there were not sufficient controls to prevent, detect and respond to unauthorized access to our IT systems in a timely manner. Network authentication, segmentation and monitoring were in place, but were not sufficiently designed to address changes in the current risk environment. Our management has concluded that these deficiencies, in the aggregate, constitute a material weakness in our internal control over financial reporting.

Management Report on Internal Control Over Financial Reporting

Our management, including our principal executive officer and principal financial officer, is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted

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accounting principles. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Management assessed our internal control over financial reporting as of March 31, 2019, the end of our fiscal year. Management based its assessment on criteria established in Internal Control – Integrated Framework (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Management's assessment included an evaluation of such elements as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment. This assessment is supported by testing and monitoring performed by our finance organization.

In accordance with guidance issued by the Securities and Exchange Commission, registrants are permitted to exclude material business combinations from their final assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred. Our management's evaluation of internal control over financial reporting excluded the internal control activities of Microsemi, which we acquired on May 29, 2018 as discussed in Note 2 of the consolidated financial statements. We have included the financial results of Microsemi in our consolidated financial statements from the date of acquisition. Total revenues excluded from our assessment of internal control over financial reporting represented approximately 28% of our consolidated revenues for the fiscal year ended March 31, 2019. Total Microsemi assets excluded from our assessment of internal control over financial reporting represented approximately 4% of our consolidated total assets as of March 31, 2019.

Based on our assessment and the existence of a material weakness related to accounting for income taxes and the existence of a material weakness related to IT system access, management has concluded that our internal control over financial reporting was not effective as of the end of the fiscal year to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles. We reviewed the results of management's assessment with the Audit Committee of our Board of Directors.

Ernst & Young LLP, an independent registered public accounting firm, who audited our consolidated financial statements included in this Form 10-K has issued an attestation report on our internal control over financial reporting as of March 31, 2019, which is included on page F-2.

Remediation Plans and Other Information

Our management has begun implementing a remediation plan to address the control deficiencies that led to the material weakness related to accounting for income taxes as described above. The remediation plan includes:

- strengthening our income tax control with improved documentation standards, technical oversight and training; and
- hiring additional qualified accounting and/or tax professionals.

With respect to the foregoing material weakness, we currently plan to have our enhanced review procedures and documentation standards in place in the first quarter of fiscal 2020. Our goal is to remediate this material weakness by the end of fiscal 2020, subject to there being sufficient opportunities to conclude, through testing, that the enhanced control is operating effectively.

Our management has also begun implementing a remediation plan to address the control deficiencies that led to the material weakness related to IT system access as described above. The remediation plan includes:

- hiring additional qualified information services professionals;
- strengthening technical access controls by implementing additional multi-factor authentication mechanisms;
- redesigning and implementing network structure to contain and isolate relevant systems; and
- implementing additional controls related to on-going incident response and monitoring.

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With respect to the foregoing material weakness related to IT system access, we currently plan to have implemented additional multi-factor authentication and implemented additional controls in the first quarter of fiscal 2020. Our goal is to remediate this material weakness by the end of fiscal 2020, subject to there being sufficient opportunities to conclude, through testing, that the enhanced controls are operating effectively.

Changes in Internal Control over Financial Reporting

On May 29, 2018, we completed our acquisition of Microsemi which operated under its own set of systems and internal controls. During the three months ended March 31, 2019, we transitioned certain of Microsemi's processes to our internal control processes and we expect to transition more of such processes throughout the remainder of calendar year 2019.

In connection with the identified material weaknesses related to accounting for income taxes and to IT system access, we have taken steps to remediate the material weaknesses as described above. However, other than with respect to our transition of Microsemi to our systems and control environment as describe above, during the three months ended March 31, 2019, there was no change in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. OTHER INFORMATION

J. Eric Bjornholt, our Senior Vice President, Chief Financial Officer, Mitch Little, our Senior Vice President, Worldwide Client Engagement, Steve Drehobl, our Senior Vice President, MCU8 and MCU16 Business Units, and Rich Simoncic, our Senior Vice President, Analog Power and Interface Business Units, have entered into trading plans as contemplated by Rule 10b-5-1 under the Exchange Act and periodic sales of our common stock have occurred and are expected to occur under such plans.

The foregoing disclosure is being made on a voluntary basis and not pursuant to any specific requirement under Form 10-K, Form 8-K or otherwise.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information on the members of our Board of Directors is incorporated herein by reference to our proxy statement for our 2019 annual meeting of stockholders under the captions "The Board of Directors," and "Proposal One – Election of Directors."

Information on the composition of our audit committee and the members of our audit committee, including information on our audit committee financial experts, is incorporated by reference to our proxy statement for our 2019 annual meeting of stockholders under the caption "The Board of Directors – Committees of the Board of Directors – Audit Committee."

Information on our executive officers is provided in Item 1, Part I of this Form 10-K under the caption "Executive Officers of the Registrant" at page 10, above.

Information with respect to compliance with Section 16(a) of the Exchange Act, is incorporated herein by reference to our proxy statement for our 2019 annual meeting of stockholders under the caption "Delinquent Section 16(a) Reports."

Information with respect to our code of ethics that applies to our directors, executive officers (including our principal executive officer and our principal financial and accounting officer) and employees is incorporated by reference to our proxy statement for our 2019 annual meeting of stockholders under the caption "Code of Business Conduct and Ethics." A copy of our Code of Business Conduct and Ethics is available on our website at the Investor Relations section under Mission Statement/Corporate Governance on www.microchip.com.

Information regarding material changes, if any, to procedures by which security holders may recommend nominees to our Board of Directors is incorporated by reference to our proxy statement for the 2019 annual meeting of stockholders under the caption "Requirements, Including Deadlines, for Receipt of Stockholder Proposals for the 2019 Annual Meeting of Stockholders; Discretionary Authority to Vote on Stockholder Proposals."

Item 11. EXECUTIVE COMPENSATION

Information with respect to executive compensation is incorporated herein by reference to the information under the caption "Executive Compensation" in our proxy statement for our 2019 annual meeting of stockholders.

Information with respect to director compensation is incorporated herein by reference to the information under the caption "The Board of Directors – Director Compensation" in our proxy statement for our 2019 annual meeting of stockholders.

Information with respect to compensation committee interlocks and insider participation in compensation decisions is incorporated herein by reference to the information under the caption "The Board of Directors – Compensation Committee Interlocks and Insider Participation" in our proxy statement for our 2019 annual meeting of stockholders.

Our Board compensation committee report on executive compensation is incorporated herein by reference to the information under the caption "Executive Compensation – Compensation Committee Report on Executive Compensation" in our proxy statement for our 2019 annual meeting of stockholders.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to securities authorized for issuance under our equity compensation plans is incorporated herein by reference to the information under the caption "Executive Compensation – Equity Compensation Plan Information" in our proxy statement for our 2019 annual meeting of stockholders.

Information with respect to security ownership of certain beneficial owners, members of our Board of Directors and management is incorporated herein by reference to the information under the caption "Security Ownership of Principal Stockholders, Directors and Executive Officers" in our proxy statement for our 2019 annual meeting of stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item pursuant to Item 404 of Regulation S-K is incorporated by reference to the information under the caption "Certain Transactions" contained in our proxy statement for our 2019 annual meeting of stockholders.

The information required by this Item pursuant to Item 407(a) of Regulation S-K regarding the independence of our directors is incorporated by reference to the information under the caption "Meetings of the Board of Directors" contained in our proxy statement for our 2019 annual meeting of stockholders.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item related to principal accountant fees and services as well as related pre-approval policies is incorporated by reference to the information under the caption "Independent Registered Public Accounting Firm" contained in our proxy statement for our 2019 annual meeting of stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Form 10-K:

	Page No.
(1) Financial Statements:	
Report of Independent Registered Public Accounting Firm	F-1
Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting	F-2
Consolidated Balance Sheets as of March 31, 2019 and 2018	F-3
Consolidated Statements of Income for each of the three years in the period ended March 31, 2019	F-4
Consolidated Statements of Comprehensive Income for each of the three years in the period ended March 31, 2019	F-5
Consolidated Statements of Cash Flows for each of the three years in the period ended March 31, 2019	F-6
Consolidated Statements of Changes in Equity for each of the three years in the period ended March 31, 2019	F-8
Notes to Consolidated Financial Statements	F-10
(2) Financial Statement Schedules	None
(3) The Exhibits filed with this Form 10-K or incorporated herein by reference are set forth in the Exhibit Index beginning on page 64 hereof, which Exhibit Index is incorporated herein by this reference.	

(b) See Item 15(a)(3) above.

(c) See "Index to Financial Statements" included under Item 8 to this Form 10-K.

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Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MICROCHIP TECHNOLOGY INCORPORATED

(Registrant)

May 30, 2019

By: /s/ Steve Sanghi

Steve Sanghi

Chief Executive Officer and Chairman of the Board

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned officer or director of Microchip Technology Incorporated, a Delaware corporation (the "Company"), does hereby constitute and appoint each of STEVE SANGHI and J. ERIC BJORNHOLT, with full power to each of them to act alone, as the true and lawful attorneys and agents of the undersigned, with full power of substitution and resubstitution to each of said attorneys to execute, file or deliver any and all instruments and to do any and all acts and things which said attorneys and agents, or any of them, deem advisable to enable the Company to comply with the Securities Exchange Act of 1934, as amended, and any requirements of the Securities and Exchange Commission in respect thereto relating to this annual report on Form 10-K, including specifically, but without limitation of the general authority hereby granted, the power and authority to sign such person's name individually and on behalf of the Company as an officer or director (as indicated below opposite such person's signature) to the Company's annual report on Form 10-K or any amendments or supplements thereto; and each of the undersigned does hereby fully ratify and confirm all that said attorneys and agents or any of them, shall do or cause to be done by virtue hereof. This Power of Attorney revokes any and all previous powers of attorney granted by any of the undersigned which such power would have entitled said attorneys and agents, or any of them, to sign such person's name, individually or on behalf of the Company, to any Form 10-K.

IN WITNESS WHEREOF, each of the undersigned has executed the foregoing power of attorney on this 30th day of May, 2019.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Name and Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Steve Sanghi</u> Steve Sanghi	Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	May 30, 2019
<u>/s/ Matthew W. Chapman</u> Matthew W. Chapman	Director	May 30, 2019
<u>/s/ L.B. Day</u> L.B. Day	Director	May 30, 2019
<u>/s/ Esther L. Johnson</u> Esther L. Johnson	Director	May 30, 2019
<u>/s/ Wade F. Meyercord</u> Wade F. Meyercord	Director	May 30, 2019
<u>/s/ J. Eric Bjornholt</u> J. Eric Bjornholt	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	May 30, 2019

EXHIBIT LIST

Exhibit Number	Exhibit Description	Incorporated by Reference				Included Herewith
		Form	File Number	Exhibit	Filing Date	
2.1	Agreement and Plan of Merger, dated as of January 19, 2016, by and among Microchip Technology, Atmel Corporation, and Hero Acquisition Corporation	8-K	000-21184	2.1	1/19/2016	
2.2	Agreement and Plan of Merger, dated as of March 1, 2018, by and among Microchip Technology Incorporated, Microsemi Corporation, and Maple Acquisition Corporation	8-K	000-21184	2.1	3/2/2018	
3.1	Restated Certificate of Incorporation of Registrant	10-Q	000-21184	3.1	11/12/2002	
3.2	Amended and Restated Bylaws of Registrant, as amended through May 21, 2019	8-K	000-21184	3.1	5/24/2019	
4.1	Indenture dated as of February 11, 2015 between Microchip Technology Incorporated and Wells Fargo Bank, N.A.	8-K	000-21184	4.1	2/11/2015	
4.2	Indenture dated as of February 15, 2017 between Microchip Technology Incorporated and Wells Fargo Bank, National Association	8-K	000-21184	4.1	2/15/2017	
4.3	Indenture dated as of February 15, 2017 between Microchip Technology Incorporated and Wells Fargo Bank, National Association	8-K	000-21184	4.3	2/15/2017	
10.1	Augmenting Lender Supplement, dated as of November 10, 2017, among Microchip Technology Incorporated, the lender party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent	8-K	000-21184	10.1	11/13/2017	
10.2	Master Increasing Lender Supplement, dated as of September 1, 2017, among Microchip Technology Incorporated, the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent	8-K	000-21184	10.1	9/1/2017	
10.3	Master Increasing Lender Supplement dated as of March 19, 2015, by and among Microchip Technology Incorporated and the Increasing Lenders thereto	10-K	000-21184	10.1	5/27/2015	
10.4	Amended and Restated Credit Agreement, dated May 18, 2018, by and among Microchip Technology Incorporated, the lenders from time to time party there to and JPMorgan Chase Bank, N.A., as administrative agent	8-K	000-21184	10.1	5/18/2018	
10.5	Pledge and Security Agreement, dated as of February 8, 2017, by and among Microchip Technology Incorporated, the other grantors party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent	8-K	000-21184	10.2	2/8/2017	
10.6	Commitment Letter dated March 1, 2018, between Microchip Technology Incorporated and JPMorgan Chase Bank, N.A.	8-K	000-21184	10.1	3/2/2018	
10.7	Form of Indemnification Agreement between Registrant and its directors and certain of its officers [Paper filing not on SEC website.]	S-1	33-57960	10.1	2/5/1993	

EXHIBIT LIST

Exhibit Number	Exhibit Description	Incorporated by Reference				Included Herewith
		Form	File Number	Exhibit	Filing Date	
10.8	Microchip Technology Incorporated 2012 Inducement Award Plan	S-8	333-183074	4.8	8/3/2012	
10.9*	2004 Equity Incentive Plan as amended and restated on May 21, 2019	8-K	000-21184	10.1	5/24/2019	
10.10*	Form of Notice of Grant of Restricted Stock Units (officer) for 2004 Equity Incentive Plan	S-8	333-192273	10.2	11/12/2013	
10.11	Form of Notice of Grant of Restricted Stock Units (non-officer) for 2004 Equity Incentive Plan	S-8	333-192273	10.3	11/12/2013	
10.12*	Form of Notice of Grant for 2004 Equity Incentive Plan (including Exhibit A Stock Option Agreement)	S-8	333-119939	4.5	10/25/2004	
10.13*	Form of Notice of Grant of Restricted Stock Units for 2004 Equity Incentive Plan (including Exhibit A Restricted Stock Units Agreement)	10-K	000-21184	10.6	5/31/2006	
10.14*	Restricted Stock Units Agreement (Domestic) for 2004 Equity Incentive Plan	10-Q	000-21184	10.3	11/7/2007	
10.15	Restricted Stock Units Agreement (Foreign) for 2004 Equity Incentive Plan	10-Q	000-21184	10.4	11/7/2007	
10.16*	Form of Global RSU Agreement for 2004 Equity Incentive Plan (including Notice of Grant of Restricted Stock Units)	8-K	000-21184	10.1	9/27/2010	
10.17	Form of RSU Grant Notice and Global RSU Agreement V-4004					X
10.18*	Form of Notice of Stock Option Grant and Stock Option Agreement					X
10.19*	Form of CEO RSU Grant and RSU Agreement					X
10.20*	Form of S16 RSU Grant and RSU Agreement					X
10.21*	Microchip Technology Incorporated 2001 Employee Stock Purchase Plan as amended through February 19, 2019					X
10.22	Microchip Technology Incorporated International Employee Stock Purchase Plan as amended May 69, 2019					X
10.23*	Executive Management Incentive Compensation Plan as amended on May 16, 2016	8-K	000-21184	10.1	8/18/2016	
10.24*	Discretionary Executive Management Incentive Compensation Plan	8-K	000-21184	10.3	8/24/2006	
10.25	Management Incentive Compensation Plan as amended by the Board of Directors on May 17, 2013	10-K	000-21184	10.21	5/30/2013	
10.26*	Microchip Technology Incorporated Supplemental Retirement Plan	S-8	333-101696	4.1.1	12/6/2002	
10.27*	Adoption Agreement to the Microchip Technology Incorporated Supplemental Retirement Plan dated January 1, 1997	S-8	333-101696	4.1.3	12/6/2002	

EXHIBIT LIST

Exhibit Number	Exhibit Description	Incorporated by Reference				Included Herewith
		Form	File Number	Exhibit	Filing Date	
10.28*	Amendment dated December 9, 1999 to the Adoption Agreement to the Microchip Technology Incorporated Supplemental Retirement Plan	S-8	333-101696	4.1.4	12/6/2002	
10.29*	February 3, 2003 Amendment to the Adoption Agreement to the Microchip Technology Incorporated Supplemental Retirement Plan	10-K	000-21184	10.28	6/5/2003	
10.30*	Amendments to Supplemental Retirement Plan	10-Q	000-21184	10.1	2/9/2006	
10.31*	Amended and Restated Adoption Agreement to the Microchip Technology Incorporated Supplemental Retirement Plan dated October 8, 2008, as amended December 15, 2008	10-K	000-21184	10.28	5/24/2016	
10.32*	Change of Control Severance Agreement	8-K	000-21184	10.1	12/18/2008	
10.33*	Change of Control Severance Agreement	8-K	000-21184	10.2	12/18/2008	
10.34	Development Agreement dated as of August 29, 1997 by and between Registrant and the City of Chandler, Arizona	10-Q	000-21184	10.1	2/13/1998	
10.35	Addendum to Development Agreement by and between Registrant and the City of Tempe, Arizona, dated May 11, 2000	10-K	000-21184	10.14	5/15/2001	
10.36	Development Agreement dated as of July 17, 1997 by and between Registrant and the City of Tempe, Arizona	10-Q	000-21184	10.2	2/13/1998	
21.1	Subsidiaries of Registrant					X
23.1	Consent of Independent Registered Public Accounting Firm					X
24.1	Power of Attorney included on Page 63 of this Form 10-K					X
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (the Exchange Act)					X
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (the Exchange Act)					X
32**	Certifications Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive File because its XBRL tags are embedded within the Inline XBRL document					
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X

EXHIBIT LIST

Exhibit Number	Exhibit Description	Incorporated by Reference			Included Herewith
		Form	File Number	Exhibit	
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	XBRL Taxonomy Presentation Linkbase Document				X

*Compensation plans or arrangements in which directors or executive officers are eligible to participate

**Furnished herewith.

Annual Report on Form 10-K

Item 8, Item 15(a)(1) and (2), (b) and (c)

INDEX TO FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENTS

EXHIBITS

YEAR ENDED MARCH 31, 2019

MICROCHIP TECHNOLOGY INCORPORATED
AND SUBSIDIARIES

CHANDLER, ARIZONA

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Microchip Technology Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Microchip Technology Incorporated (the Company) as of March 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended March 31, 2019, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at March 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of March 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated May 30, 2019 expressed an adverse opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2001.
Phoenix, Arizona
May 30, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Shareholders and the Board of Directors of Microchip Technology Incorporated

Opinion on Internal Control over Financial Reporting

We have audited Microchip Technology Incorporated's internal control over financial reporting as of March 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, because of the effect of the material weaknesses described below on the achievement of the objectives of the control criteria Microchip Technology Incorporated (the Company) has not maintained effective internal control over financial reporting as of March 31, 2019, based on the COSO criteria.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment. Management has identified a material weakness in the operating effectiveness of controls related to the Company's income tax process. Management has also identified a material weakness in the design effectiveness of certain IT general controls relating to system access.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Microsemi Corporation, which is included in the March 31, 2019 consolidated financial statements of Microchip Technology Incorporated and constituted approximately four percent of consolidated total assets as of March 31, 2019, and twenty eight percent of consolidated total revenues for the year then ended. Our audit of internal control over financial reporting of Microchip Technology Incorporated also did not include an evaluation of the internal control over financial reporting of Microsemi Corporation.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of March 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended March 31, 2019, and the related notes. The material weaknesses were considered in determining the nature, timing and extent of audit tests applied in our audit of the fiscal 2019 consolidated financial statements, and this report does not affect our report dated May 30, 2019, which expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP
Phoenix, Arizona
May 30, 2019

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Item 1. Financial Statements

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except share amounts)

ASSETS

	March 31,	
	2019	2018
Cash and cash equivalents	\$ 428.6	\$ 901.3
Short-term investments	2.3	1,295.3
Accounts receivable, net	880.6	563.7
Inventories	711.7	476.2
Other current assets	191.6	119.8
Total current assets	<u>2,214.8</u>	<u>3,356.3</u>
Property, plant and equipment, net	996.7	767.9
Goodwill	6,663.9	2,299.0
Intangible assets, net	6,685.6	1,662.0
Long-term deferred tax assets	1,677.2	100.2
Other assets	111.8	71.8
Total assets	<u>\$ 18,350.0</u>	<u>\$ 8,257.2</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Accounts payable	\$ 226.4	\$ 144.1
Accrued liabilities	787.3	229.6
Deferred income on shipments to distributors	—	333.8
Current portion of long-term debt	1,360.8	1,309.9
Total current liabilities	<u>2,374.5</u>	<u>2,017.4</u>
Long-term debt	8,946.2	1,758.4
Long-term income tax payable	756.2	754.9
Long-term deferred tax liability	706.1	205.8
Other long-term liabilities	279.5	240.9
Stockholders' equity:		
Preferred stock, \$0.001 par value; authorized 5,000,000 shares; no shares issued or outstanding	—	—
Common stock, \$0.001 par value; authorized 450,000,000 shares; 253,232,909 shares issued and 237,589,501 shares outstanding at March 31, 2019; 253,232,909 shares issued and 235,027,767 shares outstanding at March 31, 2018	0.2	0.2
Additional paid-in capital	2,679.6	2,562.5
Common stock held in treasury: 15,643,408 shares at March 31, 2019; 18,205,142 shares at March 31, 2018	(582.2)	(662.6)
Accumulated other comprehensive loss	(20.7)	(17.6)
Retained earnings	3,210.6	1,397.3
Total stockholders' equity	<u>5,287.5</u>	<u>3,279.8</u>
Total liabilities and stockholders' equity	<u>\$ 18,350.0</u>	<u>\$ 8,257.2</u>

See accompanying notes to consolidated financial statements

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MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME

(in millions, except per share amounts)

	Year ended March 31,		
	2019	2018	2017
Net sales	\$ 5,349.5	\$ 3,980.8	\$ 3,407.8
Cost of sales (1)	2,418.2	1,560.1	1,650.6
Gross profit	<u>2,931.3</u>	<u>2,420.7</u>	<u>1,757.2</u>
Research and development (1)	826.3	529.3	545.3
Selling, general and administrative (1)	682.9	452.1	499.8
Amortization of acquired intangible assets	674.1	485.5	337.7
Special charges and other, net (1)	33.7	17.5	98.6
Operating expenses	<u>2,217.0</u>	<u>1,484.4</u>	<u>1,481.4</u>
Operating income	714.3	936.3	275.8
Losses on equity method investments	(0.2)	(0.2)	(0.2)
Other income (expense):			
Interest income	8.1	22.0	3.1
Interest expense	(502.9)	(199.0)	(146.3)
Loss on settlement of debt	(12.6)	(16.0)	(43.9)
Other (loss) income, net	(2.2)	(5.8)	1.3
Income before income taxes	<u>204.5</u>	<u>737.3</u>	<u>89.8</u>
Income tax (benefit) provision	(151.4)	481.9	(80.8)
Net income from continuing operations	<u>355.9</u>	<u>255.4</u>	<u>170.6</u>
Discontinued operations:			
Loss from discontinued operations	—	—	(7.6)
Income tax benefit	—	—	(1.6)
Net loss from discontinued operations	<u>—</u>	<u>—</u>	<u>(6.0)</u>
Net Income	<u>\$ 355.9</u>	<u>\$ 255.4</u>	<u>\$ 164.6</u>
Basic net income per common share from continuing operations	\$ 1.51	\$ 1.10	\$ 0.79
Basic net loss per common share from discontinued operations	\$ —	\$ —	\$ (0.03)
Basic net income per common share	<u>\$ 1.51</u>	<u>\$ 1.10</u>	<u>\$ 0.76</u>
Diluted net income per common share from continuing operations	\$ 1.42	\$ 1.03	\$ 0.73
Diluted net loss per common share from discontinued operations	\$ —	\$ —	\$ (0.02)
Diluted net income per common share	<u>\$ 1.42</u>	<u>\$ 1.03</u>	<u>\$ 0.71</u>
Dividends declared per common share	<u>\$ 1.457</u>	<u>\$ 1.449</u>	<u>\$ 1.441</u>
Basic common shares outstanding	<u>236.2</u>	<u>232.9</u>	<u>217.2</u>
Diluted common shares outstanding	<u>249.9</u>	<u>248.9</u>	<u>234.8</u>
(1) Includes share-based compensation expense as follows:			
Cost of sales	\$ 14.9	\$ 13.8	\$ 18.7
Research and development	\$ 72.0	\$ 42.5	\$ 46.8
Selling, general and administrative	\$ 62.3	\$ 36.9	\$ 62.6
Special charges and other, net	\$ 17.2	\$ —	\$ —

See accompanying notes to consolidated financial statements

MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Year Ended March 31,		
	2019	2018	2017
Net income	\$ 355.9	\$ 255.4	\$ 164.6
Components of other comprehensive (loss) income:			
Available-for-sale securities:			
Unrealized holding losses, net of tax effect	(5.6)	(13.6)	(1.5)
Reclassification of realized transactions, net of tax effect	5.6	15.2	1.5
Defined benefit plans:			
Actuarial gains (losses) related to defined benefit pension plans, net of tax (provision) benefit	2.9	(5.6)	(5.3)
Reclassification of realized transactions, net of tax effect	1.0	0.8	—
Change in net foreign currency translation adjustment	(5.3)	—	(5.7)
Other comprehensive loss, net of tax effect	(1.4)	(3.2)	(11.0)
Comprehensive income	<u>\$ 354.5</u>	<u>\$ 252.2</u>	<u>\$ 153.6</u>

See accompanying notes to consolidated financial statements

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MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year ended March 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net income	\$ 355.9	\$ 255.4	\$ 164.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	876.4	615.9	469.2
Deferred income taxes	(62.2)	51.2	(126.9)
Share-based compensation expense related to equity incentive plans	166.4	93.2	128.1
Loss on settlement of debt	12.6	16.0	43.9
Amortization of debt discount	114.6	106.1	56.1
Amortization of debt issuance costs	16.5	6.6	4.5
Losses on equity method investments	0.2	0.2	0.2
Gains on sale of assets	—	(5.9)	(0.1)
Losses on write-down of fixed assets	0.8	0.1	2.6
Impairment of intangible assets	3.1	0.5	11.9
Losses on available-for-sale investments and marketable equity securities, net	—	—	0.1
Realized gain on equity method investment	—	—	(0.4)
Impairment of available-for-sale investment	6.0	15.5	1.4
Amortization of premium on available-for-sale investments	(0.2)	0.3	—
Changes in operating assets and liabilities, excluding impact of acquisitions:			
Decrease (increase) in accounts receivable	238.8	(85.3)	(46.8)
Decrease (increase) in inventories	341.6	(59.2)	223.7
Increase in deferred income on shipments to distributors	—	41.0	109.4
Decrease in accounts payable and accrued liabilities	(180.7)	(13.9)	(14.8)
Change in other assets and liabilities	(24.2)	14.0	25.7
Change in income tax payable	(190.8)	367.9	(2.2)
Operating cash flows related to discontinued operations	—	—	9.3
Net cash provided by operating activities	1,674.8	1,419.6	1,059.5
Cash flows from investing activities:			
Purchases of available-for-sale investments	(167.7)	(1,594.8)	(500.3)
Maturities of available-for-sale investments	78.0	786.7	0.4
Sales of available-for-sale investments	1,376.6	—	470.2
Sale of equity method investment	—	—	1.7
Acquisition of Atmel, net of cash acquired	—	—	(2,747.5)
Acquisition of Microsemi, net of cash acquired	(7,850.6)	—	—
Investments in other assets	(18.6)	(7.1)	(10.2)
Proceeds from sale of assets	0.2	10.3	23.0
Capital expenditures	(228.9)	(206.8)	(75.3)
Net cash used in investing activities	(6,811.0)	(1,011.7)	(2,838.0)
Cash flows from financing activities: ⁽¹⁾			
Proceeds from issuance of 2017 Senior Convertible Debt	—	—	2,070.0
Proceeds from issuance of 2017 Junior Convertible Debt	—	—	575.0
Payments on settlement of convertible debt	—	(73.4)	(436.2)
Proceeds from issuance of 2023 and 2021 Senior Notes	1,989.5	—	—
Proceeds from borrowings on term loan facility	3,000.0	—	—
Repayments of term loan facility	(1,088.5)	—	—
Proceeds from borrowings on revolving loan under credit facility	4,416.5	187.0	1,537.0
Repayments of revolving loan under credit facility	(1,150.0)	(187.0)	(2,781.0)
Repayment of debt assumed in Microsemi acquisition	(2,056.9)	—	—
Deferred financing costs	(72.7)	(1.2)	(36.9)
Payment of cash dividends	(344.4)	(337.5)	(315.4)
Proceeds from sale of common stock	42.6	42.0	42.2
Tax payments related to shares withheld for vested restricted stock units	(71.8)	(44.4)	(58.4)
Capital lease payments	(0.8)	(0.8)	(0.8)
Net cash provided by (used in) financing activities	4,663.5	(415.3)	595.5

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	Year ended March 31,		
	2019	2018	2017
Effect of foreign exchange rate changes on cash and cash equivalents	—	—	(1.0)
Net decrease in cash and cash equivalents	(472.7)	(7.4)	(1,184.0)
Cash and cash equivalents, and restricted cash at beginning of period ⁽²⁾	901.3	908.7	2,092.7
Cash and cash equivalents, and restricted cash at end of period ⁽²⁾	<u>\$ 428.6</u>	<u>\$ 901.3</u>	<u>\$ 908.7</u>

Schedule of significant non-cash financing activity:

⁽¹⁾ During the fiscal year ended March 31, 2018, the Company issued \$111.3 million principal amount of 2017 Junior Convertible Notes and 3.2 million shares of common stock in exchange for \$111.3 million principal amount of 2007 Junior Convertible Notes. Refer to Note 12 Debt and Credit Facility for further discussion.

Schedule of restricted cash:

⁽²⁾ During the fiscal year ended March 31, 2019, the Company adopted ASU 2016-18 - Statement of Cash Flows: Restricted Cash. The following table presents the balance of restricted cash which consists of cash denominated in a foreign currency and restricted in use due to a foreign taxing authority requirement (in millions):

	Year ended March 31,		
	2019	2018	2017
Restricted cash	<u>\$ 38.4</u>	<u>\$ 42.1</u>	<u>\$ —</u>

See accompanying notes to consolidated financial statements

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MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in millions)

	Common Stock and Additional Paid-in-Capital		Common Stock Held in Treasury		Accumulated Other Comprehensive Income	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount			
Balance at March 31, 2016	227.4	\$ 1,391.9	23.4	\$ (820.1)	\$ (3.4)	\$ 1,582.6	\$ 2,151.0
Net income	—	—	—	—	—	164.6	164.6
Other comprehensive loss	—	—	—	—	(11.0)	—	(11.0)
Issuance of common stock - Atmel acquisition	10.1	486.2	—	—	—	—	486.2
Non-cash consideration, exchange of employee stock awards - Atmel acquisition	—	7.5	—	—	—	—	7.5
Proceeds from sales of common stock through employee equity incentive plans	4.0	42.2	—	—	—	—	42.2
Restricted stock unit and stock appreciation right withholdings	(1.0)	(58.4)	—	—	—	—	(58.4)
Adoption of ASU 2016-09, cumulative adjustment	—	2.0	—	—	—	47.6	49.6
Treasury stock used for new issuances	(3.0)	(88.2)	(3.0)	88.2	—	—	—
Share-based compensation	—	127.3	—	—	—	—	127.3
Shares issued to settle convertible debt	12.0	862.7	—	—	—	—	862.7
Settlement of convertible debt	—	(850.8)	—	—	—	—	(850.8)
Convertible Debt - issuance of 2017 senior and junior debt	—	615.2	—	—	—	—	615.2
Cash dividend	—	—	—	—	—	(315.4)	(315.4)
Balance at March 31, 2017	249.5	2,537.6	20.4	(731.9)	(14.4)	1,479.4	3,270.7
Net income	—	—	—	—	—	255.4	255.4
Other comprehensive loss	—	—	—	—	(3.2)	—	(3.2)
Proceeds from sales of common stock through employee equity incentive plans	2.7	42.0	—	—	—	—	42.0
Restricted stock unit and stock appreciation right withholdings	(0.5)	(44.4)	—	—	—	—	(44.4)
Treasury stock used for new issuances	(2.2)	(69.3)	(2.2)	69.3	—	—	—
Share-based compensation	—	93.1	—	—	—	—	93.1
Shares issued to settle convertible debt	3.7	298.5	—	—	—	—	298.5
Settlement of convertible debt	—	(337.7)	—	—	—	—	(337.7)
Convertible Debt - exchange of 2017 junior debt	—	42.9	—	—	—	—	42.9
Cash dividend	—	—	—	—	—	(337.5)	(337.5)
Balance at March 31, 2018	253.2	2,562.7	18.2	(662.6)	(17.6)	1,397.3	3,279.8

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	Common Stock and Additional Paid-in-Capital		Common Stock Held in Treasury		Accumulated Other Comprehensive Income	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount			
Net income	—	—	—	—	—	355.9	355.9
Other comprehensive loss	—	—	—	—	(1.4)	—	(1.4)
Adoption of ASU 2016-01, cumulative adjustment	—	—	—	—	(1.7)	1.7	—
Adoption of ASC 606, cumulative adjustment	—	—	—	—	—	242.0	242.0
Adoption of ASU 2016-16, cumulative adjustment	—	—	—	—	—	1,558.1	1,558.1
Non-cash consideration, exchange of employee stock awards - Microsemi acquisition	—	53.9	—	—	—	—	53.9
Proceeds from sales of common stock through employee equity incentive plans	3.4	42.6	—	—	—	—	42.6
Restricted stock unit and stock appreciation right withholdings	(0.8)	(71.8)	—	—	—	—	(71.8)
Treasury stock used for new issuances	(2.6)	(80.4)	(2.6)	80.4	—	—	—
Share-based compensation	—	172.8	—	—	—	—	172.8
Cash dividend	—	—	—	—	—	(344.4)	(344.4)
Balance at March 31, 2019	253.2	\$ 2,679.8	15.6	\$ (582.2)	\$ (20.7)	\$ 3,210.6	\$ 5,287.5

See accompanying notes to consolidated financial statements

**MICROCHIP TECHNOLOGY INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Note 1. Significant Accounting Policies

Nature of Business

Microchip Technology Incorporated ("Microchip" or the "Company") develops, manufactures and sells specialized semiconductor products used by its customers for a wide variety of embedded control applications. Microchip's product portfolio comprises general purpose and specialized 8-bit, 16-bit, and 32-bit microcontrollers, 32-bit microprocessors, field-programmable gate array (FPGA) products, a broad spectrum of high-performance linear, mixed-signal, power management, thermal management, discrete diodes and Metal Oxide Semiconductor Field Effect Transistors (MOSFETS), radio frequency (RF), timing, timing systems, safety, security, wired connectivity and wireless connectivity devices, as well as Serial Electrically Erasable Programmable Read Only Memory (EEPROM), Serial Flash memories, Parallel Flash memories, Serial Electrically Erasable Random Access Memory (EERAM), and Serial Static Random Access Memory (SRAM) memories. Microchip also licenses Flash-IP solutions that are incorporated in a broad range of products.

Principles of Consolidation

The Company prepares its consolidated financial statements in accordance with generally accepted accounting principles in the United States of America (US GAAP). The consolidated financial statements include the accounts of Microchip and its majority-owned and controlled subsidiaries. As further discussed in Note 2, on May 29, 2018, the Company completed its acquisition of Microsemi Corporation (Microsemi) and the Company's financial results include Microsemi's results beginning as of such acquisition date. All of the Company's subsidiaries are included in the consolidated financial statements. All significant intercompany accounts and transactions have been eliminated in consolidation. All dollar amounts in the financial statements and tables in these notes, except per share amounts, are stated in millions of U.S. dollars unless otherwise noted.

Revenue Recognition (subsequent to the adoption of ASC 606)

The Company generates revenue primarily from sales of semiconductor products to distributors and non-distributor customers (direct customers) and, to a lesser extent, from royalties paid by licensees of intellectual property. The Company applies the following five-step approach to determine the timing and amount of revenue recognition: (1) identify the contract with the customer, (2) identify performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when the performance obligation is satisfied.

Sales to distributors are governed by a distributor agreement, a purchase order, and an order acknowledgment. Sales to distributors do not meet the definition of a contract, as defined by ASC 606, until the distributor has sent in a purchase order, the Company has acknowledged the order, the Company has deemed the collectability of the consideration to be probable, and legally enforceable rights and obligations have been created; this generally occurs 30 days prior to the estimated ship date. As is customary in the semiconductor industry, the Company offers price concessions and stock rotation rights to many of their distributors. As these are forms of variable consideration, the Company estimates the amount of consideration to which they will be entitled using recent historical data and applying the expected value method. Usually, there is only a single performance obligation in the contract, and therefore the entire transaction price is allocated to the single performance obligation. After the transaction price has been allocated, the Company recognizes revenue when the performance obligation is satisfied. Substantially all of the revenue generated from contracts with distributors is recognized at the time risk and title of the inventory transfers to the distributor.

Sales to direct customers are generally governed by a purchase order and an order acknowledgment. Sales to direct customers usually do not meet the definition of a contract, as defined by ASC 606, until shipment of the product occurs. Generally, the transaction price associated with contracts with direct customers is set at the standalone selling price and is not variable. Usually, there is only a single performance obligation in the contract, and therefore the entire transaction price is allocated to the single performance obligation. After the transaction price has been allocated, the Company recognizes revenue when the performance obligation is satisfied. Substantially all of the revenue generated from contracts with direct customers is recognized at the time risk and title of the inventory transfers to the customer.

Revenue generated from licensees is governed by licensing agreements. The Company's primary performance obligation related to these agreements is to provide the licensee the right to use the intellectual property. The final transaction price is

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determined by multiplying the usage of the license by the royalty, which is fixed in the licensing agreement. Revenue is recognized as usage of the license occurs.

For a discussion of the financial statement impact related to the adoption of ASC 606, see “Recently Adopted Accounting Pronouncements.”

Revenue Recognition (prior to the adoption of ASC 606)

The Company recognized revenue when the earnings process was complete, as evidenced by an agreement with the customer, transfer of title had occurred, the pricing was fixed or determinable and collectability was reasonably assured. The Company recognized revenue from product sales to original equipment manufacturers (OEMs) upon shipment and recorded reserves for estimated customer returns.

Distributors worldwide generally had broad price protection and product return rights which prevented the sales pricing from being fixed or determinable at the time of the Company's shipment to the distributors. Therefore, revenue recognition was deferred until the pricing uncertainty was resolved, which generally occurred when the distributor sold the product to their customer. At the time of shipment to these distributors, the Company recorded a trade receivable for the selling price as there was a legally enforceable right to payment, relieved inventory for the carrying value of goods shipped since legal title had passed to the distributor, and recorded the gross margin in deferred income on shipments to distributors on its consolidated balance sheets.

In connection with its acquisition of Atmel, the Company acquired certain distributor relationships where revenue was recognized upon shipment to the distributors based on certain contractual terms or prevailing business practices that resulted in the price being fixed and determinable at such time. Following an acquisition, the Company undertook efforts to align the contract terms and business practices of the acquired entity with its own. Once these efforts were complete, the related revenue recognition was changed. With respect to such distributor relationships acquired in the Atmel acquisition, as of October 1, 2016, these business practices were conformed to those of the Company's other distributors, which beginning in October 2016 resulted in the deferral of revenue recognition until the distributor sold the product to their customers.

Deferred income on shipments to distributors effectively represented gross margin on the sale to the distributor at the initial shipment date; however, the amount of gross margin recognized by the Company in future periods was less than the deferred margin as a result of credits granted to distributors on specifically identified products and customers to allow the distributors to earn a competitive gross margin on the sale of the Company's products to their end customers and price protection concessions related to market pricing conditions.

The Company sold the majority of the items in its product catalog to its distributors worldwide at a uniform list price. However, distributors resold the Company's products to end customers at a broad range of individually negotiated price points. The majority of the Company's distributors' resales required a reduction from the original list price paid. Often, under these circumstances, the Company remitted back to the distributor a portion of their original purchase price after the resale transaction was completed in the form of a credit against the distributors' outstanding accounts receivable balance. The credits were on a per unit basis and were not given to the distributor until they provided information regarding the sale to their end customer. The price reductions varied significantly based on the customer, product, quantity ordered, geographic location and other factors and discounts to a price less than the Company's cost have historically been rare. The effect of granting these credits established the net selling price from the Company to its distributors for the product and resulted in the net revenue recognized by the Company when the product was sold by the distributors to their end customers. Thus, a portion of the "deferred income on shipments to distributors" balance represented the amount of distributors' original purchase price that was to be credited back to the distributors in the future. The Company did not reduce deferred income on shipments to distributors or accounts receivable by anticipated future price concessions; rather, price concessions are recorded against deferred income on shipments to distributors when incurred, which is generally at the time the distributor sold the product.

At March 31, 2018, the Company had approximately \$479.6 million of deferred revenue and \$145.8 million in deferred cost of sales recognized as \$333.8 million of deferred income on shipments to distributors. The deferred income on shipments to distributors that was ultimately to be recognized in the Company's income statement was lower than the amount reflected on the balance sheet due to price credits to be granted to the distributors when the product is sold to their customers. These price credits historically have resulted in the deferred income approximating the overall gross margins that the Company recognizes in the distribution channel of its business.

The Company reduced product pricing through price protection based on market conditions, competitive considerations and other factors. Price protection was granted to distributors on the inventory they have on hand at the date the price

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protection was offered. When the Company reduced the price of its products, it allowed the distributor to claim a credit against its outstanding accounts receivable balances based on the new price of the inventory it has on hand as of the date of the price reduction. There was no immediate revenue impact from the price protection, as it was reflected as a reduction of the deferred income on shipments to distributors' balance.

Products returned by distributors and subsequently scrapped have historically been immaterial to the Company's consolidated results of operations. The Company routinely evaluated the risk of impairment of the deferred cost of sales component of the deferred income on shipments to distributors' account. Because of the historically immaterial amounts of inventory that have been scrapped, and historically rare instances where discounts given to a distributor resulted in a price less than the Company's cost, the Company believed the deferred costs have a low risk of material impairment.

Shipping charges billed to customers were included in net sales, and the related shipping costs were included in cost of sales. The Company collected and remitted certain sales-related taxes on a portion of its sales of inventory and reported such amounts under the net method in its consolidated statements of income.

For licenses or other technology arrangements without an upgrade period, non-royalty revenue from the license was recognized upon delivery of the technology if the fee was fixed or determinable and collection of the fee was reasonably assured. Royalties were recognized when reported to the Company, which generally coincided with the receipt of payment. In certain limited circumstances, the Company entered into license and other arrangements for technologies that the Company was continuing to enhance and refine or under which it was obligated to provide unspecified enhancements. Under these arrangements, non-royalty revenue is recognized over the lesser of (1) the estimated period that the Company has historically enhanced and developed refinements to the specific technology, typically one to three years (the "upgrade period"), and (2) the remaining portion of the upgrade period after the date of delivery of all specified technology and documentation, provided that the fee is fixed or determinable and collection of the fee is reasonably assured. Royalties received during the upgrade period were recognized as revenue based on an amortization calculation of the elapsed portion of the upgrade period compared to the entire estimated upgrade period. Royalties received after the upgrade period has elapsed were recognized when reported to the Company, which generally coincided with the receipt of payment.

Product Warranty

The Company typically warrants its products against defects in materials and workmanship and non-conformance to specifications for 12 to 24 months. The majority of the Company's product warranty claims are settled through the return of the defective product and the shipment of replacement product. Warranty returns are included within the Company's allowance for returns, which is based on historical return rates. Actual future returns could differ from the allowance established. In addition, the Company accrues a liability for specific warranty costs expected to be settled other than through product return and replacement, if a loss is probable and can be reasonably estimated. Product warranty expenses were immaterial for the fiscal years ended March 31, 2019, 2018, and 2017.

Advertising Costs

The Company expenses all advertising costs as incurred. Advertising costs were immaterial for the fiscal years ended March 31, 2019, 2018 and 2017.

Research and Development

Research and development costs are expensed as incurred. Assets purchased to support the Company's ongoing research and development activities are capitalized when related to products which have achieved technological feasibility or that have alternative future uses and are amortized over their estimated useful lives. Renewals or extensions of these assets are expensed as incurred. Research and development expenses include expenditures for labor, share-based payments, depreciation, masks, prototype wafers, and expenses for development of process technologies, new packages, and software to support new products and design environments.

Restructuring Charges

The Company recognizes a liability measured at fair value for restructuring costs when the liability is incurred. Restructuring charges are included within special charges and other, net in the consolidated statements of income and are primarily comprised of employee separation costs, asset impairments, contract exit costs and costs of facility consolidation and closure, including the related gains or losses associated with the sale of owned facilities. Employee separation costs includes one-time termination benefits that are recognized as a liability at estimated fair value, at the time of communication to

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employees, unless future service is required, in which case the costs are recognized ratably over the future service period. Ongoing termination benefits are recognized as a liability at estimated fair value when the amount of such benefits are probable and reasonably estimable. Contract exit costs includes contract termination fees and future contractual commitments for lease payments. A liability for contract exit costs is recognized in the period in which the Company terminates the contract or on the cease-use date for leased facilities.

Foreign Currency Translation

The Company's foreign subsidiaries are considered to be extensions of the U.S. company and any translation gains and losses related to these subsidiaries are included in other income (expense) in the consolidated statements of income. As the U.S. dollar is utilized as the functional currency, gains and losses resulting from foreign currency transactions (transactions denominated in a currency other than the subsidiaries' functional currency) are also included in income. For a portion of fiscal 2019 and 2017, certain foreign subsidiaries acquired as part of the Company's acquisition activities had the local currency as the functional currency. For subsidiaries acquired as part of the Company's acquisition of Microsemi, the U.S. dollar is expected to become the functional currency for such entities once integrated into the Company's legal structure and intercompany agreements are executed.

Income Taxes

As part of the process of preparing its consolidated financial statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. This process involves estimating its actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the Company's consolidated balance sheets. The Company must then assess the likelihood that its deferred tax assets will be recovered from future taxable income within the relevant jurisdiction and to the extent the Company believes that recovery is not likely, it must establish a valuation allowance. The Company provided valuation allowances for certain of its deferred tax assets where it is more likely than not that some portion, or all of such assets, will not be realized.

Various taxing authorities in the U.S. and other countries in which the Company does business scrutinize the tax structures employed by businesses. Companies of a similar size and complexity as the Company are regularly audited by the taxing authorities in the jurisdictions in which they conduct significant operations. During the year ended March 31, 2019, various foreign jurisdictions finalized their audits. The close of these audits did not have an adverse impact on the financial statements. The Company is currently being audited by the tax authorities in the United States and various foreign jurisdictions. At this time, the Company does not know what the outcome of these audits will be. The Company records benefits for uncertain tax positions based on an assessment of whether it is more likely than not that the tax positions will be sustained based on their technical merits under currently enacted law. If this threshold is not met, no tax benefit of the uncertain tax position is recognized. If the threshold is met, the Company recognizes the largest amount of the tax benefit that is more than 50% likely to be realized upon ultimate settlement.

The accounting model as defined in Accounting Standards Codification ("ASC") 740 related to the valuation of uncertain tax positions requires the Company to presume that the tax position will be examined by the relevant taxing authority that has full knowledge of all relevant information and that each tax position will be evaluated without consideration of the possibility of offset or aggregation with other positions. The recognition requirement for the liability exists even if the Company believes the possibility of examination by a taxing authority or discovery of the related risk matters is remote or where it has a long history of the taxing authority not performing an exam or overlooking an issue. The Company will record an adjustment to a previously recorded position if new information or facts related to the position are identified in a subsequent period. All adjustments to the positions are recorded through the income statement. Generally, adjustments will be recorded in periods subsequent to the initial recognition if the taxing authority has completed an audit of the period or if the statute of limitation expires. Due to the inherent uncertainty in the estimation process and in consideration of the criteria of the accounting model, amounts recognized in the financial statements in periods subsequent to the initial recognition may significantly differ from the estimated exposure of the position under the accounting model.

On December 22, 2017, the Act was enacted into law. The Act provides for numerous significant tax law changes and modifications including the reduction of the U.S. federal corporate income tax rate from 35.0% to 21.0%, the requirement for companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and the creation of new taxes on certain foreign-sourced earnings. As a fiscal year-end taxpayer, certain provisions of the Act began to impact the Company in the third quarter of fiscal 2018, while other provisions have become effective for the Company in fiscal 2019.

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In addition to the impacts of tax reform on fiscal 2018, the Act establishes new tax laws that are effective for fiscal 2019, including, but not limited to, (1) a new provision designed to tax low-taxed income of foreign subsidiaries ("GILTI"), which allows for the possibility of using foreign tax credits ("FTCs") and a deduction of up to 50% to offset the income tax liability (subject to some limitations); (2) limitations on the deductibility of certain executive compensation; (3) limitations on the deductibility of interest expense; and (4) limitations on the use of FTCs to reduce the U.S. income tax liability. While each of these provisions is expected to have an impact on the Company's tax expense for future periods, the increase in tax expense for GILTI is the most significant.

The FASB allows taxpayers to make an accounting policy election of either (1) treating taxes due on GILTI inclusions as a current-period expense when incurred or (2) recognizing deferred taxes for temporary basis differences that are expected to reverse as GILTI in future years. The Company is making a policy choice to include taxes due on the future GILTI inclusion in taxable income when incurred.

Cash and Cash Equivalents

All highly liquid investments, including marketable securities with an original maturity to the Company of three months or less when acquired are considered to be cash equivalents.

Available-for-Sale Investments

The Company classifies its investments in debt and marketable equity securities as available-for-sale based upon management's intent with regard to the investments and the nature of the underlying securities.

The Company's available-for-sale debt securities consist of government agency bonds, municipal bonds and corporate bonds. The Company's available-for-sale debt securities are carried at fair value with unrealized gains and losses reported in stockholders' equity unless losses are considered to be other than temporary impairments in which case the losses are recognized through the statement of income. Premiums and discounts are amortized or accreted over the life of the related available-for-sale security. Dividend and interest income are recognized when earned. The cost of available-for-sale debt securities sold is calculated using the first-in, first-out (FIFO) basis at the individual security level for sales from multiple lots.

Marketable equity securities are equity securities with a readily determinable fair value that are measured and recorded at fair value on a recurring basis with changes in fair value, whether realized or unrealized, recorded through the statement of income. Prior to fiscal 2019, these securities were classified as available-for-sale securities and measured and recorded at fair value with unrealized changes in fair value reported in stockholders' equity.

The Company includes within short-term investments its income yielding available-for-sale securities that can be readily converted to cash and includes within long-term investments those income yielding available-for-sale securities with maturities of over one year that have unrealized losses attributable to them or those that cannot be readily liquidated. As discussed in Note 5, if the Company anticipates that investments will be liquidated in anticipation of a pending merger or otherwise, any unrealized losses are recognized as other-than-temporary impairments. If the anticipated liquidity event is within 12 months, the securities are classified as short-term investments. In the normal course of business, the Company intends and has the ability to hold its long-term investments with temporary impairments until such time as these assets are no longer impaired.

Derivative Instruments

Derivative instruments are required to be recorded at fair value as either assets or liabilities in the Company's consolidated balance sheet. The Company's accounting policies for derivative instruments depends on whether the instrument has been designated and qualifies as part of a hedging relationship and further, on the type of hedging relationship.

The Company does not apply hedge accounting to foreign currency forward contracts. Gains and losses associated with currency rate changes on forward contracts are recorded currently in income. These gains and losses have been immaterial to the Company's financial statements.

The Company is exposed to fluctuations in prices for energy that it consumes, particularly electricity and natural gas. The Company also enters into variable-priced contracts for some purchases of electricity and natural gas, on an index basis. The Company seeks, or may seek, to partially mitigate these exposures through fixed-price contracts. These contracts meet the characteristics of derivative instruments, but generally qualify for the "normal purchases or normal sales" exception under authoritative guidance and require no mark-to-market adjustment.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for probable losses on uncollectible accounts receivable resulting from the inability of its customers to make required payments, which is included in bad debt expense. The Company determines the adequacy of this allowance by routinely analyzing the composition of accounts receivable and evaluating customer creditworthiness, credit history, facts and circumstances specific to outstanding balances and current economic conditions.

Inventories

Inventories are valued at the lower of cost or net realizable value using the first-in, first-out method. The Company writes down its inventory for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of inventory and the estimated net realizable value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by the Company, additional inventory write-downs may be required. Inventory impairment charges establish a new cost basis for inventory and charges are not subsequently reversed to income even if circumstances later suggest that increased carrying amounts are recoverable. In estimating reserves for obsolescence, the Company primarily evaluates estimates of demand over a 12-month period and provides reserves for inventory on hand in excess of the estimated 12-month demand. Estimates for projected 12-month demand are generally based on the average shipments of the prior three-month period, which are then annualized to adjust for any potential seasonality in the Company's business. The estimated 12-month demand is compared to the Company's most recently developed sales forecast to further reconcile the 12-month demand estimate. Management reviews and adjusts the estimates as appropriate based on specific situations. For example, demand can be adjusted up for new products for which historic sales are not representative of future demand. Alternatively, demand can be adjusted down to the extent any existing products are being replaced or discontinued.

In periods where the Company's production levels are substantially below normal operating capacity, unabsorbed overhead production costs associated with the reduced production levels of the Company's manufacturing facilities are charged directly to cost of sales.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Major renewals and improvements are capitalized, while maintenance and repairs are expensed when incurred. The Company's property and equipment accounting policies incorporate estimates, assumptions and judgments relative to the useful lives of its property and equipment. Depreciation is provided for assets placed in service on a straight-line basis over the estimated useful lives of the relative assets, which range from 10 to 40 years for buildings and building improvements and 3 to 7 years for machinery and equipment. The Company evaluates the carrying value of its property and equipment when events or changes in circumstances indicate that the carrying value of such assets may be impaired. Asset impairment evaluations are, by nature, highly subjective.

Senior and Junior Subordinated Convertible Debt

The Company separately accounts for the liability and equity components of its senior and junior subordinated convertible debt in a manner that reflects its nonconvertible debt (unsecured debt) borrowing rate when interest cost is recognized. This results in a bifurcation of a component of the debt, classification of that component in equity and the accretion of the resulting discount on the debt to be recognized as part of interest expense in its consolidated statements of income. Lastly, the Company includes the dilutive effect of the shares of its common stock issuable upon conversion of the outstanding senior and junior subordinated convertible debt in its diluted income per share calculation regardless of whether the market price triggers or other contingent conversion features have been met. The Company applies the treasury stock method as it has the intent and ability to settle the principal amounts of the senior and junior subordinated convertible debentures in cash. This method results in incremental dilutive shares when the average market value of the Company's common stock for a reporting period exceeds the conversion prices per share and adjust as dividends are recorded in the future.

Upon a de-recognition event such as a settlement or conversion, the Company estimates the fair value of the liability component and compares that to the carrying amount in order to calculate the appropriate amount of gain or loss. The remaining amounts paid or issued (in the case of non cash consideration in the form of shares of common stock) are recognized as a reduction of additional paid-in-capital. The fair value of the liability component is estimated using the current comparable borrowing rate for an otherwise identical non-convertible debt instrument.

Defined Benefit Pension Plans

The Company maintains defined benefit pension plans, covering certain of its foreign employees. For financial reporting purposes, net periodic pension costs and pension obligations are determined based upon a number of actuarial assumptions, including discount rates for plan obligations, and assumed rates of compensation increases for employees participating in plans. These assumptions are based upon management's judgment and consultation with actuaries, considering all known trends and uncertainties.

Contingencies

In the ordinary course of business, the Company is exposed to various liabilities as a result of contracts, product liability, customer claims and other matters. Additionally, the Company is involved in a limited number of legal actions, both as plaintiff and defendant. Consequently, the Company could incur uninsured liability in any of those actions. The Company also periodically receives notifications from various third parties alleging infringement of patents or other intellectual property rights, or from customers requesting reimbursement for various costs. With respect to pending legal actions to which the Company is a party and other claims, although the outcomes are generally not determinable, the Company believes that the ultimate resolution of these matters will not have a material adverse effect on its financial position, cash flows or results of operations. Litigation and disputes relating to the semiconductor industry are not uncommon, and the Company is, from time to time, subject to such litigation and disputes. As a result, no assurances can be given with respect to the extent or outcome of any such litigation or disputes in the future.

The Company accrues for claims and contingencies when losses become probable and reasonably estimable. As of the end of each applicable reporting period, the Company reviews each of its matters and, where it is probable that a liability has been or will be incurred, it accrues for all probable and reasonably estimable losses. Where the Company can reasonably estimate a range of losses it may incur regarding such a matter, it records an accrual for the amount within the range that constitutes its best estimate. If the Company can reasonably estimate a range but no amount within the range appears to be a better estimate than any other, it uses the amount that is the low end of such range.

Business Combinations

All of the Company's business combinations are accounted for at fair value under the acquisition method of accounting. Under the acquisition method of accounting, (i) acquisition-related costs, except for those costs incurred to issue debt or equity securities, will be expensed in the period incurred; (ii) non-controlling interests will be valued at fair value at the acquisition date; (iii) in-process research and development will be recorded at fair value as an intangible asset at the acquisition date and amortized once the technology reaches technological feasibility; (iv) restructuring costs associated with a business combination will be expensed subsequent to the acquisition date; and (v) changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date will be recognized through income tax expense. The aggregate amount of consideration paid by the Company is allocated to net tangible assets and intangible assets based on their estimated fair values as of the acquisition date. The excess of the purchase price over the value of the net tangible assets and intangible assets is recorded to goodwill. The measurement of fair value of assets acquired and liabilities assumed requires significant judgment. The valuation of intangible assets, in particular, requires that the Company use valuation techniques such as the income approach. The income approach includes the use of a discounted cash flow model, which includes discounted cash flow scenarios and requires the following significant estimates: revenue, expenses, capital spending and other costs, and discount rates based on the respective risks of the cash flows.

Goodwill and Other Intangible Assets

The Company's intangible assets include goodwill and other intangible assets. Goodwill is recorded when the purchase price paid for an acquisition exceeds the estimated fair value of the net identified tangible and intangible assets acquired. Other intangible assets include existing technologies, core and developed technology, in-process research and development, trademarks and trade names, distribution rights and customer-related intangibles. In-process research and development is capitalized until such time the related projects are completed or abandoned at which time the capitalized amounts will begin to be amortized or written off. Indefinite-lived intangible assets consist of goodwill and in-process research and development intangible assets that have not yet been placed in service. All other intangible assets are definite-lived intangible assets, including in-process research and development assets that have been placed in service, and are amortized over their respective estimated lives, ranging from 1 to 15 years.

The Company is required to perform an impairment review of indefinite-lived intangible assets, including goodwill annually, and more frequently under certain circumstances. Indefinite-lived intangible assets are subjected to this annual

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impairment test during the fourth quarter of the Company's fiscal year. The Company engages primarily in the development, manufacture and sale of semiconductor products as well as technology licensing. As a result, the Company concluded there are two reporting units, semiconductor products and technology licensing. Under the qualitative indefinite-lived intangible asset impairment assessment standard, management evaluates whether it is more likely than not that the indefinite-lived intangible assets are impaired. If it is determined that it is more likely than not, the Company proceeds with the next step of the impairment test, which compares the fair value of the reporting unit or indefinite-lived intangible asset to its carrying value. If the Company determines through the impairment process that the indefinite-lived intangible asset has been impaired, the Company will record the impairment charge in its results of operation. Through March 31, 2019, the Company has not had impaired goodwill. In the event that facts and circumstances indicate definite-lived intangible assets may be impaired, the Company evaluates the recoverability and estimated useful lives of such assets. If such indicators are present, recoverability is evaluated based on whether the sum of the estimated undiscounted cash flows attributable to the asset (group) in question is less than their carrying value. If less, the Company measures the fair value of the asset (group) and recognizes an impairment loss if the carrying amount of the assets exceeds their respective fair values.

Impairment of Long-Lived Assets

The Company assesses whether indicators of impairment of long-lived assets are present. If such indicators are present, the Company determines whether the sum of the estimated undiscounted cash flows attributable to the assets in question is less than their carrying value. If less, the Company recognizes an impairment loss based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted future cash flows, appraisals or other methods. If the assets determined to be impaired are to be held and used, the Company recognizes an impairment loss through a charge to operating results to the extent the present value of anticipated net cash flows attributable to the asset are less than the asset's carrying value. The Company would depreciate the remaining value over the remaining estimated useful life of the asset.

Share-Based Compensation

The Company has equity incentive plans under which non-qualified stock options and restricted stock units (RSUs) have been granted to employees and non-employee members of the Board of Directors. The Company uses RSUs as its primary equity incentive compensation instrument for employees. The Company also has employee stock purchase plans for eligible employees. Share-based compensation cost is measured on the grant date based on the fair market value of the Company's common stock discounted for expected future dividends and is recognized as expense on a straight-line basis over the requisite service periods.

If there are any modifications or cancellations of the underlying unvested securities, the Company may be required to accelerate or increase any remaining unearned share-based compensation expense. Future share-based compensation expense and unearned share-based compensation will increase to the extent that the Company grants additional equity awards to employees or it assumes unvested equity awards in connection with acquisitions.

During fiscal 2017, the Company elected to early adopt ASU 2016-09-*Compensation - Stock Compensation, Improvements to Employee Share-Based Payment Accounting (Topic 718)*. See "Recently Adopted Accounting Pronouncements" for additional information on the new guidance.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of investments in debt securities and trade receivables. Investments in debt securities with original maturities of greater than six months consist primarily of AAA and AA rated financial instruments and counterparties. The Company's investments are primarily in direct obligations of the U.S. government or its agencies, corporate bonds, and municipal bonds.

Concentrations of credit risk with respect to accounts receivable are generally not significant due to the diversity of the Company's customers and geographic sales areas. The Company sells its products primarily to OEMs and distributors in the Americas, Europe and Asia. The Company performs ongoing credit evaluations of its customers' financial condition and, as deemed necessary, may require collateral, primarily letters of credit.

Distributor advances in the consolidated balance sheets, totaled \$170.7 million and \$203.9 million at March 31, 2019 and March 31, 2018, respectively. On sales to distributors, the Company's payment terms generally require the distributor to settle amounts owed to the Company for an amount in excess of their ultimate cost. The Company's sales price to its distributors may be higher than the amount that the distributors will ultimately owe the Company because distributors often negotiate price

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reductions after purchasing the products from the Company and such reductions are often significant. It is the Company's practice to apply these negotiated price discounts to future purchases, requiring the distributor to settle receivable balances, on a current basis, generally within 30 days, for amounts originally invoiced. This practice has an adverse impact on the working capital of the Company's distributors. As such, the Company has entered into agreements with certain distributors whereby it advances cash to the distributors to reduce the distributors' working capital requirements. These advances are reconciled at least on a quarterly basis and are estimated based on the amount of ending inventory as reported by the distributor multiplied by a negotiated percentage. Such advances have no impact on revenue recognition or the Company's consolidated statements of income. The Company processes discounts taken by distributors against its deferred income on shipments to distributors' balance and trues-up the advanced amounts generally after the end of each completed fiscal quarter. The terms of these advances are set forth in binding legal agreements and are unsecured, bear no interest on unsettled balances and are due upon demand. The agreements governing these advances can be canceled by the Company at any time.

Use of Estimates

The Company has made a number of estimates and assumptions relating to the reporting of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities to prepare its consolidated financial statements in conformity with U.S. Generally Accepted Accounting Principles. Actual results could differ from those estimates.

Business Segments

Operating segments are components of an enterprise about which separate financial information is regularly reviewed by the chief operating decision makers ("CODMs") to assess the performance of the component and make decisions about the resources to be allocated to the component. The Company's Chairman and Chief Executive Officer and the Company's President and Chief Operating Officer have been identified as the CODMs as they jointly manage the Company's worldwide consolidated enterprise. Based on the Company's structure and manner in which the Company is managed and decisions are made, the Company's business is made up of two operating segments, semiconductor products and technology licensing.

In the semiconductor products segment, the Company designs, develops, manufactures and markets microcontrollers, development tools and analog, interface, mixed-signal, timing, wired and wireless connectivity devices, and memory products. Under the leadership of the CODMs, the Company is structured and organized around standardized roles and responsibilities based on product groups and functional activities. The Company's product groups are responsible for product research, design and development. The Company's functional activities include sales, marketing, manufacturing, information technology, human resources, legal and finance.

The Company's product groups have similar products, production processes, types of customers and methods for distribution. In addition, the tools and technologies used in the design and manufacture of the Company's products are shared among the various product groups. The Company's product group leaders, under the direction of the CODMs, define the product roadmaps and team with sales personnel to achieve design wins and revenue and other performance targets. Product group leaders also interact with manufacturing and operational personnel who are responsible for the production, prioritization and planning of the Company's manufacturing capabilities to help ensure the efficiency of the Company's operations and fulfillment of customer requirements. This centralized structure supports a global operating strategy in which the CODMs assess performance and allocate resources based on the Company's consolidated results.

Recently Adopted Accounting Pronouncements

On April 1, 2018, the Company adopted ASU 2014-09-*Revenue from Contracts with Customers (ASC 606)* and all related amendments ("New Revenue Standard") using the modified retrospective method. The Company has applied the new revenue standard to all contracts that were entered into after adoption and to all contracts that were open as of the initial date of adoption. The Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The adoption of the new standard impacts the Company's net sales on an ongoing basis depending on the relative amount of revenue sold through its distributors, the change in inventory held by its distributors, and the changes in price concessions granted to its distributors. Previously, the Company deferred revenue and cost of sales on shipments to distributors until the distributor sold the product to their end customer. As required by the new revenue standard, the Company no longer defers revenue and cost of sales, but rather, estimates the effects of returns and allowances provided to distributors and records revenue at the time of sale to the distributor. Sales to non-distributor customers, under both the previous and new revenue standards, are generally recognized upon the Company's shipment of the product. The cumulative effect of the changes made to the consolidated April 1, 2018 balance sheet for the adoption of the new revenue standard is summarized in the table of opening balance sheet adjustments below. In accordance with the new revenue standard

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requirements, the disclosure of the impact of adoption on the consolidated income statement and balance sheet for the period ended March 31, 2019 was as follows (in millions):

Income Statement	For the year ended March 31, 2019		
	As reported	Balances without adoption of New Revenue Standard	Effect of Change Higher / (Lower)
Net sales	\$ 5,349.5	\$ 5,380.1	\$ (30.6)
Cost of sales	\$ 2,418.2	\$ 2,434.0	\$ (15.8)
Gross profit	\$ 2,931.3	\$ 2,946.1	\$ (14.8)
Income before income taxes	\$ 204.5	\$ 219.3	\$ (14.8)
Income tax (benefit) provision	\$ (151.4)	\$ (149.0)	\$ (2.4)
Net income from continuing operations	\$ 355.9	\$ 368.3	\$ (12.4)

Balance Sheet	As of March 31, 2019		
	As reported	Balances without adoption of New Revenue Standard	Effect of Change Higher / (Lower)
ASSETS			
Accounts receivable, net	\$ 880.6	\$ 556.1	\$ 324.5
Inventories	\$ 711.7	\$ 724.2	\$ (12.5)
Other current assets	\$ 191.6	\$ 154.7	\$ 36.9
Other assets	\$ 111.8	\$ 106.3	\$ 5.5
Long-term deferred tax assets	\$ 1,677.2	\$ 1,700.7	\$ (23.5)
LIABILITIES			
Accrued liabilities	\$ 787.3	\$ 420.3	\$ 367.0
Deferred income on shipments to distributors	\$ —	\$ 288.2	\$ (288.2)
Long-term deferred tax liability	\$ 706.1	\$ 689.3	\$ 16.8
STOCKHOLDERS' EQUITY			
Retained Earnings	\$ 3,210.6	\$ 2,975.3	\$ 235.3

The significant changes in the financial statements noted in the table above are primarily due to the transition from sell-through revenue recognition to sell-in revenue recognition as required by the New Revenue Standard, which eliminated the balance of deferred income on shipments to distributors, significantly reduced accounts receivable, and significantly increased retained earnings. Prior to the acquisition of Microsemi, Microsemi already recognized revenue on a sell-in basis, so the impact of the adoption of the New Revenue Standard was primarily driven by Microchip's historical business excluding Microsemi.

During the three months ended June 30, 2018, the Company adopted ASU 2016-01-*Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This standard requires available-for-sale equity investments to be measured at fair value with changes in fair value recognized in net income. The adoption of this standard did not have a material impact on the Company's financial statements.

During the three months ended June 30, 2018, the Company adopted ASU 2016-16-*Intra-Entity Transfers of Assets Other Than Inventory*. This standard addresses the recognition of current and deferred income taxes resulting from an intra-entity transfer of any asset other than inventory. This standard has been applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings. The adoption of this standard resulted in a cumulative-effect increase in the Company's deferred tax assets of approximately \$1.58 billion, a decrease to the Company's deferred tax

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liabilities of \$1.1 million, a decrease to other assets of \$24.1 million, and a decrease of \$1.7 million to other long-term liabilities.

During the three months ended June 30, 2018, the Company adopted ASU 2016-18-*Statement of Cash Flows: Restricted Cash*. This standard requires that the statement of cash flows explain the change during the period in total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The standard has been applied using a retrospective transition method to each period presented. The adoption of this standard did not have a material impact on the Company's financial statements.

The following table summarizes the opening balance sheet adjustments related to the adoption of the New Revenue Standard, ASU 2016-01-*Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, and ASU 2016-16-*Intra-Entity Transfers of Assets Other Than Inventory* (in millions):

	Balance as of March 31, 2018	Adjustments from			Balance as of April 1, 2018
		ASC 606	ASU 2016-01	ASU 2016-16	
ASSETS					
Accounts receivable, net	\$ 563.7	\$ 340.1	\$ —	\$ —	\$ 903.8
Inventories	\$ 476.2	\$ (5.1)	\$ —	\$ —	\$ 471.1
Other current assets	\$ 119.8	\$ 17.2	\$ —	\$ —	\$ 137.0
Long-term deferred tax assets	\$ 100.2	\$ (23.1)	\$ —	\$ 1,579.4	\$ 1,656.5
Other assets	\$ 71.8	\$ —	\$ —	\$ (24.1)	\$ 47.7
LIABILITIES					
Accrued liabilities	\$ 229.6	\$ 404.2	\$ —	\$ —	\$ 633.8
Deferred income on shipments to distributors	\$ 333.8	\$ (333.8)	\$ —	\$ —	\$ —
Long-term deferred tax liability	\$ 205.8	\$ 16.8	\$ —	\$ (1.1)	\$ 221.5
Other long-term liabilities	\$ 240.9	\$ —	\$ —	\$ (1.7)	\$ 239.2
STOCKHOLDERS' EQUITY					
Accumulated other comprehensive loss	\$ (17.6)	\$ —	\$ (1.7)	\$ —	\$ (19.3)
Retained earnings	\$ 1,397.3	\$ 241.9	\$ 1.7	\$ 1,558.1	\$ 3,199.0

Recently Issued Accounting Pronouncements Not Yet Adopted

In August 2017, the FASB issued ASU 2017-12-*Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*. The update expands an entity's ability to apply hedge accounting for nonfinancial and financial risk components and allows for a simplified approach for fair value hedging of interest rate risk. The update eliminates the need to separately measure and report hedge ineffectiveness and generally requires the entire change in fair value of a hedging instrument to be presented in the same income statement line as the hedged item. Additionally, the update simplifies the hedge documentation and effectiveness assessment requirements under the previous guidance. The effective date of this standard is for fiscal years beginning after December 15, 2018 and early adoption is permitted. Adoption will be applied through a cumulative-effect adjustment for cash flow and net investment hedges existing at the date of adoption and prospectively for presentation and disclosure. The Company is currently evaluating the impact the adoption of this standard will have on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04-*Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which simplifies the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The amendment is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2019, and early adoption is permitted. The Company does not expect this standard to have an impact on its consolidated financial statements.

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In June 2016, the FASB issued ASU 2016-13-*Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments*. This standard requires entities to use a current lifetime expected credit loss methodology to measure impairments of certain financial assets. Using this methodology will result in earlier recognition of losses than under the current incurred loss approach, which required waiting to recognize a loss until it is probable of having been incurred. The amendments in ASU 2016-13 broaden the information that an entity must consider in developing its expected credit loss estimate for assets measured either collectively or individually and can include forecasted information. There are other provisions within the standard affecting how impairments of other financial assets may be recorded and presented, as well as expanded disclosures. ASU 2016-13 is effective for interim and annual periods beginning after December 15, 2019, and permits early adoption, but not before December 15, 2018. The standard is to be applied using a modified retrospective approach. The Company is currently evaluating the impact the adoption of this standard will have on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02-*Leases*. This standard requires lessees to recognize a lease liability and a right-of-use asset on the balance sheet and aligns many of the underlying principles of the new lessor model with those in Accounting Standards Codification Topic 606, Revenue from Contracts with Customers. ASU 2016-02 is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2018, with early adoption permitted. The Company will adopt Topic 842 using the retrospective cumulative effect adjustment transition method and record a cumulative effect adjustment as of the adoption date. The Company currently plans to apply the package of practical expedients to leases that commenced before the effective date whereby the Company will elect to not reassess the following: (i) whether any expired or existing contracts contain leases; (ii) the lease classification for any expired or existing leases; and (iii) initial direct costs for any existing leases. The Company is continuing to assess the potential impacts of the new leasing standard. The Company expects the adoption of this standard will result in the inclusion of a significant component of the Company's future minimum lease commitments, as disclosed in Note 17 on its consolidated balance sheets, as right-of-use assets and lease liabilities with no material impact to its consolidated statements of income and comprehensive income.

Note 2. Business Acquisitions

Acquisition of Microsemi

On May 29, 2018, the Company completed its acquisition of Microsemi Corporation, a publicly traded company headquartered in Aliso Viejo, California. The Company paid an aggregate of approximately \$8.19 billion in cash to the stockholders of Microsemi. The total consideration transferred in the acquisition, including approximately \$53.9 million of non-cash consideration for the exchange of certain share-based payment awards of Microsemi for stock awards of the Company, was approximately \$8.24 billion. In addition to the consideration transferred, the Company recognized in its consolidated financial statements \$3.23 billion in liabilities of Microsemi consisting of debt, taxes payable and deferred, restructuring, and contingent and other liabilities of which \$2.06 billion of existing debt was paid off. The Company financed the purchase price using approximately \$8.10 billion of borrowings consisting of \$3.10 billion under its amended and restated revolving line of credit (the "Revolving Credit Facility"), \$3.00 billion of term loans ("Term Loan Facility") provided under the Company's amended and restated credit agreement (the "Credit Agreement"), and \$2.00 billion in newly issued senior secured notes. The Company incurred \$22.0 million in acquisition costs related to the acquisition. As a result of the acquisition, Microsemi became a wholly owned subsidiary of the Company. Microsemi offers a comprehensive portfolio of semiconductor and system solutions for aerospace and defense, communications, data center and industrial markets. The Company's primary reason for this acquisition was to expand the Company's range of solutions, products and capabilities by extending its served available market.

The acquisition was accounted for under the acquisition method of accounting, with the Company identified as the acquirer, and the operating results of Microsemi have been included in the Company's consolidated financial statements as of the closing date of the acquisition. Under the acquisition method of accounting, the aggregate amount of consideration paid by the Company was allocated to Microsemi's net tangible assets and intangible assets based on their estimated fair values as of May 29, 2018. The excess of the purchase price over the value of the net tangible assets and intangible assets was recorded to goodwill. The factors contributing to the recognition of goodwill were based upon the Company's conclusion that there are strategic and synergistic benefits that are expected to be realized from the acquisition. The goodwill has been allocated to the Company's semiconductor products reporting segment. None of the goodwill related to the Microsemi acquisition is deductible for tax purposes. The Company retained independent third-party appraisers to assist management in its valuation of the acquired assets and liabilities.

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The table below represents the allocation of the purchase price to the net assets acquired based on their estimated fair values, as well as the associated estimated useful lives of the acquired intangible assets (in millions).

	Previously reported December 31, 2018	Adjustments	March 31, 2019
<u>Assets acquired</u>			
Cash and cash equivalents	\$ 340.0	\$ —	\$ 340.0
Accounts receivable	216.1	(0.5)	215.6
Inventories	571.5	4.7	576.2
Other current assets	85.2	—	85.2
Property, plant and equipment	201.9	(0.4)	201.5
Goodwill	4,483.0	(118.1)	4,364.9
Purchased intangible assets	5,466.9	167.6	5,634.5
Long-term deferred tax assets	6.0	(0.1)	5.9
Other assets	57.2	(3.9)	53.3
Total assets acquired	11,427.8	49.3	11,477.1
<u>Liabilities assumed</u>			
Accounts payable	(233.8)	—	(233.8)
Other current liabilities	(169.4)	20.1	(149.3)
Long-term debt	(2,056.9)	—	(2,056.9)
Deferred tax liabilities	(604.7)	39.6	(565.1)
Long-term income tax payable	(87.2)	(90.5)	(177.7)
Other long-term liabilities	(31.3)	(18.5)	(49.8)
Total liabilities assumed	(3,183.3)	(49.3)	(3,232.6)
Purchase price allocated	\$ 8,244.5	\$ —	\$ 8,244.5

Purchased Intangible Assets

	Weighted Average Useful Life (in years)	May 29, 2018 (in millions)
Core and developed technology	15	\$ 4,569.1
In-process research and development	—	847.1
Customer-related	12	200.2
Backlog	1	12.3
Other	4	5.8
Total purchased intangible assets		\$ 5,634.5

Purchased intangible assets include core and developed technology, in-process research and development, customer-related intangibles, acquisition-date backlog and other intangible assets.

The estimated fair values of the core and developed technology and in-process research and development are being determined based on the present value of the expected cash flows to be generated by the respective existing technology or future technology. The core and developed technology intangible assets are being amortized in a manner based on the expected cash flows used in the initial determination of fair value.

In-process research and development is capitalized until such time as the related projects are completed or abandoned at which time the capitalized amounts will begin to be amortized or written off.

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Customer-related intangible assets consist of Microsemi's contractual relationships and customer loyalty related to its distributor and end-customer relationships. The fair values of the customer-related intangibles were determined using the distributor method, a form of the income approach based on distributor margin and expected attrition and revenue growth for Microsemi's existing customers as of the acquisition date. Customer relationships are being amortized in a manner based on the estimated cash flows associated with the existing customers and anticipated retention rates.

Backlog relates to the value of orders not yet shipped by Microsemi at the acquisition date, and the fair values are being determined based on the estimated profit associated with those orders. Backlog related assets have a one year useful life and are being amortized on a straight-line basis over that period.

The total weighted average amortization period of intangible assets acquired as a result of the Microsemi transaction is 13 years. Amortization expense associated with acquired intangible assets is not deductible for tax purposes. Thus, approximately \$856.7 million was established as a net deferred tax liability for the future amortization of the intangible assets.

The amount of Microsemi net sales and net loss included in the Company's consolidated statements of income for the fiscal year ended March 31, 2019 was approximately \$1,568.6 million and \$570.8 million, respectively.

The following unaudited pro-forma consolidated results of operations for the fiscal year ended March 31, 2019 and 2018 assume the closing of the Microsemi acquisition occurred as of April 1, 2017. The pro-forma adjustments are mainly comprised of acquired inventory fair value costs and amortization of purchased intangible assets. The pro-forma results of operations are presented for informational purposes only and are not indicative of the results of operations that would have been achieved if the acquisition had taken place on April 1, 2017 or of results that may occur in the future (in millions except per share data):

	Year Ended March 31,	
	2019	2018
Net sales	\$ 5,563.7	\$ 5,875.0
Net income (loss)	\$ 542.0	\$ (762.3)
Basic net income (loss) per common share	\$ 2.29	\$ (3.27)
Diluted net income (loss) per common share	\$ 2.17	\$ (3.27)

Acquisition of Atmel

On April 4, 2016, the Company acquired Atmel, a publicly traded company based in San Jose, California. The Company paid an aggregate of approximately \$2.98 billion in cash and issued an aggregate of 10.1 million shares of its common stock to Atmel stockholders valued at \$486.1 million based on the closing price of the Company's common stock on April 4, 2016 and incurred transaction and other fees of approximately \$14.9 million. The total consideration transferred in the acquisition, including approximately \$7.5 million of non-cash consideration for the exchange of certain share-based payment awards of Atmel for stock awards of the Company, was approximately \$3.47 billion. In addition to the consideration transferred, the Company recognized in its consolidated financial statements \$653.0 million in liabilities of Atmel consisting of debt, taxes payable and deferred, pension obligations, restructuring, and contingent and other liabilities. The Company financed the cash portion of the purchase price using approximately \$2.04 billion of cash held by certain of its foreign subsidiaries and approximately \$0.94 billion from additional borrowings under its existing credit agreement. As a result of the acquisition, Atmel became a wholly owned subsidiary of the Company. Atmel is a worldwide leader in the design and manufacture of microcontrollers, capacitive touch solutions, advanced logic, mixed-signal, nonvolatile memory and radio frequency components. The Company's primary reason for this acquisition was to expand the Company's range of solutions, products and capabilities by extending its served available market.

The acquisition was accounted for under the acquisition method of accounting, with the Company identified as the acquirer, and the operating results of Atmel have been included in the Company's consolidated financial statements as of the closing date of the acquisition. Under the acquisition method of accounting, the aggregate amount of consideration paid by the Company was allocated to Atmel's net tangible assets and intangible assets based on their estimated fair values as of April 4, 2016. The excess of the purchase price over the value of the net tangible assets and intangible assets was recorded to goodwill. The factors contributing to the recognition of goodwill were based upon the Company's conclusion that there are strategic and synergistic benefits that are expected to be realized from the acquisition. The goodwill has been allocated to the Company's

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semiconductor products reporting segment. None of the goodwill related to the Atmel acquisition is deductible for tax purposes. The Company retained independent third-party appraisers to assist management in its valuation.

The table below represents the allocation of the final purchase price to the net assets acquired based on their estimated fair values, as well as the associated estimated useful lives of the acquired intangible assets (amounts in millions).

Assets acquired

Cash and cash equivalents	\$ 230.2
Accounts receivable	141.4
Inventories	335.1
Prepaid expenses and other current assets	28.4
Assets held for sale	32.0
Property, plant and equipment	129.9
Goodwill	1,286.4
Purchased intangible assets	1,888.4
Long-term deferred tax assets	46.7
Other assets	7.5
Total assets acquired	4,126.0

Liabilities assumed

Accounts payable	(55.7)
Other current liabilities	(121.0)
Long-term line of credit	(192.0)
Deferred tax liabilities	(27.5)
Long-term income tax payable	(115.1)
Other long-term liabilities	(141.7)
Total liabilities assumed	(653.0)
Purchase price allocated	\$ 3,473.0

Purchased Intangible Assets

	Weighted Average Useful Life (in years)	April 4, 2016 (in millions)
Core and developed technology	11	\$ 1,075.0
In-process research and development	—	140.7
Customer-related	6	630.6
Backlog	1	40.3
Other	5	1.8
Total purchased intangible assets		\$ 1,888.4

Purchased intangible assets include core and developed technology, in-process research and development, customer-related intangibles, acquisition-date backlog and other intangible assets. The estimated fair values of the core and developed technology and in-process research and development were determined based on the present value of the expected cash flows to be generated by the respective existing technology or future technology. The core and developed technology intangible assets are being amortized in a manner based on the expected cash flows used in the initial determination of fair value. In-process research and development is capitalized until such time as the related projects are completed or abandoned at which time the capitalized amounts will begin to be amortized or written off. Customer-related intangible assets consist of Atmel's contractual relationships and customer loyalty related to its distributor and end-customer relationships, and the fair values of the customer-related intangibles were determined based on Atmel's projected revenues. An analysis of expected attrition and revenue growth for existing customers was prepared from Atmel's historical customer information. Customer relationships are being amortized in a manner based on the estimated cash flows associated with the existing customers and anticipated retention rates. Backlog relates to the value of orders not yet shipped by Atmel at the acquisition date, and the fair values were based on the estimated profit associated with those orders. Backlog related assets had a one year useful life and were being amortized on a straight-

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line basis over that period. The total weighted average amortization period of intangible assets acquired as a result of the Atmel transaction is 9 years. Amortization expense associated with acquired intangible assets is not deductible for tax purposes. Thus, approximately \$178.1 million was established as a net deferred tax liability for the future amortization of the intangible assets.

Note 3. Net Sales

The following table represents the Company's net sales by product line (in millions):

	Year Ended March 31, 2019
Microcontrollers	\$ 2,921.9
Analog, interface, mixed signal and timing products	1,530.7
Field-programmable gate array products	303.8
Memory products	184.0
Technology licensing	132.4
Multi-market and other	276.7
Total net sales	<u>\$ 5,349.5</u>

All of the product lines listed above are included in the Company's Semiconductor Product segment with the exception of Technology Licensing, which belongs to the Technology Licensing segment.

The following table represents the Company's net sales by contract type (in millions).

	Year Ended March 31, 2019
Distributors	\$ 2,719.1
Direct customers	2,498.0
Licensees	132.4
Total net sales	<u>\$ 5,349.5</u>

Distributors are customers that buy products with the intention of reselling them. Distributors generally have a distributor agreement with the Company to govern the terms of the relationship. Direct customers are non-distributor customers, which generally do not have a master sales agreement with the Company. The Company's direct customers primarily consist of original equipment manufacturers (OEMs) and, to a lesser extent, contract manufacturers. Licensees are customers of the Company's Technology Licensing segment, which include purchasers of intellectual property and customers that have licensing agreements to use the Company's SuperFlash® embedded flash and Smartbits® one time programmable NVM technologies. All of the contract types listed in the table above are included in the Company's Semiconductor Product segment with the exception of Licensees, which belong to the Technology Licensing segment.

Substantially all of the Company's net sales are recognized from contracts with customers, and therefore, subject to the new revenue recognition standard.

Semiconductor Product Segment

For contracts related to the purchase of semiconductor products, the Company satisfies its performance obligation when control of the ordered product transfers to the customer. The timing of the transfer of control depends on the agreed upon shipping terms with the customer, but generally occurs upon shipment, which is when physical possession of the product has been transferred and legal title of the product transfers to the customer. Payment is generally due within 30 days of the ship date. Payment is generally collected after the Company satisfies its performance obligation, therefore contract liabilities are uncommon. Also, the Company usually does not record contract assets because the Company has an unconditional right to payment upon satisfaction of the performance obligation, and therefore, a receivable is more commonly recorded than a

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contract asset. Refer to Note 8 for the opening and closing balances of the Company's receivables. As contracts with customers generally have an expected duration of one year or less, the balance of open performance obligations as of period end that will be recognized as revenue subsequent to March 31, 2020 is immaterial.

Generally, there is only a single performance obligation in the Company's contracts with customers for semiconductor products; as such, the entire transaction price is allocated to the single performance obligation and allocation of the transaction price to individual performance obligations is not necessary. The consideration received from customers is fixed, with the exception of consideration from certain distributors. Certain of the Company's distributors are granted price concessions and return rights, which result in variable consideration. The amount of revenue recognized for sales to these certain distributors is adjusted for estimates of the price concessions and return rights that are expected to be claimed. These estimates are based on the recent history of price concessions and stock rotations.

Technology Licensing Segment

The technology licensing segment includes sales and licensing of the Company's intellectual property. For contracts related to the sale of the Company's intellectual property, the Company satisfies its performance obligation and recognizes revenue when control of the intellectual property transfers to the customer. For contracts related to the licensing of the Company's technology, the Company satisfies its performance obligation and recognizes revenue as usage of the license occurs. The transaction price is fixed by the license agreement. Payment is collected after the Company satisfies its performance obligation, and therefore no contract liabilities are recorded. The Company does not record contract assets due to the fact that the Company has an unconditional right to payment upon satisfaction of the performance obligation, and therefore, the Company recognizes a receivable instead of a contract asset. Refer to Note 8 for the opening and closing balances of the Company's receivables.

Note 4. Special Charges and Other, Net

The following table summarizes activity included in the "special charges and other, net" caption on the Company's consolidated statements of income (in millions):

	For The Years Ended March 31,		
	2019	2018	2017
Restructuring			
Employee separation costs	\$ 65.3	\$ 1.2	\$ 39.1
Gain on sale of assets	—	(4.4)	—
Impairment charges	3.6	—	12.6
Contract exit costs	(4.7)	0.7	44.1
Other	(0.3)	—	2.8
Legal contingencies	(30.2)	—	—
Non-restructuring contract exit costs and other	—	20.0	—
Total	<u>\$ 33.7</u>	<u>\$ 17.5</u>	<u>\$ 98.6</u>

The Company continuously evaluates its existing operations in an attempt to identify and realize cost savings opportunities and operational efficiencies. This same approach is applied to businesses that are acquired by the Company and often the operating models of acquired companies are not as efficient as the Company's operating model which enables the Company to realize significant savings and efficiencies. As a result, following an acquisition, the Company will from time to time incur restructuring expenses; however, the Company is often not able to estimate the timing or amount of such costs in advance of the period in which they occur. The primary reason for this is that the Company regularly reviews and evaluates each position, contract and expense against the Company's strategic objectives, long-term operating targets and other operational priorities. Decisions related to restructuring activities are made on a "rolling basis" during the course of the integration of an acquisition whereby department managers, executives and other leaders work together to evaluate each of these expenses and make recommendations. As a result of this approach, at the time of an acquisition, the Company is not able to estimate the future amount of expected employee separation or exit costs that it will incur in connection with its restructuring activities.

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The Company's restructuring expenses during the fiscal year ended March 31, 2019 were related to the Company's most recent business acquisitions, and resulted from workforce, property and other operating expense rationalizations as well as combining product roadmaps and manufacturing operations. These expenses were for employee separation costs and intangible asset impairment charges. The impairment charges in the fiscal year ended March 31, 2019 were primarily recognized as a result of writing off intangible assets purchased from Microsemi prior to the close of the acquisition and other intangible assets that were impaired as a result of changes in the combined product roadmaps after the acquisition that affected the use and life of the assets. Additional costs will be incurred in the future as additional synergies or operational efficiencies are identified in connection with the Microsemi transaction and other previous acquisitions. The Company is not able to estimate the amount of such future expenses at this time.

During fiscal 2018, the Company incurred expenses including non-restructuring contract exit costs of \$19.5 million for fees associated with transitioning from the public utility provider in Oregon to a lower cost direct access provider. The fee is paid monthly and will depend on the amount of actual energy consumed by the Company's wafer fabrication facility in Oregon over the next five years. In connection with the transition to a direct access provider, the Company signed a ten-year supply agreement to purchase monthly amounts of energy that are less than the current average usage and priced on a per mega watt hour published index rate in effect at those future dates. Also during fiscal 2018, the Company incurred \$1.2 million of employee separation costs in connection with the acquisition of Atmel.

The Company's restructuring expenses during fiscal 2017 were related to the Company's acquisitions of Atmel and Micrel, and resulted from workforce, property and other operating expense rationalizations as well as combining product roadmaps and manufacturing operations. These expenses were for employee separation costs, contract exit costs, other operating expenses and intangible asset impairment losses. The impairment charges in fiscal 2017 were recognized as a result of changes in the combined product roadmaps after the acquisition of Atmel that affected the use and life of these assets. At March 31, 2017, these activities were substantially complete.

All of the Company's restructuring activities occurred in its semiconductor products segment. The Company incurred \$115.2 million in costs since the start of fiscal 2016 in connection with employee separation activities, of which \$65.3 million, \$1.2 million and \$39.1 million was incurred during the fiscal years ended March 31, 2019, 2018 and 2017, respectively. The Company could incur future expenses as additional synergies or operational efficiencies are identified. The Company is not able to estimate future expenses, if any, to be incurred in employee separation costs. The Company has incurred \$40.8 million in costs in connection with contract exit activities since the start of fiscal 2016 which includes \$4.7 million of income incurred for the year ended March 31, 2019 and \$0.7 million and \$44.1 million of costs incurred for the years ended March 31, 2018 and 2017, respectively. The amounts recognized during the fiscal year ended March 31, 2019 were primarily related to vacated lease liabilities. While the Company expects to incur further acquisition-related contract exit expenses, it is not able to estimate the amount at this time.

In the three months ended June 30, 2017, the Company completed the sale of an asset it acquired as part of its acquisition of Micrel for proceeds of \$10.0 million and the gain of \$4.4 million is included in the gain on sale of assets in the above table.

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The following is a roll forward of accrued restructuring charges for fiscal 2019 and fiscal 2018 (in millions):

	Restructuring		Non- Restructuring		Total
	Employee Separation Costs	Exit Costs	Exit Costs		
Balance at March 31, 2017	\$ 5.4	\$ 34.8	\$ —	\$ 40.2	
Charges	1.2	0.7	20.0	21.9	
Payments	(5.9)	(9.2)	(0.9)	(16.0)	
Non-cash - Other	(0.2)	1.0	—	0.8	
Changes in foreign exchange rates	0.3	—	—	0.3	
Balance at March 31, 2018	0.8	27.3	19.1	47.2	
Additions due to Microsemi acquisition	10.4	9.0	—	19.4	
Charges	48.9	(4.7)	—	44.2	
Payments	(47.1)	(13.1)	(4.1)	(64.3)	
Non-cash - Other	—	0.7	0.7	1.4	
Changes in foreign exchange rates	(0.1)	—	—	(0.1)	
Balance at March 31, 2019	\$ 12.9	\$ 19.2	\$ 15.7	\$ 47.8	
Current				\$ 26.9	
Non-current				20.9	
Total				\$ 47.8	

The liability for restructuring and other exit costs of \$47.8 million is included in accrued liabilities and other long-term liabilities, on the Company's consolidated balance sheets as of March 31, 2019.

Note 5. Investments

The Company's investments are intended to establish a high-quality portfolio that preserves principal, meets liquidity needs, avoids inappropriate concentrations, and delivers an appropriate yield in relationship to the Company's investment guidelines and market conditions.

At March 31, 2019, the company had short-term investments of \$2.3 million consisting of marketable equity securities.

At March 31, 2018, short-term investments of \$1.30 billion included available-for-sale debt securities of \$1.29 billion and marketable equity securities of \$2.8 million. The following is a summary of available-for-sale debt securities at March 31, 2018 (in millions):

	Available-for-sale Debt Securities			
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale debt securities:				
Government agency bonds	\$ 723.2	\$ —	\$ —	\$ 723.2
Municipal bonds - taxable	14.9	—	—	14.9
Time deposits	11.5	—	—	11.5
Corporate bonds and debt	542.9	—	—	542.9
Total	\$ 1,292.5	\$ —	\$ —	\$ 1,292.5

The Company sold available-for-sale debt securities for proceeds of \$1.38 billion during the year ended March 31, 2019 to help finance its acquisition of Microsemi. There were no sales of available-for-sale debt securities during the year ended March 31, 2018. The Company sold available-for-sale debt securities for proceeds of \$470.2 million during the year ended March 31, 2017. The Company recognized losses of \$5.6 million on available-for-sale debt securities during the year ended

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March 31, 2019. The Company had no material net realized gains from sales of available-for-sale debt securities during fiscal years ended March 31, 2018 and March 31, 2017. During the year ended March 31, 2018, the Company recognized an impairment of \$15.5 million on available-for-sale debt securities based on its evaluation of available evidence and the Company's intent to sell these investments which were subsequently sold in the first quarter of fiscal 2019. The Company determines the cost of available-for-sale debt securities sold on a first-in first-out (FIFO) basis at the individual security level for sales from multiple lots. For sales of marketable equity securities, the Company uses an average cost basis at the individual security level. Gains and losses recognized in earnings are credited or charged to other (loss) income, net on the consolidated statements of income.

As of March 31, 2019 and 2018, the Company had no available-for-sale debt securities in an unrealized loss position.

The Company did not have any available-for-sale debt securities at March 31, 2019. The amortized cost and estimated fair value of the available-for-sale debt securities at March 31, 2018, by maturity are shown below (in millions). Expected maturities can differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties, and the Company views its available-for-sale debt securities as available for current operations.

	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale				
Due in one year or less	\$ 246.5	\$ —	\$ —	\$ 246.5
Due after one year and through five years	1,046.0	—	—	1,046.0
Due after five years and through ten years	—	—	—	—
Due after ten years	—	—	—	—
Total	<u>\$ 1,292.5</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,292.5</u>

Note 6. Fair Value Measurements

Accounting rules for fair value clarify that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the Company utilizes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1- Observable inputs such as quoted prices in active markets;
- Level 2- Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3- Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Marketable Debt Instruments

Marketable debt instruments include instruments such as corporate bonds and debt, government agency bonds, bank deposits, municipal bonds, and money market mutual funds. When the Company uses observable market prices for identical securities that are traded in less active markets, the Company classifies its marketable debt instruments as Level 2. When observable market prices for identical securities are not available, the Company prices its marketable debt instruments using non-binding market consensus prices that are corroborated with observable market data; quoted market prices for similar instruments; or pricing models, such as a discounted cash flow model, with all significant inputs derived from or corroborated with observable market data. Non-binding market consensus prices are based on the proprietary valuation models of pricing providers or brokers. These valuation models incorporate a number of inputs, including non-binding and binding broker quotes; observable market prices for identical or similar securities; and the internal assumptions of pricing providers or brokers that use observable market inputs and, to a lesser degree, unobservable market inputs. The Company corroborates non-binding market consensus prices with observable market data using statistical models when observable market data exists. The discounted cash flow model uses observable market inputs, such as LIBOR-based yield curves, currency spot and forward rates, and credit ratings.

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Assets Measured at Fair Value on a Recurring Basis

Assets measured at fair value on a recurring basis at March 31, 2019 are as follows (amounts in millions):

	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Total Balance
Assets			
Cash and cash equivalents:			
Money market mutual funds	\$ 8.3	\$ —	\$ 8.3
Deposit accounts	—	420.3	420.3
Short-term investments:			
Marketable equity securities	2.3	—	2.3
Total assets measured at fair value	\$ 10.6	\$ 420.3	\$ 430.9

Assets measured at fair value on a recurring basis at March 31, 2018 are as follows (amounts in millions):

	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Total Balance
Assets			
Cash and cash equivalents:			
Money market mutual funds	\$ 121.0	\$ —	\$ 121.0
Deposit accounts	—	641.6	641.6
Commercial Paper	—	118.7	118.7
Government agency bonds	—	20.0	20.0
Short-term investments:			
Marketable equity securities	2.8	—	2.8
Corporate bonds and debt	—	542.9	542.9
Time deposits	—	11.5	11.5
Government agency bonds	—	723.2	723.2
Municipal bonds - taxable	—	14.9	14.9
Total assets measured at fair value	\$ 123.8	\$ 2,072.8	\$ 2,196.6

There were no transfers between Level 1 or Level 2 during fiscal 2019 or fiscal 2018. There were no assets measured on a recurring basis during fiscal 2019 or fiscal 2018 using significant unobservable inputs (Level 3).

Assets and Liabilities Measured and Recorded at Fair Value on a Non-Recurring Basis

The Company's non-marketable equity, cost method investments, certain acquired liabilities and non-financial assets, such as intangible assets, assets held for sale and property, plant and equipment, are recorded at fair value on a non-recurring basis. These assets are subject to fair value adjustments in certain circumstances, for example, when there is evidence of impairment.

The Company's non-marketable and cost method investments are monitored on a quarterly basis for impairment charges. The fair values of these investments have been determined as Level 3 fair value measurements because the valuations use unobservable inputs that require management's judgment due to the absence of quoted market prices. There were no impairment charges recognized on these investments during the years ended March 31, 2019, 2018 and 2017. These investments are included in other assets on the consolidated balance sheets.

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The fair value measurements related to the Company's non-financial assets, such as intangible assets, assets held for sale and property, plant and equipment are based on available market prices at the measurement date based on transactions of similar assets and third-party independent appraisals, less costs to sell where appropriate. The Company classifies these measurements as Level 2.

Note 7. Fair Value of Financial Instruments

The carrying amount of cash equivalents approximates fair value because their maturity is less than three months. Management believes the carrying amount of the equity and cost-method investments materially approximated fair value at March 31, 2019 based upon unobservable inputs. The fair values of these investments have been determined as Level 3 fair value measurements. The fair values of the Company's line of credit borrowings are estimated using discounted cash flow analyses, based on the Company's current incremental borrowing rates for similar types of borrowing arrangements and approximate carrying value excluding debt issuance costs. Based on the borrowing rates currently available to the Company for bank loans with similar terms and average maturities, the fair value of the Company's line of credit borrowings at March 31, 2019 approximated the carrying value and are considered Level 2 in the fair value hierarchy described in Note 6. The carrying amount of accounts receivable, accounts payable and accrued liabilities approximates fair value due to the short-term maturity of the amounts and are considered Level 2 in the fair value hierarchy.

Fair Value of Subordinated Convertible Debt, Senior Secured Notes, and Term Loan Facility

The Company measures the fair value of its senior and junior subordinated convertible debt and senior secured notes for disclosure purposes. These fair values are based on observable market prices for this debt, which is traded in less active markets and are therefore classified as a Level 2 fair value measurement.

The following table shows the carrying amounts and fair values of the Company's senior and junior subordinated convertible debt, senior secured notes, and term loan facility as of March 31, 2019 and 2018 (in millions).

	March 31,			
	2019		2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
2023 Senior Secured Notes	\$ 985.4	\$ 1,020.1	N/A	N/A
2021 Senior Secured Notes	\$ 987.4	\$ 1,008.1	N/A	N/A
Term Loan Facility	\$ 1,892.1	\$ 1,911.5	N/A	N/A
2017 Senior Convertible Debt	\$ 1,493.6	\$ 2,285.4	\$ 1,437.6	\$ 2,459.2
2015 Senior Convertible Debt	\$ 1,360.8	\$ 2,810.6	\$ 1,309.9	\$ 3,079.1
2017 Junior Convertible Debt	\$ 335.9	\$ 740.8	\$ 326.7	\$ 876.9

⁽¹⁾ The carrying amounts presented are net of debt discounts and debt issuance costs (see Note 12 Debt and Credit Facility for further information).

Note 8. Other Financial Statement Details

Accounts Receivable

Accounts receivable consists of the following (in millions):

	March 31,	
	2019	2018
Trade accounts receivable	\$ 875.8	\$ 557.8
Other	6.8	8.1
Total accounts receivable, gross	882.6	565.9
Less allowance for doubtful accounts	2.0	2.2
Total accounts receivable, net	\$ 880.6	\$ 563.7

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Inventories

The components of inventories consist of the following (in millions):

	March 31,	
	2019	2018
Raw materials	\$ 74.5	\$ 26.0
Work in process	413.0	311.8
Finished goods	224.2	138.4
Total inventories	<u>\$ 711.7</u>	<u>\$ 476.2</u>

Inventories are valued at the lower of cost and net realizable value using the first-in, first-out method. Inventory impairment charges establish a new cost basis for inventory and charges are not subsequently reversed to income even if circumstances later suggest that increased carrying amounts are recoverable.

Property, Plant and Equipment

Property, plant and equipment consists of the following (in millions):

	March 31,	
	2019	2018
Land	\$ 83.4	\$ 73.4
Building and building improvements	647.6	508.5
Machinery and equipment	2,095.5	1,943.9
Projects in process	119.2	118.3
Total property, plant and equipment, gross	2,945.7	2,644.1
Less accumulated depreciation and amortization	1,949.0	1,876.2
Total property, plant and equipment, net	<u>\$ 996.7</u>	<u>\$ 767.9</u>

Depreciation expense attributed to property, plant and equipment was \$180.6 million, \$123.7 million and \$122.9 million for the fiscal years ending March 31, 2019, 2018 and 2017, respectively.

Accrued Liabilities

Accrued liabilities consists of the following (in millions):

	March 31,	
	2019	2018
Accrued compensation and benefits	\$ 133.2	\$ 87.6
Income taxes payable	46.9	27.5
Sales related reserves	366.9	—
Accrued expenses and other liabilities	240.3	114.5
Total accrued liabilities	<u>\$ 787.3</u>	<u>\$ 229.6</u>

Sales related reserves represent price concessions and stock rotation rights that the Company offers to many of its distributors. For the fiscal year ending March 31, 2018, these sales related reserves were recorded within accounts receivable, and therefore did not exist within accrued liabilities. The Company made this change in classification as part of its adoption of ASC 606. For additional information regarding the Company's adoption of ASC 606, refer to Note 1 of the consolidated financial statements.

Note 9. Discontinued Operations

Discontinued operations include the mobile touch operations that the Company acquired as part of its acquisition of Atmel. The mobile touch assets had been marketed for sale since the Company's acquisition of Atmel on April 4, 2016 based on management's decision that it was not a strategic fit for the Company's product portfolio. On November 10, 2016, the Company completed the sale of the mobile touch assets to Solomon Systech (Limited) International, a Hong Kong based semiconductor company. The transaction included the sale of certain semiconductor products, equipment, customer list, backlog, patents, and a license to certain other intellectual property and patents related to the Company's mobile touch product line. The Company also agreed to provide certain transition services to Solomon Systech, which were substantially complete as of March 31, 2017. For financial statement purposes, the results of operations for this discontinued business have been segregated from those of the continuing operations and are presented in the Company's consolidated financial statements as discontinued operations.

As the Company completed the sale of the mobile touch assets on November 10, 2016, there are no discontinued operations in the years ended March 31, 2019 or 2018. The results of discontinued operations for the year ended March 31, 2017 are as follows (in millions):

	March 31, 2017	
Net sales	\$	18.3
Cost of sales		15.8
Operating expenses		10.7
Gain on Sale		0.6
Income tax benefit		(1.6)
Net loss from discontinued operations	\$	(6.0)

Note 10. Intangible Assets and Goodwill

Intangible assets consist of the following (in millions):

	March 31, 2019		
	Gross Amount	Accumulated Amortization	Net Amount
Core and developed technology	\$ 7,413.0	\$ (1,112.9)	\$ 6,300.1
Customer-related	917.1	(544.0)	373.1
In-process research and development	7.7	—	7.7
Distribution rights	0.3	(0.2)	0.1
Other	7.3	(2.7)	4.6
Total	\$ 8,345.4	\$ (1,659.8)	\$ 6,685.6

	March 31, 2018		
	Gross Amount	Accumulated Amortization	Net Amount
Core and developed technology	\$ 1,952.3	\$ (644.4)	\$ 1,307.9
Customer-related	716.9	(375.9)	341.0
In-process research and development	12.1	—	12.1
Distribution rights	0.3	(0.1)	0.2
Other	1.5	(0.7)	0.8
Total	\$ 2,683.1	\$ (1,021.1)	\$ 1,662.0

The Company amortizes intangible assets over their expected useful lives, which range between 1 and 15 years. During the year ended March 31, 2019, due to the acquisition of Microsemi, the Company acquired \$4.57 billion of core and developed technology which has a weighted average amortization period of 15 years, \$200.2 million of customer-related intangible assets which have a weighted average amortization period of 12 years, \$12.3 million of intangible assets related to

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backlog with an amortization period of 1 year, \$5.8 million of other intangible assets which have a weighted average amortization period of 4 years, and \$847.1 million of in-process technology. In fiscal 2019, \$851.5 million of in-process research and development intangible assets, primarily consisting of intangible assets acquired in the acquisition of Microsemi, reached technological feasibility and was reclassified as core and developed technology and began being amortized over the respective estimated useful lives. The following is an expected amortization schedule for the intangible assets for fiscal 2020 through fiscal 2024, absent any future acquisitions or impairment charges (in millions):

Fiscal Year Ending March 31,	Projected Amortization Expense
2020	\$1,005.8
2021	\$944.1
2022	\$873.1
2023	\$680.0
2024	\$608.3

Amortization expense attributed to intangible assets was \$695.8 million, \$492.2 million and \$346.3 million for fiscal years 2019, 2018 and 2017, respectively. In fiscal 2019, \$9.6 million was charged to cost of sales and \$686.2 million was charged to operating expenses. In fiscal 2018, \$6.1 million was charged to cost of sales and \$486.1 million was charged to operating expenses. In fiscal 2017, \$4.0 million was charged to cost of sales and \$342.3 million was charged to operating expenses. The Company recognized impairment charges of \$3.1 million, \$0.5 million and \$11.9 million in fiscal 2019, 2018 and fiscal 2017, respectively. The impairment charges of \$3.1 million in fiscal 2019 were recognized as a result of writing off intangible assets purchased from Microsemi prior to the close of the acquisition and as a result of the changes in the combined product roadmaps after the acquisition of Microsemi that affected the use and life of these assets. The impairment charges of \$11.9 million in fiscal 2017 were recognized primarily as a result of the acquisition of Atmel and as a result of changes in the combined product roadmaps after the acquisition of Atmel that affected the use and life of these assets.

Goodwill activity for fiscal 2019 and fiscal 2018 was as follows (in millions):

	Semiconductor Products Reporting Unit	Technology Licensing Reporting Unit
Balance at March 31, 2017 and 2018	\$ 2,279.8	\$ 19.2
Additions due to the acquisition of Microsemi	4,364.9	—
Balance at March 31, 2019	\$ 6,644.7	\$ 19.2

At March 31, 2019, the Company applied a qualitative goodwill impairment test to its two reporting units, concluding it was not more likely than not that goodwill was impaired. Through March 31, 2019, the Company has never recorded an impairment charge against its goodwill balance.

Note 11. Income Taxes

The income tax provision consists of the following (amounts in millions):

	Year Ended March 31,		
	2019	2018	2017
Pretax (loss) income:			
U.S.	\$ (593.4)	\$ (127.3)	\$ (279.3)
Foreign	797.9	864.6	369.1
	<u>\$ 204.5</u>	<u>\$ 737.3</u>	<u>\$ 89.8</u>
Current (benefit) expense:			
U.S. Federal	\$ (98.0)	\$ 369.4	\$ 21.3
State	(5.3)	0.5	1.0
Foreign	14.1	60.8	23.8
Total current (benefit) expense	<u>\$ (89.2)</u>	<u>\$ 430.7</u>	<u>\$ 46.1</u>
Deferred expense (benefit):			
U.S. Federal	\$ 11.9	\$ 82.5	\$ (114.7)
State	0.6	0.1	(5.4)
Foreign	(74.7)	(31.4)	(6.8)
Total deferred (benefit) expense	<u>(62.2)</u>	<u>51.2</u>	<u>(126.9)</u>
Total Income tax (benefit) provision	<u>\$ (151.4)</u>	<u>\$ 481.9</u>	<u>\$ (80.8)</u>

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was enacted into law. The Act provides for numerous significant tax law changes and modifications including the reduction of the U.S. federal corporate income tax rate from 35.0% to 21.0%, the requirement for companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and the creation of new taxes on certain foreign-sourced earnings.

Accounting Standards Codification ("ASC") 740, Income Taxes, requires companies to recognize the effect of the tax law changes in the period of enactment. However, the SEC staff issued Staff Accounting Bulletin ("SAB") 118, which allowed companies to record provisional amounts during a measurement period that is similar to the measurement period used when accounting for business combinations. The Company recorded a reasonable estimate when measurable and with the understanding that the provisional amount was subject to further adjustments under SAB 118. In addition, for significant items for which the Company could not make a reasonable estimate, no provisional amounts were recorded. As of December 31, 2018, the Company completed its review of the previously recorded provisional amounts related to the Act, recorded necessary adjustments, and the amounts are now final under SAB 118.

As of March 31, 2018, the Company remeasured certain deferred tax assets and liabilities based on the rates at which they were expected to reverse in the future (which was generally 21%), by recording a provisional income tax benefit of \$136.7 million. Upon further analysis of certain aspects of the Act and refinement of its calculations during the period ended December 31, 2018, the Company did not make adjustments to the provisional amount.

The one-time transition tax is based on the Company's total post-1986 earnings and profits (E&P), the tax on which the Company previously deferred from U.S. income taxes under U.S. law. The Company recorded a provisional amount for its one-time transition tax expense for each of its foreign subsidiaries, resulting in a transition tax expense of \$644.7 million at March 31, 2018. Upon further analyses of the Act and notices and regulations issued and proposed by the U.S. Department of the Treasury and the Internal Revenue Service, the Company finalized its calculations of the transition tax expense during the period ended December 31, 2018. The Company increased its March 31, 2018 provisional amount by \$13.1 million to \$657.8 million, which is included as a component of income tax expense from continuing operations. The measurement period adjustment of \$13.1 million decreased basic and diluted net income per common share by \$0.06 and \$0.05, respectively, for the year ended March 31, 2019.

The Company intends to invest substantially all of its foreign subsidiary earnings, as well as its capital in its foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which the Company would incur significant, additional costs upon repatriation of such amounts. It is not practical to estimate the additional tax that would be incurred, if any, if the permanently reinvested earnings were repatriated.

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As of March 31, 2018, the Company removed its valuations allowance on certain foreign tax credits and recorded a provisional income tax benefit of \$36.4 million. Upon further analysis of the Act, the Company did not make adjustments to the provisional amount.

The Act subjects a U.S. shareholder to tax on Global Intangible Low-Taxed Income (GILTI) earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, *Accounting for Global Intangible Low-Taxed Income*, states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. The Company has elected to account for GILTI in the year the tax is incurred.

The provision for income taxes differs from the amount computed by applying the statutory federal tax rate to income before income taxes. The sources and tax effects of the differences in the total income tax provision are as follows (amounts in millions):

	Year Ended March 31,		
	2019	2018	2017
Computed expected income tax provision	\$ 43.0	\$ 232.6	\$ 31.4
State income taxes, net of federal benefit	(8.7)	(1.3)	(4.6)
Foreign income taxed at lower than the federal rate	(94.0)	(208.8)	(105.0)
Impact of the Act - one-time transition tax, net of foreign tax credits	13.1	653.7	—
Impact of the Act - deferred tax effects, net of valuation allowance	—	(136.7)	—
Global intangible low-taxed income	95.4	—	—
Business realignment	(90.6)	—	—
Increases related to current year tax positions	9.0	32.0	53.7
Decreases related to prior year tax positions ⁽¹⁾	(75.1)	(11.3)	(36.3)
Share-based compensation	(13.3)	(27.2)	(25.0)
Research and development tax credits	(27.5)	(17.0)	(12.8)
Intercompany prepaid tax asset amortization	5.2	7.4	7.9
Foreign exchange	4.6	(20.5)	(1.7)
Other	(2.6)	(0.5)	9.8
Change in valuation allowance	(9.9)	(20.5)	1.8
Total income tax provision (benefit)	\$ (151.4)	\$ 481.9	\$ (80.8)

⁽¹⁾ The release of prior year tax positions during fiscal 2019 increased the basic and diluted net income per common share by \$0.32 and \$0.30, respectively. The release of prior year tax positions during fiscal 2018 increased the basic and diluted net income per common share by \$0.05. The release of prior year tax positions during fiscal 2017 increased the basic and diluted net income per common share by \$0.17 and \$0.15, respectively.

The foreign tax rate differential benefit primarily relates to the Company's operations in Thailand, Malta and Ireland. The Company's Thailand manufacturing operations are currently subject to numerous tax holidays granted to the Company based on its investment in property, plant and equipment in Thailand. The Company's tax holiday periods in Thailand expire between fiscal 2022 and 2026, however, the Company actively seeks to obtain new tax holidays. The Company does not expect the future expiration of any of its tax holiday periods in Thailand to have a material impact on its effective tax rate. The Company's Microsemi operations in Malaysia are subject to a tax holiday that effectively reduces the income tax rate in that jurisdiction. Microsemi's tax holiday in Malaysia was granted in 2009 and is effective through December 2019, subject to continued compliance with the tax holiday's requirements. The aggregate dollar expense derived from these tax holidays approximated \$0.1 million in fiscal 2019. The aggregate dollar benefit derived from these tax holidays approximated \$6.2 million and \$13.2 million in fiscal 2018 and 2017, respectively. The impact of the tax holidays during fiscal 2019 did not impact basic and diluted net income per common share. The impact of the tax holidays during fiscal 2018 increased the basic and diluted net income per common share by \$0.03 and \$0.02, respectively. The impact of the tax holidays during fiscal 2017 increased the basic and diluted net income per common share by \$0.06.

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The tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets and deferred tax liabilities are as follows (amounts in millions):

	March 31,	
	2019	2018
Deferred tax assets:		
Deferred income on shipments to distributors	\$ —	\$ 39.1
Inventory valuation	45.0	10.7
Net operating loss carryforward	94.3	101.1
Capital loss carryforward	9.6	10.6
Share-based compensation	42.4	31.4
Income tax credits	376.5	178.4
Property, plant and equipment	23.6	25.7
Accrued expenses and other	91.4	91.2
Intangible assets	1,608.1	—
Other	12.6	—
Gross deferred tax assets	2,303.5	488.2
Valuation allowances	(332.1)	(204.5)
Deferred tax assets, net of valuation allowances	1,971.4	283.7
Deferred tax liabilities:		
Convertible debt	(279.3)	(304.4)
Intangible assets	(721.0)	(66.6)
Other	—	(18.3)
Deferred tax liabilities	(1,000.3)	(389.3)
Net deferred tax asset (liability)	\$ 971.1	\$ (105.6)
Reported as:		
Non-current deferred tax assets	\$ 1,677.2	\$ 100.2
Non-current deferred tax liability	(706.1)	(205.8)
Net deferred tax asset (liability)	\$ 971.1	\$ (105.6)

In assessing whether it is more likely than not that deferred tax assets will be realized, the Company considers all available evidence, both positive and negative, including its recent cumulative earnings experience and expectations of future available taxable income of the appropriate character by taxing jurisdiction, tax attribute carryback and carryforward periods available to them for tax reporting purposes, and prudent and feasible tax planning strategies.

The Company had federal, state and foreign NOL carryforwards with an estimated tax effect of \$94.3 million available at March 31, 2019. The federal, state and foreign NOL carryforwards expire at various times between 2020 and 2039, of which portion of the NOL carryforwards do not expire. The Company had state tax credits of \$158.5 million available at March 31, 2019. These state tax credits expire at various times between 2020 and 2039. The Company had capital loss carryforwards with an estimated tax effect of \$9.6 million available at March 31, 2019. These capital loss carryforwards begin to expire in fiscal 2020. The Company had foreign tax credits of \$18.5 million available at March 31, 2019. These foreign tax credits begin to expire in fiscal 2022. The Company had credits for increasing research activity in the amount of \$129.3 million available at March 31, 2019. These credits begin to expire in fiscal 2020. The Company had U.S. prior year minimum tax credits in the amount of \$4.5 million available at March 31, 2019. These credits do not expire. The Company had refundable tax credits in foreign jurisdictions of \$45.8 million available at March 31, 2019. The Company had withholding tax credits in foreign jurisdictions of \$19.9 million available at March 31, 2019. These credits expire at various times between fiscal 2022 and 2024.

The Company recognizes interest and penalties related to unrecognized tax benefits through income tax expense. The Company is subject to income taxes in the U.S. and numerous foreign jurisdictions. The Company files U.S. federal, U.S. state, and foreign income tax returns. For U.S. federal, and in general for U.S. state tax returns, the fiscal 2007 and later tax years remain effectively open for examination by tax authorities. For foreign tax returns, the Company is generally no longer subject to income tax examinations for years prior to fiscal 2007.

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Significant judgment is required in evaluating the Company's uncertain tax positions and determining its provision for income taxes. Although the Company believes that it has appropriately reserved for its uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different than expectations. The Company will adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit, the refinement of an estimate, the closing of a statutory audit period or changes in applicable tax law. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences would impact the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the impact of reserve provisions and changes to the reserves that are considered appropriate, as well as related net interest.

The Company recognizes liabilities for anticipated tax audit issues in the U.S. and other domestic and international tax jurisdictions based on its estimate of whether, and the extent to which, the tax positions are more likely than not to be sustained based on the technical merits. The Company believes that it has appropriate support for the income tax positions taken and to be taken on its tax returns and that its accruals for tax liabilities are adequate for all open years based on an assessment of many factors including past experience and interpretations of tax laws applied to the facts of each matter.

The Company believes it maintains appropriate reserves to offset any potential income tax liabilities that may arise upon final resolution of matters for open tax years. If such reserve amounts ultimately prove to be unnecessary, the resulting reversal of such reserves could result in tax benefits being recorded in the period the reserves are no longer deemed necessary. If such amounts prove to be less than an ultimate assessment, a future charge to expense would be recorded in the period in which the assessment is determined.

The following table summarizes the activity related to the Company's gross unrecognized tax benefits from April 1, 2016 to March 31, 2019 (amounts in millions):

	Year Ended March 31,		
	2019	2018	2017
Beginning balance	\$ 436.0	\$ 398.5	\$ 220.7
Increases related to acquisitions	329.7	—	193.3
Decreases related to settlements with tax authorities	(8.3)	(0.1)	(11.7)
Decreases related to statute of limitation expirations	(16.2)	(10.9)	(7.6)
Increases related to current year tax positions	27.8	30.3	26.3
Increases (decreases) related to prior year tax positions	(5.6)	18.2	(22.5)
Ending balance	<u>\$ 763.4</u>	<u>\$ 436.0</u>	<u>\$ 398.5</u>

As of March 31, 2019 and March 31, 2018, the Company had accrued interest and penalties related to tax contingencies of \$88.1 million and \$80.8 million, respectively. Interest and penalties charged to operations for the years ended March 31, 2018 and 2017 related to the Company's uncertain tax positions were \$5.4 million and \$5.8 million, respectively. Previously accrued interest and penalties that were released during the year ended March 31, 2019 were \$37.5 million.

The total amount of gross unrecognized tax benefits was \$763.4 million and \$436.0 million as of March 31, 2019 and March 31, 2018, respectively, of which \$664.4 million and \$436.0 million is estimated to impact the Company's effective tax rate, if recognized. The Company estimates that it is reasonably possible unrecognized tax benefits as of March 31, 2019 could decrease by approximately \$50.0 million in the next 12 months. Positions that may be resolved include various U.S. and non-U.S. matters.

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Note 12. Debt and Credit Facility

Debt obligations included in the consolidated balance sheets consisted of the following (in millions):

	Coupon Interest Rate	Effective Interest Rate	Fair Value of Liability Component at Issuance ⁽¹⁾	March 31,	
				2019	2018
<i>Senior Secured Indebtedness</i>					
Revolving Credit Facility				\$ 3,266.5	\$ —
Term Loan Facility				1,911.5	N/A
2023 Notes, maturing June 1, 2023 ("2023 Notes")	4.333%			1,000.0	N/A
2021 Notes, maturing June 1, 2021 ("2021 Notes")	3.922%			1,000.0	N/A
Total Senior Secured Indebtedness				7,178.0	—
<i>Senior Subordinated Convertible Debt - Principal Outstanding</i>					
2017 Senior Convertible Debt, maturing February 15, 2027 ("2017 Senior Convertible Debt")	1.625%	6.0%	\$1,396.3	\$ 2,070.0	\$ 2,070.0
2015 Senior Convertible Debt, maturing February 15, 2025 ("2015 Senior Convertible Debt")	1.625%	5.9%	\$1,160.1	1,725.0	1,725.0
<i>Junior Subordinated Convertible Debt - Principal Outstanding</i>					
2017 Junior Convertible Debt, maturing February 15, 2037 ("2017 Junior Convertible Debt")	2.250%	7.4%	\$321.1	686.3	686.3
Total Convertible Debt				4,481.3	4,481.3
<i>Gross long-term debt including current maturities</i>					
				11,659.3	4,481.3
Less: Debt discount ⁽²⁾				(1,268.7)	(1,372.9)
Less: Debt issuance costs ⁽³⁾				(83.6)	(40.1)
Net long-term debt including current maturities				10,307.0	3,068.3
Less: Current maturities ⁽⁴⁾				(1,360.8)	(1,309.9)
Net long-term debt				\$ 8,946.2	\$ 1,758.4

⁽¹⁾ As each of the convertible instruments may be settled in cash upon conversion, for accounting purposes, they were bifurcated into a liability component and an equity component, which are both initially recorded at fair value. The amount allocated to the equity component is the difference between the principal value of the instrument and the fair value of the liability component at issuance. The resulting debt discount is being amortized to interest expense at the respective effective interest rate over the contractual term of the debt.

⁽²⁾ The unamortized discount includes the following (in millions):

	March 31,	
	2019	2018
2023 Notes	\$ (4.4)	N/A
2021 Notes	(3.8)	N/A
2017 Senior Convertible Debt	(561.9)	(616.3)
2015 Senior Convertible Debt	(351.4)	(400.3)
2017 Junior Convertible Debt	(347.2)	(356.3)
Total unamortized discount	\$ (1,268.7)	\$ (1,372.9)

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⁽³⁾ Debt issuance costs include the following (in millions):

	March 31,	
	2019	2018
Revolving Credit Facility	\$ (14.7)	\$ (5.9)
Term Loan Facility	(19.4)	N/A
2023 Notes	(10.2)	N/A
2021 Notes	(8.8)	N/A
2017 Senior Convertible Debt	(14.5)	(16.1)
2015 Senior Convertible Debt	(12.8)	(14.8)
2017 Junior Convertible Debt	(3.2)	(3.3)
Total debt issuance costs	<u>\$ (83.6)</u>	<u>\$ (40.1)</u>

⁽⁴⁾ Current maturities include the full balance of the 2015 Senior Convertible Debt as of March 31, 2019 and 2018.

Expected maturities relating to the Company's long-term debt as of March 31, 2019 are as follows (in millions):

Fiscal year ending March 31,	Expected Maturities
2020	\$ —
2021	—
2022	1,000.0
2023	—
2024	4,266.5
Thereafter	6,392.8
Total	<u>\$ 11,659.3</u>

Ranking of Convertible Debt - The Senior Subordinated Convertible Debt and Junior Subordinated Convertible Debt (collectively, the Convertible Debt) are unsecured obligations which are subordinated in right of payment to the amounts outstanding under the Company's Credit Facility and Senior Secured Notes (as defined below). The Junior Subordinated Convertible Debt is expressly subordinated in right of payment to any existing and future senior debt of the Company (including the Credit Facility, the Senior Secured Notes, and the Senior Subordinated Convertible Debt) and is structurally subordinated in right of payment to the liabilities of the Company's subsidiaries. The Senior Subordinated Convertible Debt is subordinated to the Credit Facility and the Senior Secured Notes; ranks senior to the Company's indebtedness that is expressly subordinated in right of payment to it, including the Junior Subordinated Convertible Debt; ranks equal in right of payment to any of the Company's unsubordinated indebtedness that does not provide that it is senior to the Senior Subordinated Convertible Debt; ranks junior in right of payment to any of the Company's secured, unsubordinated indebtedness to the extent of the value of the assets securing such indebtedness; and is structurally subordinated to all indebtedness and other liabilities of the Company's subsidiaries.

Summary of Conversion Features - Each series of Convertible Debt is convertible, subject to certain conditions, into cash, shares of the Company's common stock or a combination thereof, at the Company's election, at specified Conversion Rates (see table below), adjusted for certain events including the declaration of cash dividends. Except during the three-month period immediately preceding the maturity date of the applicable series of Convertible Debt, each series of Convertible Debt is convertible only upon the occurrence of (1) such time as the closing price of the Company's common stock exceeds the Conversion Price (see table below) by 130% for 20 days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding fiscal quarter or (2) during the 5 business day period after any 10 consecutive trading day period, or the measurement period, in which the trading price per \$1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day or (3) upon the occurrence of certain corporate events specified in the indenture of such series of Convertible Debt. In addition, for each series, if at the time of conversion the applicable price of the Company's common stock exceeds the applicable Conversion Price at such time, the applicable Conversion Rate will be increased by up to an additional maximum incremental shares rate, as determined pursuant to a formula specified in the indenture for the applicable series of Convertible Debt, and as adjusted for cash dividends paid since the issuance of such series of Convertible Debt. However, in no event will the applicable Conversion Rate exceed the

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applicable Maximum Conversion Rate specified in the indenture for the applicable series of Convertible Debt (see table below). The following table sets forth the applicable Conversion Rates adjusted for dividends declared since issuance of such series of Convertible Debt and the applicable Incremental Share Factors and Maximum Conversion Rates as adjusted for dividends paid since the applicable issuance date:

	Dividend adjusted rates as of March 31, 2019			
	Conversion Rate, adjusted	Approximate Conversion Price, adjusted	Incremental Share Factor, adjusted	Maximum Conversion Rate, adjusted
2017 Senior Convertible Debt	10.2925	\$ 97.16	5.1462	14.6668
2015 Senior Convertible Debt	16.0504	\$ 62.30	8.0252	22.4705
2017 Junior Convertible Debt	10.4763	\$ 95.45	5.2382	14.6668

As of March 31, 2019, the 2017 Senior Convertible Debt and the 2017 Junior Convertible Debt were not convertible. As of March 31, 2019, the holders of the 2015 Senior Convertible Debt have the right to convert their debentures between April 1, 2019 and June 30, 2019 because the Company's common stock price has exceeded the Conversion Price by 130% for the specified period of time during the quarter ended March 31, 2019. As of March 31, 2019, the 2015 Senior Convertible Debt had a value if converted above par of \$857.9 million.

The Company may not redeem any series of Convertible Debt prior to the relevant maturity date and no sinking fund is provided for any series of Convertible Debt. Upon the occurrence of a fundamental change as defined in the applicable indenture of such series of Convertible Debt, holders of such series may require the Company to purchase all or a portion of their Convertible Debt for cash at a price equal to 100% of the principal amount plus any accrued and unpaid interest.

Interest expense includes the following (in millions):

	Year Ended March 31,		
	2019	2018	2017
Debt issuance amortization	\$ 12.9	\$ 3.1	\$ 2.4
Debt discount amortization	2.2	—	—
Interest expense	291.8	6.6	40.4
Total interest expense on Senior Secured Indebtedness	306.9	9.7	42.8
Debt issuance amortization	3.6	3.5	2.1
Debt discount amortization	112.4	106.1	56.1
Coupon interest expense	77.1	77.3	44.5
Total interest expense on Convertible Debt	193.1	186.9	102.7
Other interest expense	2.9	2.4	0.8
Total interest expense	\$ 502.9	\$ 199.0	\$ 146.3

The remaining period over which the unamortized debt discount will be recognized as non-cash interest expense is 7.88 years, 5.88 years, and 17.88 years for the 2017 Senior Convertible Debt, 2015 Senior Convertible Debt and 2017 Junior Convertible Debt, respectively.

In November 2017, the Company called for redemption \$14.6 million in principal value of the remaining outstanding 2007 Junior Subordinated Convertible Debt (2007 Junior Convertible Debt) with an effective redemption date of December 15, 2017 for which substantially all holders submitted requests to convert. Prior to the call, conversion requests were received in both the second and third quarters of fiscal 2018. Total conversions for fiscal 2018 were for a principal amount of \$32.5 million for which the Company settled the principal amount in cash and issued 0.5 million shares of its common stock in respect of the conversion value in excess of the principal amount for the conversions occurring prior to the redemption notice and \$41.0

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million in cash for the conversion value in excess of the principal amount for the conversion requests received after the notice of redemption. A loss on total conversions was recorded for \$2.2 million.

In June 2017, the Company exchanged, in privately negotiated transactions, \$111.3 million aggregate principal amount of its 2007 Junior Convertible Debt for (i) \$111.3 million principal amount of 2017 Junior Convertible Debt with a market value of \$119.3 million plus (ii) the issuance of 3.2 million shares of the Company's common stock with a value of \$254.6 million, of which \$56.3 million was allocated to the fair value of the liability and \$321.1 million was allocated to the reacquisition of the equity component for total consideration of \$374.0 million. The transaction resulted in a loss on settlement of the 2007 Junior Convertible Debt of approximately \$13.8 million, which represented the difference between the fair value of the liability component at time of repurchase and the sum of the carrying values of the debt component and any unamortized debt issuance costs. The debt discount on the new 2017 Junior Convertible Debt was the difference between the par value and the fair value of the debt resulting in a debt discount of \$55.1 million which will be amortized to interest expense using the effective interest method over the term of the debt.

In February 2017, the Company issued the 2017 Senior Convertible Debt and 2017 Junior Convertible Debt for net proceeds of \$2.04 billion and \$567.7 million, respectively. In connection with the issuance of these instruments, the Company incurred issuance costs of \$33.7 million, of which \$17.8 million and \$3.4 million was recorded as convertible debt issuance costs related to the 2017 Senior Convertible Debt and 2017 Junior Convertible Debt, respectively, and will be amortized using the effective interest method over the term of the debt. The balance of \$12.5 million in fees was recorded to equity. Interest on both instruments is payable semi-annually on February 15 and August 15 of each year.

In February 2015, the Company issued the 2015 Senior Convertible Debt for net proceeds of approximately \$1.69 billion. In connection with the issuance, the Company incurred issuance costs of \$30.3 million, of which \$20.4 million was recorded as debt issuance costs and will be amortized using the effective interest method over the term of the debt. The balance of \$9.9 million was recorded to equity.

The Company utilized the proceeds from the issuances of the 2017 Senior Convertible Debt, 2017 Junior Convertible Debt, and 2015 Senior Convertible Debt to reduce amounts borrowed under its Credit Facility and to settle a portion of the 2007 Junior Convertible Debt in privately negotiated transactions. In February 2017 and February 2015, the Company settled \$431.3 million and \$575.0 million, respectively, in aggregate principal of its 2007 Junior Convertible Debt. The February 2015 repurchase consisted solely of cash. In February 2017, the Company used cash of \$431.3 million and an aggregate of 12.0 million in shares of the Company's common stock valued at \$862.7 million for total consideration of \$1.29 billion to repurchase \$431.3 million of the 2007 Junior Convertible Debt, of which \$188.0 million was allocated to the liability component and \$1.11 billion was allocated to the equity component. In addition, in February 2017, there was an inducement fee of \$5.0 million which was recorded in the consolidated statements of income in loss on settlement of debt. The consideration transferred in February 2015 was \$1.13 billion, of which \$238.3 million was allocated to the liability component and \$896.3 million was allocated to the equity component. In the case of both settlements of the 2007 Junior Convertible Debt, the consideration was allocated to the liability and equity components using the equivalent rate that reflected the borrowing rate for a similar non-convertible debt prior to the retirement. The transactions resulted in a loss on settlement of debt of approximately \$43.9 million and \$50.6 million in fiscal 2017 and fiscal 2015, respectively, which represented, in each case, the difference between the fair value of the liability component at time of repurchase and the sum of the carrying values of the debt component and any unamortized debt issuance costs.

Senior Secured Notes

In May 2018, the Company issued \$1.00 billion aggregate principal amount of 3.922% Senior Secured Notes due 2021 (the "2021 Notes") and \$1.00 billion aggregate principal amount of 4.333% Senior Secured Notes due 2023 (the "2023 Notes", and together with the 2021 Notes, the "Senior Secured Notes") to qualified institutional buyers in a Rule 144A offering. In connection with the issuance of these instruments, the Company incurred issuance costs of \$24.4 million and recorded a debt discount of \$10.5 million for fees deducted from the proceeds, which will both be amortized using the effective interest method over the term of the debt. The 2021 Notes mature on June 1, 2021 and the 2023 Notes mature on June 1, 2023. Interest on the 2021 Notes accrues at a rate of 3.922% per annum, payable semi-annually in arrears on June 1 and December 1 of each year, commencing on December 1, 2018. Interest on the 2023 Notes accrues at a rate of 4.333% per annum, payable semi-annually in arrears on June 1 and December 1 of each year, commencing on December 1, 2018.

The Company may, at its option, redeem some or all of the 2021 Notes prior to June 1, 2021 at a price equal to the greater of (a) 100% of the principal amount of the 2021 Notes redeemed or (b) the sum of the present value of all remaining scheduled payments of principal and interest (discounted in accordance with the indenture for the 2021 Notes) that would have been due on the redeemed 2021 Notes, in each case, plus accrued and unpaid interest to, but excluding, the redemption date. The

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Company may, at its option, redeem some or all of the 2023 Notes, (i) if prior to May 1, 2023 (one month prior to the maturity date of the 2023 Notes), at a price equal to the greater of (a) 100% of the principal amount of the 2023 Notes redeemed or (b) the sum of the present value of all remaining scheduled payments of principal and interest (discounted in accordance with the indenture for the 2023 Notes) that would have been due on the redeemed 2023 Notes, in each case, plus accrued and unpaid interest to, but excluding, the redemption date, and (ii) if on or after May 1, 2023 (one month prior to maturity of the 2023 Notes), at a redemption price equal to 100% of the principal amount of the notes redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

If the Company experiences a specified change of control triggering event, the Company must offer to repurchase the Notes at a price equal to 101% of the principal amount of the Notes repurchased, plus accrued and unpaid interest, if any, to, but excluding, the repurchase date.

The Notes are guaranteed by certain of the Company's subsidiaries (each such guarantee, a "Note Guarantee") that have also guaranteed the obligations under the Company's Credit Facility and under the Term Loan Facility (the Term Loan Facility together with the Credit Facility, the "Senior Credit Facilities") that was entered into in connection with the Microsemi acquisition.

The Notes and the Note Guarantees are secured, on a pari passu first lien basis with the Senior Credit Facilities, by substantially all of the tangible and intangible assets (other than certain excluded assets) of the Company and the guarantors that secure obligations under the Senior Credit Facilities, in each case subject to certain thresholds, exceptions and permitted liens, as set forth in the indenture for the Senior Secured Notes and the Security Agreement, dated May 29, 2018, by and among the Company, the subsidiary guarantors party thereto and the Collateral Agent (the "Security Agreement").

Credit Facility

In May 2018, the Company amended and restated its credit agreement to, among other things, increase the size of the Revolving Credit Facility thereunder to \$3.84 billion from \$3.12 billion at March 31, 2018. In connection with the amendment and restatement of the Credit Agreement, the Company incurred issuance costs of \$13.6 million which will be amortized using the effective interest method over the term of the debt. In the year ended March 31, 2019, the Company terminated the commitments for the 2020 Revolving Loans which decreased the capacity of the Revolving Credit Facility to \$3.60 billion.

The Credit Agreement provides for a revolving loan facility in an aggregate principal amount of approximately \$3.60 billion, with a \$250.0 million foreign currency sublimit, a \$50.0 million letter of credit sublimit and a \$25.0 million swingline loan sublimit. The Credit Agreement consists of approximately \$3.60 billion of revolving loan commitments that terminate on May 18, 2023 (the "2023 Maturity Date"). The \$244.3 million of revolving loan commitments (the "2020 Revolving Loans") that would terminate on February 4, 2020 were canceled in the fiscal year ended March 31, 2019. The Revolving Loans bear interest, at the Company's option, at the base rate plus a spread of 0.00% to 1.00% or an adjusted LIBOR rate (based on one, two, three or six-month interest periods) plus a spread of 1.00% to 2.00%, in each case with such spread being determined based on the consolidated senior leverage ratio for the preceding four fiscal quarter period.

The Credit Agreement permits the Company to add one or more incremental term loan facilities (in addition to the loans under the Term Loan Facility) and/or increase the commitments under the Revolving Credit Facility from time to time, subject, in each case, to the receipt of additional commitments from existing and/or new lenders and pro forma compliance with a consolidated senior leverage ratio set forth in the Credit Agreement.

The Company's obligations under the Credit Agreement are guaranteed by certain of its subsidiaries meeting materiality thresholds set forth in the Credit Agreement. To secure the Company's obligations under the Credit Agreement and the subsidiary guarantors' obligations under the guarantees, the Company and each of the subsidiary guarantors has granted a security interest in substantially all its assets subject to certain exceptions and limitations.

In May 2018, the Company borrowed \$3.0 billion aggregate principal amount of loans under the Term Loan Facility ("Term Loans"). In connection with such borrowings, the Company incurred issuance costs of \$34.7 million which will be amortized using the effective interest method over the term of the debt. The Credit Agreement provides for quarterly amortization payments of the Term Loans on the last business day of each March, June, September and December, commencing with the last business day of the first full fiscal quarter to occur after the Microsemi acquisition effective date, equal to 0.25% of the aggregate original principal amount of the Term Loans. In addition, the Credit Agreement requires mandatory prepayments of the Term Loans from the incurrence of debt not otherwise permitted to be incurred under the Credit Agreement, certain asset sales and certain excess cash flow. Mandatory prepayments with excess cash flow (as defined in the Credit Agreement) are required to be made beginning with the Company's fiscal year ending March 31, 2020 in an amount equal to

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50%, 25% or 0% of the excess cash flow for such fiscal year, depending on the Company's senior leverage ratio. The Company may prepay the Term Loans at any time without premium or penalty. Term Loans repaid or prepaid may not be reborrowed. During fiscal 2019, the Company voluntarily prepaid \$1.09 billion of principal under the Term Loan Facility of which \$500.0 million was from funds borrowed under its Revolving Credit Facility. The transactions resulted in a loss on settlement of debt of approximately \$11.5 million consisting of unamortized financing fees.

Interest is due and payable in arrears quarterly for loans bearing interest at the base rate and at the end of an interest period (or at each three-month interval in the case of loans with interest periods greater than three months) in the case of loans bearing interest at the adjusted LIBOR rate. Principal, together with all accrued and unpaid interest, is due and payable on the 2023 Maturity Date in the case of revolving loans under the Credit Agreement and May 29, 2025 in the case of the Term Loans. The Company pays a quarterly commitment fee on the available but unused portion of its line of credit which is calculated on the average daily available balance during the period. The Company may prepay the loans and terminate the commitments, in whole or in part, at any time without premium or penalty, subject to certain conditions including minimum amounts in the case of commitment reductions and reimbursement of certain costs in the case of prepayments of LIBOR loans.

The Credit Agreement contains customary affirmative and negative covenants, including covenants that limit or restrict the Company and its subsidiaries' ability to, among other things, incur subsidiary indebtedness, grant liens, merge or consolidate, dispose of assets, make investments, make acquisitions, enter into certain transactions with affiliates, pay dividends or make distributions, repurchase stock, enter into restrictive agreements and enter into sale and leaseback transactions, in each case subject to customary exceptions for a credit facility of this size and type. The Company is also required to maintain compliance with a senior leverage ratio, a total leverage ratio and an interest coverage ratio, all measured quarterly and calculated on a consolidated basis. At March 31, 2019, the Company was in compliance with these financial covenants.

The financial covenants include limits on the Company's consolidated total leverage ratio and senior leverage ratio. The maximum Total Leverage Ratio (capitalized terms not otherwise defined in this Form 10-K have the meaning of the defined terms in the applicable agreements), measured quarterly, cannot exceed (a) 6.75 to 1.00 for any such period ended on or after the Microsemi Acquisition Closing Date to (but excluding) the first anniversary of the Microsemi Acquisition Closing Date, (b) 6.25 to 1.00 for any such period ended on or after the first anniversary of the Microsemi Acquisition Closing Date to (but excluding) the second anniversary of the Microsemi Acquisition Closing Date to (but excluding) the second anniversary of the Microsemi Acquisition Closing Date and (c) 5.75 to 1.00 for any such period ended on or after the second anniversary of the Microsemi Acquisition Closing Date. The total leverage ratio is calculated as Consolidated Total Indebtedness, excluding the Junior Convertible Debt up to a \$700 million maximum, to Consolidated EBIDTA for a period of four consecutive quarters. The Credit Agreement also requires that the Senior Leverage Ratio, measured quarterly, not exceed (a) 4.75 to 1.00 for any such period ended from (and including) the Microsemi Acquisition Closing Date to (but excluding) the first anniversary of the Microsemi Acquisition Closing Date, (b) 4.25 to 1.00 for any such period ended on or after the first anniversary of the Microsemi Acquisition Closing Date to (but excluding) the second anniversary of the Microsemi Acquisition Closing Date and (c) 3.75 to 1.00 for any such period ended on or after the second anniversary of the Microsemi Acquisition Closing Date. The senior leverage ratio is calculated as Consolidated Senior Indebtedness to Consolidated EBIDTA for four consecutive quarters. The Company is also required to comply with a Minimum Interest Coverage Ratio of at least 3.25 to 1.00 for any period ended on or after the Microsemi Acquisition Closing Date, measured quarterly.

The Credit Agreement includes customary events of default that include, among other things, non-payment defaults, inaccuracy of representations and warranties, covenant defaults, cross default to material indebtedness, bankruptcy and insolvency defaults, material judgment defaults, ERISA defaults and a change of control default. The occurrence of an event of default could result in the acceleration of the obligations under the Credit Agreement. Under certain circumstances, a default interest rate will apply on all obligations during the existence of an event of default under the Revolving Credit Facility at a per annum rate equal to 2.00% above the applicable interest rate for any overdue principal and 2.00% above the rate applicable for base rate loans for any other overdue amounts.

Note 13. Contingencies

In the ordinary course of the Company's business, it is exposed to various liabilities as a result of contracts, product liability, customer claims and other matters. Additionally, the Company is involved in a limited number of legal actions, both as plaintiff and defendant. Consequently, the Company could incur uninsured liability in any of those actions. The Company also periodically receives notifications from various third parties alleging infringement of patents or other intellectual property rights, or from customers requesting reimbursement for various costs. With respect to pending legal actions to which the Company is a party and other claims, although the outcomes are generally not determinable, the Company believes that the ultimate resolution of these matters will not have a material adverse effect on its financial position, cash flows or results of operations. Litigation and disputes relating to the semiconductor industry are not uncommon, and the Company is, from time

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to time, subject to such litigation and disputes. As a result, no assurances can be given with respect to the extent or outcome of any such litigation or disputes in the future.

In connection with its acquisition of Microsemi, which closed on May 29, 2018, the Company became involved with the following legal matters:

Federal Shareholder Class Action Litigation. Beginning on September 14, 2018, the Company and certain of its officers were named in two putative shareholder class action lawsuits filed in the United States District Court for the District of Arizona, captioned Jackson v. Microchip Technology Inc., et al., Case No. 2:18-cv-02914-JJT and Maknissian v. Microchip Technology Inc., et al., Case No. 2:18-cv-02924-JJT. On November 13, 2018, the Maknissian complaint was voluntarily dismissed. The Jackson complaint is allegedly brought on behalf of a putative class of purchasers of Microchip common stock between March 2, 2018 and August 9, 2018. The complaint asserts claims for alleged violations of the federal securities laws and generally alleges that the defendants issued materially false and misleading statements and failed to disclose material adverse facts about the Company's business, operations, and prospects during the putative class period. The complaint seeks, among other things, compensatory damages and attorneys' fees and costs on behalf of the putative class. On December 11, 2018, the Court issued an order appointing the lead plaintiff. An amended complaint was filed on February 22, 2019. Defendants filed a motion to dismiss the amended complaint on April 1, 2019.

Federal Derivative Litigation. On December 17, 2018, a shareholder derivative lawsuit was filed against certain of the Company's officers and directors in the United States District Court for the District of Arizona, captioned Kistenmacher v. Sanghi, et al., Case No. 16-cv-04720. The Company is named as a nominal defendant. The complaint generally alleges that defendants breached their fiduciary duties by, among other things, making or causing the Company to make false and misleading statements and omissions regarding the Microsemi acquisition, the Company's business, operations, and prospects, and a purported failure to maintain internal controls. The complaint further alleges that certain defendants engaged in insider trading. The complaint asserts causes of action for alleged violations of Section 14(a) of the Securities Exchange Act, breach of fiduciary duties, and unjust enrichment and seeks unspecified monetary damages, corporate governance reforms, restitution, and attorneys' fees and costs.

State Derivative Litigation. On January 22, 2019, a shareholder derivative lawsuit was filed against certain of the Company's officers and directors in the Superior Court of Arizona for Maricopa County, captioned Reid v. Sanghi, et al., Case No. CV2019-002389. The Company is named as a nominal defendant. The complaint generally alleges that defendants breached their fiduciary duties by, among other things, purportedly failing to conduct adequate due diligence regarding Microsemi prior to its acquisition, misrepresenting the Company's business prospects and health, and engaging in improper practices, and further alleges that certain defendants engaged in insider trading. The complaint asserts causes of action for breach of fiduciary duty, waste, and unjust enrichment and seeks unspecified monetary damages, corporate governance reforms, equitable and/or injunctive relief, restitution, and attorneys' fees and costs. This case was stayed on May 23, 2019 to allow the Federal Derivative Litigation to address certain overlapping issues.

Peterson, et al. v. Sanghi, et al. On October 9, 2018, four former officers of Microsemi Corporation filed a lawsuit in the Superior Court of California in Orange County against us and four of our officers asserting claims for slander per se, libel per se, trade libel, and violations of California Business and Professions Code Section 17200 ("UCL"). On November 8, 2018, defendants removed the action to the United States District Court for the Central District of California, Case No. 18-cv-02000-JLS. Defendants moved to dismiss, and, following the Court's ruling, Plaintiffs filed an amended complaint that dropped the trade libel and UCL claims. The plaintiffs are seeking unspecified compensatory damages (ranging from an alleged \$10 million to \$100 million), as well as punitive damages, injunctive relief, and attorneys' fees and costs. Discovery has begun, and the Court has set a Final Pretrial Conference date of May 22, 2020.

As a result of its acquisition of Atmel, which closed April 4, 2016, the Company became involved with the following legal matters:

Continental Claim ICC Arbitration. On December 29, 2016, Continental Automotive GmbH ("Continental") filed a Request for Arbitration with the ICC, naming as respondents the Company's subsidiaries Atmel Corporation, Atmel SARM, Atmel Global Sales Ltd., and Atmel Automotive GmbH (collectively, "Atmel"). The Request alleges that a quality issue affecting Continental airbag control units in certain recalled vehicles stems from allegedly defective Atmel application specific integrated circuits ("ASICs"). Continental seeks to recover from Atmel all related costs and damages incurred as a result of the vehicle manufacturers' airbag control unit-related recalls, currently alleged to be \$208 million. The Company's Atmel subsidiaries intend to defend this action vigorously.

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Southern District of New York Action by LFoundry Rousset ("LFR") and LFR Employees. On March 4, 2014, LFR and Jean-Yves Guerrini, individually and on behalf of a putative class of LFR employees, filed an action in the United States District Court for the Southern District of New York (the "District Court") against the Company's Atmel subsidiary, French subsidiary, Atmel Rousset S.A.S. ("Atmel Rousset"), and LFoundry GmbH ("LF"), LFR's German parent. The case purports to relate to Atmel Rousset's June 2010 sale of its wafer manufacturing facility in Rousset, France to LF, and LFR's subsequent insolvency, and later liquidation, more than three years later. The District Court dismissed the case on August 21, 2015, and the United States Court of Appeals for the Second Circuit affirmed the dismissal on June 27, 2016. On July 25, 2016, the plaintiffs filed a notice of appeal from the District Court's June 27, 2016 denial of their motion for relief from the dismissal judgment. On May 19, 2017, the United States Court of Appeals for the Second Circuit affirmed the June 27, 2016 order dismissing the case.

Individual Labor Actions by former LFR Employees. In June 2010, Atmel Rousset sold its wafer manufacturing business in Rousset, France to LFoundry GmbH ("LF"), the German parent of LFoundry Rousset ("LFR"). LFR then leased the Atmel Rousset facility to conduct the manufacture of wafers. More than three years later, LFR became insolvent and later liquidated. In the wake of LFR's insolvency and liquidation, over 500 former employees of LFR have filed individual labor actions against Atmel Rousset in a French labor court. The Company's Atmel Rousset subsidiary believes that each of these actions is entirely devoid of merit, and, further, that any assertion by any of the Claimants of a co-employment relationship with the Atmel Rousset subsidiary is based substantially on the same specious arguments that the Paris Commercial Court summarily rejected in 2014 in related proceedings. The Company's Atmel Rousset subsidiary therefore intends to defend vigorously against each of these claims. Additionally, complaints have been filed in a regional court in France on behalf of the same group of employees against Microchip Technology Rousset, Atmel Switzerland Sarl, Atmel Corporation and Microchip Technology Incorporated alleging that the sale of the Atmel Rousset production unit to LF was fraudulent and should be voided. Furthermore, new claims have been filed in a regional court in France on behalf of a subset of this same group of employees against Microchip Technology Incorporated and Atmel Corporation. These claims are specious and the defendant entities therefore intend to defend vigorously against these claims.

The Company accrues for claims and contingencies when losses become probable and reasonably estimable. As of the end of each applicable reporting period, the Company reviews each of its matters and, where it is probable that a liability has been or will be incurred, the Company accrues for all probable and reasonably estimable losses. Where the Company can reasonably estimate a range of losses it may incur regarding such a matter, the Company records an accrual for the amount within the range that constitutes its best estimate. If the Company can reasonably estimate a range but no amount within the range appears to be a better estimate than any other, the Company uses the amount that is the low end of such range. As of March 31, 2019, the Company's estimate of the aggregate potential liability that is possible but not probable is approximately \$100 million in excess of amounts accrued.

The Company's technology license agreements generally include an indemnification clause that indemnifies the licensee against liability and damages (including legal defense costs) arising from any claims of patent, copyright, trademark or trade secret infringement by the Company's proprietary technology. The terms of these indemnification provisions approximate the terms of the outgoing technology license agreements, which are typically perpetual unless terminated by either party for breach. The possible amount of future payments the Company could be required to make based on agreements that specify indemnification limits, if such indemnifications were required on all of these agreements, is approximately \$164 million. There are some licensing agreements in place that do not specify indemnification limits. As of March 31, 2019, the Company had not recorded any liabilities related to these indemnification obligations and the Company believes that any amounts that it may be required to pay under these agreements in the future will not have a material adverse effect on its financial position, cash flows or results of operations.

The Company has learned of an ongoing compromise of its computer networks by what is believed to be sophisticated hackers. The Company has engaged experienced legal counsel and a leading forensic investigatory firm with experience in such matters. The Company has taken steps to identify malicious activity on its network including a compromise of its network and, as of the date of this filing, the Company is implementing a containment plan. The Company is continuing to evaluate the effectiveness of the containment plan and the amount and content of the information that was compromised and to implement additional remedial actions. At this time, the Company does not believe that this IT system compromise has had a material adverse effect on its business or resulted in any material damage to it. However, the Company is still evaluating the amount and type of data that was compromised and there can be no assurance as to what the impact of this IT system compromise will be. The Company has considered whether there may be litigation, investigations or claims related to such matter but it is too early to know if or whether litigation, investigations or claims may be asserted or what the nature of such proceedings or alleged damages may be.

Note 14. Stock Repurchase Activity

In January 2016, the Company's Board of Directors authorized an increase to the existing share repurchase program to 15.0 million shares of common stock. There were no repurchases of common stock during fiscal 2019, 2018 and 2017. There is no expiration date associated with this repurchase program. As of March 31, 2019, approximately 15.6 million shares remained as treasury shares with the balance of the shares being used to fund share issuance requirements under the Company's equity incentive plans.

Note 15. Employee Benefit Plans

Defined Benefit Plans

The Company has defined benefit pension plans that cover certain French and German employees. Most of these defined pension plans, which were acquired in the Atmel and Microsemi acquisitions, are unfunded. Plan benefits are provided in accordance with local statutory requirements. Benefits are based on years of service and employee compensation levels. Pension liabilities and charges are based upon various assumptions, updated annually, including discount rates, future salary increases, employee turnover, and mortality rates. The Company's French pension plan provides for termination benefits paid to covered French employees only at retirement, and consists of approximately one to five months of salary. The Company's German pension plan provides for defined benefit payouts for covered German employees following retirement.

The aggregate net pension expense relating to these two plans is as follows (in millions):

	Year Ended March 31,		
	2019	2018	2017
Service costs	\$ 1.5	\$ 2.2	\$ 1.4
Interest costs	1.1	1.0	1.0
Amortization of actuarial loss	0.4	0.8	—
Settlements	—	—	0.5
Net pension period cost	<u>\$ 3.0</u>	<u>\$ 4.0</u>	<u>\$ 2.9</u>

Interest costs and amortization of actuarial losses are recorded in the other (loss) income, net line item in the statements of income.

The change in projected benefit obligation and the accumulated benefit obligation, were as follows (in millions):

	Year Ended March 31,	
	2019	2018
Projected benefit obligation at the beginning of the year	\$ 61.0	\$ 50.4
Additions due to acquisition of Microsemi	9.8	—
Service cost	1.5	2.2
Interest cost	1.1	1.0
Actuarial losses	6.0	0.7
Benefits paid	(0.9)	(0.8)
Foreign currency exchange rate changes	(5.8)	7.5
Projected benefit obligation at the end of the year	<u>\$ 72.7</u>	<u>\$ 61.0</u>
Accumulated benefit obligation at the end of the year	<u>\$ 66.7</u>	<u>\$ 55.5</u>
Weighted average assumptions		
Discount rate	1.41%	1.73%
Rate of compensation increase	2.79%	2.91%

The Company's pension liability represents the present value of estimated future benefits to be paid. The discount rate is based on the quarterly average yield for Euros treasuries with a duration of 30 years, plus a supplement for corporate bonds

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(Euros, AA rating). Net actuarial losses, which are included in accumulated other comprehensive loss in the Company's consolidated balance sheets, will be recognized as a component of net periodic cost over the average remaining service period.

As the defined benefit plans are unfunded, the liability recognized on the Company's consolidated balance sheet as of March 31, 2019 was \$72.7 million of which \$1.3 million is included in accrued liabilities and \$71.4 million is included in other long-term liabilities. The liability recognized on the Company's consolidated balance sheet as of March 31, 2018 was \$61.0 million of which \$0.9 million is included in accrued liabilities and \$60.1 million is included in other long-term liabilities.

Future estimated expected benefit payments for fiscal year 2020 through 2029 are as follows (in millions):

Fiscal Year Ending March 31,	Expected Benefit Payments
2020	\$ 1.3
2021	1.5
2022	1.9
2023	1.8
2024	2.3
2025 through 2029	11.9
Total	<u>\$ 20.7</u>

The Company's net periodic pension cost for fiscal 2020 is expected to be approximately \$3.3 million.

In connection with the acquisition of SMSC in August 2012, the Company assumed an unfunded Supplemental Executive Retirement Plan ("SERP"), which provides former SMSC senior management with retirement, disability and death benefits. An amendment to the SERP was executed on November 3, 2009, freezing the benefit level for existing participants as of February 28, 2010 and closing the SERP to new participants. As of March 31, 2019, the projected benefit obligation is \$3.7 million. Annual benefit payments and contributions under this plan are expected to be approximately \$0.4 million in fiscal 2020 and approximately \$4.1 million cumulatively in fiscal 2021 through fiscal 2029.

Defined Contribution Plans

The Company maintains a contributory profit-sharing plan for its domestic employees meeting certain eligibility and service requirements. The plan qualifies under Section 401(k) of the Internal Revenue Code of 1986, as amended, and allows employees to contribute up to 60% of their base salary, subject to maximum annual limitations prescribed by the IRS. The Company has a discretionary matching contribution program. All matches are provided on a quarterly basis and require the participant to be an active employee at the end of the applicable quarter. During fiscal 2019, 2018 and 2017, the Company's matching contributions to the plan totaled \$8.6 million, \$8.8 million and \$8.2 million, respectively.

The Company's 2001 Employee Stock Purchase Plan (the 2001 Purchase Plan) became effective on March 1, 2002. Under the 2001 Purchase Plan, eligible employees of the Company may purchase shares of common stock at semi-annual intervals through periodic payroll deductions. The purchase price in general will be 85% of the lower of the fair market value of the common stock on the first day of the participant's entry date into the offering period or of the fair market value on the semi-annual purchase date. Depending upon a participant's entry date into the 2001 Purchase Plan, purchase periods under the 2001 Purchase Plan consist of overlapping periods of either 24, 18, 12 or 6 months in duration. In May 2003 and August 2003, the Company's Board and stockholders, respectively, each approved an annual automatic increase in the number of shares reserved under the 2001 Purchase Plan. The automatic increase took effect on January 1, 2005, and on each January 1 thereafter during the term of the plan, and is equal to the lesser of (i) 1,500,000, (ii) one half of one percent (0.5%) of the then outstanding shares of the Company's common stock, or (iii) such lesser amount as is approved by Board of Directors. On January 1, 2019, under the automatic increase provision, an additional 1,184,815 shares of Common Stock were reserved for sale under the 2001 Purchase Plan in future offering periods. Upon the approval of the Board of Directors, there were no shares added under the 2001 Purchase Plan on January 1, 2018 based on the automatic increase provision. On January 1, 2017, an additional 1,077,150 shares were reserved under the 2001 Purchase Plan based on the automatic increase. Since the inception of the 2001 Purchase Plan, 14,557,319 shares of common stock have been reserved for issuance and 8,293,815 shares have been issued under this purchase plan.

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During fiscal 1995, a purchase plan was adopted for employees in non-U.S. locations. Such plan provided for the purchase price per share to be 100% of the lower of the fair market value of the common stock at the beginning or end of the semi-annual purchase plan period. Effective May 1, 2006, the Company's Board of Directors approved a purchase price per share equal to 85% of the lower of the fair market value of the common stock at the beginning or end of the semi-annual purchase plan period. On May 1, 2006, the Company's Board of Directors approved an annual automatic increase in the number of shares reserved under the plan. The automatic increase took effect on January 1, 2007, and on each January 1 thereafter during the term of the plan, and is equal to one tenth of one percent (0.1%) of the then outstanding shares of the Company's common stock. On January 1, 2019, under the automatic increase provision, an additional 236,963 shares of Common Stock were reserved for sale under the International Purchase Plan in future offering periods. Upon the approval of the Board of Directors, there were no shares added under the plan on January 1, 2018 based on the automatic increase provision. On January 1, 2017, an additional 215,430 shares were reserved under the plan based on the automatic increase. Since the inception of this purchase plan, 2,156,176 shares of common stock have been reserved for issuance and 1,524,674 shares have been issued under this purchase plan.

Effective January 1, 1997, the Company adopted a non-qualified deferred compensation arrangement. This plan is unfunded and is maintained primarily for the purpose of providing deferred compensation for a select group of highly compensated employees as defined in ERISA Sections 201, 301 and 401. There are no Company matching contributions made under this plan.

The Company has management incentive compensation plans which provide for bonus payments, based on a percentage of base salary, from an incentive pool created from operating profits of the Company, at the discretion of the Board of Directors. During fiscal 2019, 2018 and 2017, \$18.7 million, \$48.1 million and \$41.5 million were charged against operations for these plans, respectively.

The Company also has a plan that, at the discretion of the Board of Directors, provides a cash bonus to all employees of the Company based on the operating profits of the Company. During fiscal 2019, 2018 and 2017, \$16.4 million, \$36.3 million and \$28.2 million, respectively, were charged against operations for this plan.

Note 16. Share-Based Compensation

Share-Based Compensation Expense

The following table presents the details of the Company's share-based compensation expense (in millions):

	Year Ended March 31,		
	2019	2018	2017
Cost of sales ⁽¹⁾	\$ 14.9	\$ 13.8	\$ 18.7
Research and development	72.0	42.5	46.8
Selling, general and administrative	62.3	36.9	62.6
Special (income) charges and other, net	17.2	—	—
Pre-tax effect of share-based compensation	166.4	93.2	128.1
Income tax benefit	35.5	28.3	44.2
Net income effect of share-based compensation	\$ 130.9	\$ 64.9	\$ 83.9

⁽¹⁾ During the year ended March 31, 2019, \$17.2 million of share-based compensation expense was capitalized to inventory, and \$14.9 million of previously capitalized share-based compensation expense in inventory was sold. During the year ended March 31, 2018, \$11.9 million of share-based compensation expense was capitalized to inventory and \$13.8 million of previously capitalized share-based compensation expense in inventory that was sold. During the year ended March 31, 2017, \$11.3 million of share-based compensation expense was capitalized to inventory. The amount of share-based compensation included in cost of sales during fiscal 2017 included \$14.5 million of previously capitalized share-based compensation expense in inventory was sold and \$4.2 million of share-based compensation expense related to the Company's acquisition of Atmel that was not previously capitalized into inventory.

The amount of unearned share-based compensation currently estimated to be expensed in the remainder of fiscal 2020 through fiscal 2024 related to unvested share-based payment awards at March 31, 2019 is \$253.4 million. The weighted average period over which the unearned share-based compensation is expected to be recognized is approximately 1.88 years.

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Microsemi Acquisition-related Equity Awards

In connection with its acquisition of Microsemi on May 29, 2018, the Company assumed certain restricted stock units (RSUs), stock appreciation rights (SARs), and stock options granted by Microsemi. The assumed awards were measured at the acquisition date based on the estimated fair value, which was a total of \$175.4 million. A portion of that fair value, \$53.9 million, which represented the pre-acquisition vested service provided by employees to Microsemi, was included in the total consideration transferred as part of the acquisition. As of the acquisition date, the remaining portion of the fair value of those awards was \$121.5 million, representing post-acquisition share-based compensation expense that will be recognized as these employees provide service over the remaining vesting periods. During the year ended March 31, 2019, the Company recognized \$65.2 million of share-based compensation expense in connection with the acquisition of Microsemi, of which \$3.5 million was capitalized into inventory and \$17.2 million was due to the accelerated vesting of outstanding equity awards upon termination of certain Microsemi employees.

Atmel Acquisition-related Equity Awards

In connection with its acquisition of Atmel on April 4, 2016, the Company assumed certain RSUs granted by Atmel. The assumed awards were measured at the acquisition date based on the estimated fair value, which was a total of \$95.9 million. A portion of that fair value, \$7.5 million, which represented the pre-acquisition vested service provided by employees to Atmel, was included in the total consideration transferred as part of the acquisition. As of the acquisition date, the remaining portion of the fair value of those awards was \$88.4 million, representing post-acquisition share-based compensation expense that will be recognized as these employees provide service over the remaining vesting periods.

Combined Incentive Plan Information

RSU share activity under the 2004 Plan is set forth below:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested shares at March 31, 2016	6,307,742	\$ 36.76
Granted	1,635,655	51.46
Assumed upon acquisition	2,059,524	46.57
Forfeited	(722,212)	43.58
Vested	(2,861,253)	38.60
Nonvested shares at March 31, 2017	6,419,456	42.06
Granted	1,267,536	77.26
Forfeited	(279,051)	49.65
Vested	(1,735,501)	38.00
Nonvested shares at March 31, 2018	5,672,440	50.79
Granted	1,951,408	77.83
Assumed upon acquisition	1,805,680	91.70
Forfeited	(408,242)	73.36
Vested	(2,729,324)	61.51
Nonvested shares at March 31, 2019	6,291,962	\$ 64.81

The total intrinsic value of RSUs which vested during the years ended March 31, 2019, 2018 and 2017 was \$229.3 million, \$146.0 million and \$166.1 million, respectively. The aggregate intrinsic value of RSUs outstanding at March 31, 2019 was \$522.0 million, calculated based on the closing price of the Company's common stock of \$82.96 per share on March 29, 2019. At March 31, 2019, the weighted average remaining expense recognition period was 1.91 years.

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Stock option and stock appreciation right (SAR) activity under the Company's stock incentive plans in the three years ended March 31, 2019 is set forth below:

	Number of Shares	Weighted Average Exercise Price per Share
Outstanding at March 31, 2016	913,508	\$ 33.00
Exercised	(437,906)	34.34
Forfeited or expired	(42,485)	34.26
Outstanding at March 31, 2017	433,117	31.51
Exercised	(131,666)	31.75
Forfeited or expired	(17,111)	34.73
Outstanding at March 31, 2018	284,340	31.21
Assumed upon acquisition	141,751	25.86
Exercised	(140,118)	27.67
Forfeited or expired	(4,091)	39.62
Outstanding at March 31, 2019	281,882	\$ 30.16

The total intrinsic value of options and SARs exercised during the years ended March 31, 2019, 2018 and 2017 was \$8.3 million, \$7.4 million and \$9.6 million, respectively. This intrinsic value represents the difference between the fair market value of the Company's common stock on the date of exercise and the exercise price of each equity award.

The aggregate intrinsic value of options and SARs outstanding at March 31, 2019 was \$14.9 million. The aggregate intrinsic value of options and SARs exercisable at March 31, 2019 was \$14.8 million. The aggregate intrinsic values were calculated based on the closing price of the Company's common stock of \$82.96 per share on March 29, 2019.

As of March 31, 2019 and March 31, 2018, the number of option and SAR shares exercisable was 278,591 and 224,022, respectively, and the weighted average exercise price per share was \$30.03 and \$29.96, respectively.

There were no stock options granted in the years ended March 31, 2019, 2018 and 2017.

Note 17. Commitments

The Company leases office space and transportation and other equipment under operating leases which expire at various dates through September 2032. The future minimum lease commitments under these operating leases at March 31, 2019 were as follows (in millions):

Year Ending March 31,	Amount
2020	\$ 49.0
2021	38.2
2022	30.2
2023	18.0
2024	9.1
Thereafter	22.6
Total minimum payments	\$ 167.1

The terms of the leases do not contain significant restriction provisions and usually contain standard rent escalation clauses as well as options for renewal. Rental expense under operating leases totaled \$50.9 million, \$30.0 million and \$35.4 million for fiscal 2019, 2018 and 2017, respectively.

Commitments for construction or purchase of property, plant and equipment totaled \$18.8 million as of March 31, 2019, all of which will be due within the next year. Other purchase obligations and commitments totaled approximately \$194.9 million, which includes outstanding purchase commitments with the Company's wafer foundries and other suppliers, for delivery in fiscal 2020.

Note 18. Geographic and Segment Information

The Company's reportable segments are semiconductor products and technology licensing. The Company does not allocate operating expenses, interest income, interest expense, other income or expense, or provision for or benefit from income taxes to these segments for internal reporting purposes, as the Company does not believe that allocating these expenses is beneficial in evaluating segment performance. Additionally, the Company does not allocate assets to segments for internal reporting purposes as it does not manage its segments by such metrics.

The following table represents net sales and gross profit for each segment (in millions):

	Years ended March 31,					
	2019		2018		2017	
	Net Sales	Gross Profit	Net Sales	Gross Profit	Net Sales	Gross Profit
Semiconductor products	\$ 5,217.1	\$ 2,798.9	\$ 3,876.0	\$ 2,315.9	\$ 3,316.6	\$ 1,666.0
Technology licensing	132.4	132.4	104.8	104.8	91.2	91.2
Total	\$ 5,349.5	\$ 2,931.3	\$ 3,980.8	\$ 2,420.7	\$ 3,407.8	\$ 1,757.2

The Company sells its products to distributors and original equipment manufacturers (OEMs) in a broad range of market segments, performs on-going credit evaluations of its customers and, as deemed necessary, may require collateral, primarily letters of credit. The Company's operations outside the U.S. consist of product assembly and final test facilities in Thailand, and sales and support centers and design centers in certain foreign countries. Domestic operations are responsible for the design, development and wafer fabrication of products, as well as the coordination of production planning and shipping to meet worldwide customer commitments. The Company's Thailand assembly and test facility is reimbursed in relation to value added with respect to assembly and test operations and other functions performed, and certain foreign sales offices receive compensation for sales within their territory. Accordingly, for financial statement purposes, it is not meaningful to segregate sales or operating profits for the assembly and test and foreign sales office operations. Identifiable long-lived assets (consisting of property, plant and equipment net of accumulated amortization) by geographic area are as follows (in millions):

	March 31,	
	2019	2018
United States	\$ 521.1	\$ 393.3
Thailand	209.3	215.5
Various other countries	266.3	159.1
Total long-lived assets	\$ 996.7	\$ 767.9

Sales to unaffiliated customers located outside the U.S., primarily in Asia and Europe, aggregated approximately 80% of consolidated net sales for fiscal 2019 and approximately 85% and 84% of net sales during fiscal 2018 and fiscal 2017, respectively. Sales to customers in Europe represented approximately 23% of consolidated net sales for fiscal 2019 and approximately 24% of consolidated net sales for each of fiscal 2018 and fiscal 2017. Sales to customers in Asia represented approximately 52% of consolidated net sales for fiscal 2019 and approximately 58% of consolidated net sales for each of fiscal 2018 and 2017. Within Asia, sales into China represented approximately 22%, 30% and 32% of consolidated net sales for fiscal 2019, 2018 and 2017, respectively. Sales into Taiwan represented approximately 13%, 11% and 9% of consolidated net sales for fiscal 2019, 2018 and 2017, respectively. Sales into any other individual foreign country did not exceed 10% of the Company's net sales for any of the three years presented.

With the exception of Arrow Electronics, the Company's largest distributor, which made up 10% of net sales, no other distributor or end customer accounted for more than 10% of net sales in fiscal 2019. In fiscal 2018 and fiscal 2017, no distributor or end customer accounted for more than 10% of net sales.

Note 19. Derivative Instruments*Freestanding Derivative Forward Contracts*

The Company has international operations and is thus subject to foreign currency rate fluctuations. Approximately 99% of the Company's sales are U.S. Dollar denominated. However, a significant amount of the Company's expenses and liabilities are denominated in foreign currencies and subject to foreign currency rate fluctuations. To help manage the risk of changes in foreign currency rates, the Company periodically enters into derivative contracts comprised of foreign currency forward contracts to hedge its asset and liability foreign currency exposure and a portion of its foreign currency operating expenses. Foreign exchange rate fluctuations after the effects of hedging activity resulted in net gains of \$1.7 million, \$9.3 million and \$1.0 million in fiscal 2019, 2018 and 2017, respectively. As of March 31, 2019 and 2018, the Company had no foreign currency forward contracts outstanding. The Company recognized an immaterial amount of net losses and gains on foreign currency forward contracts in the year ended March 31, 2019, compared to net gains of \$4.2 million and net losses of \$2.3 million in the years ended March 31, 2018 and 2017, respectively. Gains and losses from changes in the fair value of these foreign currency forward contracts and foreign currency exchange rate fluctuations are credited or charged to other (loss) income, net. The Company does not apply hedge accounting to its foreign currency derivative instruments.

Commodity Price Risk

The Company is exposed to fluctuations in prices for energy that it consumes, particularly electricity and natural gas. The Company also enters into variable-priced contracts for some purchases of electricity and natural gas, on an index basis. The Company seeks, or may seek, to partially mitigate these exposures through fixed-price contracts. These contracts meet the characteristics of derivative instruments, but generally qualify for the "normal purchases or normal sales" exception under authoritative guidance and require no mark-to-market adjustment.

Note 20. Net Income Per Common Share From Continuing Operations

The following table sets forth the computation of basic and diluted net income per common share from continuing operations (in millions, except per share amounts):

	Year Ended March 31,		
	2019	2018	2017
Net income from continuing operations	\$ 355.9	\$ 255.4	\$ 170.6
Basic weighted average common shares outstanding	236.2	232.9	217.2
Dilutive effect of stock options and RSUs	3.8	4.4	4.4
Dilutive effect of 2007 Junior Convertible Debt	—	1.3	12.7
Dilutive effect of 2015 Senior Convertible Debt	9.9	10.3	0.5
Dilutive effect of 2017 Senior Convertible Debt	—	—	—
Dilutive effect of 2017 Junior Convertible Debt	—	—	—
Diluted weighted average common shares outstanding	249.9	248.9	234.8
Basic net income per common share from continuing operations	\$ 1.51	\$ 1.10	\$ 0.79
Diluted net income per common share from continuing operations	\$ 1.42	\$ 1.03	\$ 0.73

The Company computed basic net income per common share from continuing operations based on the weighted average number of common shares outstanding during the period. The Company computed diluted net income per common share from continuing operations based on the weighted average number of common shares outstanding plus potentially dilutive common shares outstanding during the period.

Potentially dilutive common shares from employee equity incentive plans are determined by applying the treasury stock method to the assumed exercise of outstanding stock options and the assumed vesting of outstanding RSUs. Weighted average common shares exclude the effect of option shares which are not dilutive. There were no anti-dilutive option shares for the years ended March 31, 2019, 2018, and 2017.

Diluted weighted average common shares outstanding for fiscal 2018 and 2017 includes 1.3 million and 12.7 million shares, respectively, issuable upon the exchange of the Company's 2007 Junior Convertible Debt. The Company's 2007 Junior Convertible Debt was fully settled as of December 31, 2017 (see Note 12 for details on the settlement of debt), with the Company issuing an aggregate of 3.7 million shares of its common stock in the settlement of \$143.8 million principal amount

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in fiscal 2018 and an aggregate of 12.0 million shares of its common stock in the settlement of \$431.3 million principal amount in fiscal 2017. The shares that were issued were included in the weighted average dilutive common shares outstanding through the date of the issuance and were reflected in the weighted average common shares outstanding thereafter. Diluted weighted average common shares outstanding for fiscal 2019, 2018, and 2017 includes 9.9 million shares, 10.3 million shares, and 0.5 million shares, respectively, issuable upon the exchange of the Company's 2015 Senior Convertible Debt. There were no shares issuable upon the exchange of the Company's 2017 Junior Convertible Debt or the Company's 2017 Senior Convertible Debt. The convertible debt has no impact on diluted net income per common share unless the average price of the Company's common stock exceeds the conversion price because the principal amount of the debentures will be settled in cash upon conversion. Prior to conversion, the Company will include, in the diluted net income per common share calculation, the effect of the additional shares that may be issued when the Company's common stock price exceeds the conversion price using the treasury stock method. The following is the weighted average conversion price per share used in calculating the dilutive effect (See Note 12 for details on the convertible debt):

	Year Ended March 31,		
	2019	2018	2017
2007 Junior Convertible Debt ⁽¹⁾	N/A	\$ 23.59	\$ 24.01
2015 Senior Convertible Debt	\$ 62.86	\$ 63.94	\$ 65.21
2017 Senior Convertible Debt	\$ 98.03	\$ 99.71	\$ 100.58
2017 Junior Convertible Debt	\$ 96.31	\$ 97.96	\$ 98.81

⁽¹⁾ No longer outstanding as of December 31, 2017.

Note 21. Quarterly Results (Unaudited)

The following table presents the Company's selected unaudited quarterly operating results for the eight quarters ended March 31, 2019. The Company believes that all adjustments of a normal recurring nature have been made to present fairly the related quarterly results (in millions, except per share amounts). Amounts may not add to the total due to rounding:

Fiscal 2019	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net sales	\$ 1,212.5	\$ 1,432.5	\$ 1,374.7	\$ 1,329.8	\$ 5,349.5
Gross profit	\$ 642.0	\$ 689.3	\$ 779.6	\$ 820.5	\$ 2,931.3
Operating income	\$ 132.3	\$ 102.7	\$ 194.7	\$ 284.6	\$ 714.3
Net income from continuing operations	\$ 35.7	\$ 96.3	\$ 49.2	\$ 174.7	\$ 355.9
Diluted net income per common share	\$ 0.14	\$ 0.38	\$ 0.20	\$ 0.70	\$ 1.42

Fiscal 2018	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net sales	\$ 972.1	\$ 1,012.1	\$ 994.2	\$ 1,002.3	\$ 3,980.8
Gross profit	\$ 584.4	\$ 614.1	\$ 607.1	\$ 615.1	\$ 2,420.7
Operating income	\$ 221.6	\$ 225.4	\$ 245.2	\$ 244.1	\$ 936.3
Net income from continuing operations	\$ 170.6	\$ 189.2	\$ (251.1)	\$ 146.7	\$ 255.4
Diluted net income per common share	\$ 0.70	\$ 0.77	\$ (1.07)	\$ 0.58	\$ 1.03

Refer to Note 11, Income Taxes, for an explanation of the one-time transition tax recognized in the third quarter of fiscal 2018. Refer to Note 4, Special Charges and Other, Net, for an explanation of the special charges included in operating income in fiscal 2019 and fiscal 2018. Refer to Note 12, Debt and Credit Facility, for an explanation of the loss on settlement of debt included in other (loss) income, net of \$4.1 million during the second quarter, \$0.2 million during the third quarter, and \$8.3 million during the fourth quarter of fiscal 2019 and \$13.8 million and \$2.1 million for the first quarter and third quarter of fiscal 2018, respectively. Refer to Note 5, Investments, for an explanation of the impairment recognized on available-for-sale securities in the fourth quarter of fiscal 2018.

Note 22. Supplemental Financial Information

Cash paid for income taxes amounted to \$77.6 million, \$25.9 million and \$48.4 million during fiscal 2019, 2018 and 2017, respectively. Cash paid for interest on borrowings amounted to \$347.9 million, \$85.3 million and \$82.5 million during fiscal 2019, 2018 and 2017, respectively.

A summary of additions and deductions related to the valuation allowance for deferred tax asset accounts for the years ended March 31, 2019, 2018 and 2017 follows (amounts in millions):

	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Additions Charged to Other Accounts	Deductions	Balance at End of Year
Valuation allowance for deferred tax assets:					
Fiscal 2019	\$ 204.5	\$ 16.2	\$ 175.8	\$ (64.4)	\$ 332.1
Fiscal 2018	\$ 210.1	\$ 36.2	\$ —	\$ (41.8)	\$ 204.5
Fiscal 2017	\$ 161.8	\$ 15.2	\$ 37.6	\$ (4.5)	\$ 210.1

A summary of additions and deductions related to the allowance for doubtful accounts for the years ended March 31, 2019, 2018 and 2017 follows (amounts in millions):

	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Deductions ⁽¹⁾	Balance at End of Year
Allowance for doubtful accounts:				
Fiscal 2019	\$ 2.2	\$ —	\$ (0.2)	\$ 2.0
Fiscal 2018	\$ 2.1	\$ 0.2	\$ (0.1)	\$ 2.2
Fiscal 2017	\$ 2.5	\$ 0.2	\$ (0.6)	\$ 2.1

⁽¹⁾ Deductions represent uncollectible accounts written off, net of recoveries.

Accumulated Other Comprehensive Income

The following tables present the changes in the components of accumulated other comprehensive income (AOCI) for the years ended March 31, 2019 and 2018:

	Unrealized Holding Gains (Losses) Available-for-sale Securities	Minimum Pension Liability	Foreign Currency	Total
Balance at March 31, 2018	\$ 1.9	\$ (10.1)	\$ (9.4)	\$ (17.6)
Impact of change in accounting principle	(1.7)	—	—	(1.7)
Opening Balance as of April 1, 2018	0.2	(10.1)	(9.4)	(19.3)
Other comprehensive loss before reclassifications	(5.6)	2.9	(5.3)	(8.0)
Amounts reclassified from accumulated other comprehensive income (loss)	5.6	1.0	—	6.6
Net other comprehensive income (loss)	—	3.9	(5.3)	(1.4)
Balance at March 31, 2019	\$ 0.2	\$ (6.2)	\$ (14.7)	\$ (20.7)

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	Unrealized Holding Gains (Losses) Available-for- sale Securities	Minimum Pension Liability	Foreign Currency	Total
Balance at March 31, 2017	\$ 0.3	\$ (5.3)	\$ (9.4)	\$ (14.4)
Other comprehensive loss before reclassifications	(13.6)	(5.6)	—	(19.2)
Amounts reclassified from accumulated other comprehensive income (loss)	15.2	0.8	—	16.0
Net other comprehensive loss	1.6	(4.8)	—	(3.2)
Balance at March 31, 2018	\$ 1.9	\$ (10.1)	\$ (9.4)	\$ (17.6)

The table below details where reclassifications of realized transactions out of AOCI are recorded on the consolidated statements of income (amounts in millions).

Description of AOCI Component	Year ended March 31,			Related Statement of Income Line
	2019	2018	2017	
Unrealized losses on available-for-sale securities	\$ (5.6)	\$ (15.2)	\$ (1.5)	Other income, net
Amortization of actuarial loss	(1.0)	(0.8)	—	Other income, net
Reclassification of realized transactions, net of taxes	\$ (6.6)	\$ (16.0)	\$ (1.5)	Net Income

Note 23. Dividends

On October 28, 2002, the Company announced that its Board of Directors had approved and instituted a quarterly cash dividend on its common stock. The Company has continued to pay quarterly dividends and has increased the amount of such dividends on a regular basis. Cash dividends paid per share were \$1.457, \$1.449 and \$1.441 during fiscal 2019, 2018 and 2017, respectively. Total dividend payments amounted to \$344.4 million, \$337.5 million and \$315.4 million during fiscal 2019, 2018 and 2017, respectively.

EXHIBIT 10.17

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Unless otherwise defined herein, the terms used in this Notice of Grant of Restricted Stock Units ("Grant Notice") shall have the same meanings as those defined in the 2004 Equity Incentive Plan (the "Plan").

Grantee: %%FIRST_NAME%- %LAST_NAME%-

You have been granted an Award of Restricted Stock Units ("RSUs") subject to and in accordance with the express terms and conditions of the Plan and the Restricted Stock Unit Agreement, including the appendix for your country, if any ("Appendix" and together with the Restricted Stock Unit Agreement, the "Agreement") attached hereto as Exhibit A. The Plan and Agreement are incorporated herein in their entirety. Each RSU is equivalent to the right to receive one share of Common Stock of the Company ("Share") for purposes of determining the number of Shares subject to this Award. No Shares will be issued until the vesting conditions of the Award described below are satisfied and the restrictions lapse, subject to the terms and conditions set forth in the Plan and the Agreement. This Award does not entitle Grantee to any stockholder rights with respect to the underlying Shares until the vesting conditions of the Award described below are satisfied, the restrictions lapse and Shares are issued to him/her. Additional terms of this Award are as follows:

Grant Number: %%NUM %-%
Grant Date: %%OPTION_DATE,'Month DD, YYYY'%- %
Vest Begin Date: %%VEST_DATE_PERIOD1,'Month DD, YYYY'%- %;
Vesting Period: %VEST_PERIOD%
Purchase Price Per RSU \$0.00 (USD)
Total Number of RSU's Granted: %%TOTAL_SHARES_GRANTED%- %

Vesting Schedule. The RSUs vest and all restrictions lapse according to the following schedule: %VEST_SCHEDULE%. All vesting is contingent upon the Grantee's continual status as a Service Provider measured from the Grant Date through the applicable Vest Date.

Termination Period. This Award automatically terminates and Grantee's rights are forfeited with respect to any portion of the RSUs unvested on the date Grantee ceases to be a Service Provider or in the event that Grantee has not accepted this Grant in accordance with Company procedures 31 days or more prior to its Vest Begin Date. In no event shall this Award vest later than the Vesting Schedule outlined above.

Binding Agreements. By signature of Company's representative below, and Grantee's acceptance of this Grant in accordance with Company procedures, the parties agree that this Grant Notice, the Agreement, and the Plan constitute Grantee's entire agreement with respect to this Award and agree to be bound by the terms therein. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Agreement, and/or this Award. This Award may be modified by the Company, but in accordance with Section 21(c) of the Plan, it may not be modified adversely to Grantee's interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. The internal laws of the State of Arizona, United States of America, but not its choice of law principles, will govern this Award.

GRANTEE

MICROCHIP TECHNOLOGY INCORPORATED

Acceptance: **By Electronic Signature**

By: /s/ Steve Sanghi

Steve Sanghi, President and CEO

Exhibit A

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNITS AGREEMENT

1. Grant of Restricted Stock Units. Microchip Technology Incorporated (the "Company") hereby grants to the Grantee named in the Notice of Grant of Restricted Stock Units ("Grant Notice") an Award of Restricted Stock Units ("RSUs"), as set forth in the Grant Notice and subject to the terms and conditions in this Restricted Stock Unit Agreement, including any appendix for the Grantee's country (the "Appendix" and together with the Restricted Stock Unit Agreement, the "Agreement") and the Company's 2004 Equity Incentive Plan (the "Plan"). Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Agreement.
2. Company's Obligation. Each RSU represents the right to receive a Share in accordance with the Vesting Period in the Grant Notice. Unless and until the RSUs vest, the Grantee will have no right to receive Shares underlying such RSUs. Prior to actual distribution of Shares pursuant to any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. Vesting Schedule. Subject to paragraph 4 of this Agreement, the RSUs awarded by this Agreement will vest and all restrictions lapse according to the vesting schedule specified in the Grant Notice.
4. Forfeiture upon Termination as a Service Provider. Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited (as determined in accordance with paragraph 10(j) below) at no cost to the Company.
5. Payment after Vesting. Any RSUs that vest in accordance with paragraph 3 of this Agreement will be paid to the Grantee (or in the event of the Grantee's death, to his or her estate) in Shares (unless otherwise determined by the Administrator and stated in the Appendix), upon satisfaction, as determined by the Company, of any Tax-Related Items as set forth in paragraph 9 of this Agreement. The Shares will be issued to the Grantee as soon as practicable after the Vesting Date, but in any event, within the period ending on the later to occur of the date that is two and a half (2 ½) months from the end of (i) the Grantee's tax year that includes the applicable Vesting Date, or (ii) the Company's tax year that includes the applicable vesting date.
6. Payments after Death. Any distribution or delivery to be made to the Grantee under this Agreement will, if the Grantee is then deceased, be made to the administrator or executor of the Grantee's estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.
7. Grant is Not Transferable. Except to the limited extent provided in paragraph 6 of this Agreement, RSUs may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of the RSUs, or any right or privilege

conferred hereby, or upon any attempted sale under any execution, attachment or similar process, the RSUs grant and the rights and privileges conferred hereby immediately will become null and void.

8. Rights as Stockholder. Neither the Grantee nor any person claiming under or through the Grantee will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until the Grantee's rights with respect to the RSUs have become vested and certificates representing such Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Grantee or Grantee's broker or the Shares have been electronically transferred to Grantee's account.

9. Tax Obligations. The Grantee acknowledges that regardless of any action taken by the Company or, if different, the Grantee's employer (the "Employer"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the Grantee's participation in the Plan and legally applicable to the Grantee ("Tax-Related Items"), is and remains the Grantee's responsibility and may exceed the amount actually withheld by the Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant or vesting of the RSUs, the issuance of Shares on the relevant Vesting Date, the subsequent sale of Shares acquired at vesting of the RSUs, if any, and the receipt of any dividends; and (2) do not commit and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Grantee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee becomes subject to Tax-Related Items in more than one jurisdiction between the Grant Date and the date of any relevant taxable, tax and/or social security contribution withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable, tax and/or social security contribution withholding event, as applicable, the Grantee shall pay or make appropriate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, by the Grantee's acceptance of the RSUs, the Grantee authorizes and directs the Company and/or the Employer and any brokerage firm determined acceptable by the Company, at their sole discretion, to satisfy any applicable withholding obligations with respect to Tax-Related Items by one or a combination of the following: (i) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (ii) withholding from proceeds of the sale of Shares acquired upon vesting of the RSUs, either through a voluntary sale or through a mandatory sale arrangement by the Company (on the Grantee's behalf pursuant to this authorization); or (iii) withholding in Shares to be issued upon vesting of the RSUs; or (iv) by requiring direct payment from the Grantee in cash (or its equivalent).

Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates, including maximum applicable rates, in which case the Grantee will receive a refund of any over-withheld amount in cash and will have no entitlement to the Stock equivalent. If the Grantee's and/or the Company's withholding obligations for Tax-Related Items are satisfied as described in (iii) of this paragraph, the Company will endeavor to sell only the number of Shares required to satisfy the Grantee's and/or the Company's withholding obligations for Tax-Related Items; however, the Grantee agrees that the Company may sell more Shares than necessary to satisfy the Tax-Related Items. Further, the Grantee will be deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of Shares is held back solely for purposes of paying the Tax-Related Items due as a result of any aspect of the Grantee's

participation in the Plan. The Grantee hereby consents to any action reasonably taken by the Company to satisfy his or her obligations for Tax-Related Items.

Finally, the Grantee agrees to pay the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares at vesting if the Grantee fails to comply with his or her obligations in connection with the Tax-Related Items.

10. Nature of Grant. In accepting the RSUs, the Grantee expressly acknowledges, understands and agrees to the following:

- (a) the Plan is established voluntarily by the Company, is discretionary in nature, and may be modified, amended, suspended or terminated by the Company at any time;
- (b) the grant of the RSUs is exceptional, voluntary, occasional and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted in the past;
- (c) all decisions with respect to future RSUs or other awards, if any, will be at the sole discretion of the Company;
- (d) the Award of RSUs and the Grantee's participation in the Plan shall not create a right to employment or be interpreted as forming an employment or service relationship and shall not interfere with the ability of the Company and/or the Employer to terminate the Grantee's status as a Service Provider, if any;
- (e) the Grantee is voluntarily participating in the Plan;
- (f) the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not intended to replace any pension rights or compensation;
- (g) the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not part of normal or expected salary or compensation for any purposes, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement or welfare benefits, or any other payments, benefits or rights of any kind, and in no event should be considered as compensation for, or relating in any way to, past services for the Company, the Employer or any Subsidiary;
- (h) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;
- (i) no claim or entitlement to compensation or damages shall arise from the forfeiture of the RSUs resulting from termination of the Grantee's as a Service Provider (for any reason whatsoever, whether or not later found to be invalid or in breach of employment or other laws in the jurisdiction where the Grantee is employed or otherwise rendering services, or the terms of the Grantee's employment or service agreement, if any), and in consideration of the Award of the RSUs to which the Grantee is otherwise not entitled, the Grantee agrees not to institute any claim against the Company or the Employer;
- (j) for purposes of the Award of RSUs, the Grantee's status as a Service Provider will be considered terminated as of the date the Grantee is no longer providing services to the Company or any Parent or

Subsidiary (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or rendering services or the terms of the Grantee's employment or service agreement, if any), and will not be extended by any notice period (e.g., the Grantee's period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the Grantee is employed or rendering services or the terms of the Grantee's employment or service agreement, if any). The Administrator shall have the exclusive discretion to determine when the Grantee is no longer actively providing services for purposes of the RSUs (including whether the Grantee may still be considered to be providing services while on a leave of absence).

(k) unless otherwise agreed with the Company, the RSUs and the Shares subject to the RSUs, and the income from and value of same, are not granted in consideration for, or in connection with the service the Grantee may provide as a director of a Subsidiary or Affiliate of the Company; and

(l) neither the Company, the Employer nor any Parent or Subsidiary shall be liable for any foreign exchange rate fluctuation between the Grantee's local currency and the U.S. Dollar that may affect the value of the RSUs or any amounts due to the Grantee pursuant to the settlement of the RSUs or the subsequent sale of Shares acquired upon settlement.

11. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying Shares. The Grantee understands and agrees that he or she should be advised to consult with his or her own personal tax, legal, and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

12. ***Data Privacy. The Grantee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her personal data as described in this Agreement and any other grant materials, by and among, as applicable, the Company, the Employer or any other Parent or Subsidiary for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.***

(i) ***The Grantee understands that the Company, Employer and any other Parent, or Subsidiary may hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address, email address and telephone number, date of birth, Company identification number (used in the Company's stock database), social insurance number, passport or other identification number, salary, date of hire and employment status, nationality, job title, any Shares or directorships held in the Company, details of all purchase rights, stock options, RSUs or any other entitlement to Company Shares awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.***

(ii) ***The Grantee understands and agrees that Data may be transferred to E*Trade or any other broker or stock plan service provider that may be designated by the Company and any other third parties assisting in the implementation, administration and management of the Plan, that these recipients may be located in the Grantee's country or elsewhere, including in the United States, and that the Grantee's country may have different data privacy laws and protections than my country; provided however, that the Grantee's Data is not transferred in instances where applicable law expressly prohibits the Grantee from consenting to such transfer, or makes it unlawful to require the Grantee's consent to such transfer as a condition of participation. The***

*Grantee undertakes to provide any additional Data as may be required from time to time by E*Trade or other broker as may be designated by the Company in the future in order for them to maintain and/or modify the Grantee's brokerage account or as otherwise may be required to provide brokerage services to Grantee.*

*(iii) The Grantee understands that he or she may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. The Grantee authorizes such recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Grantee's participation in the Plan, including any requisite transfer of such Data as may be required to E*Trade or any other broker or other third party with whom the Grantee may elect to deposit any Shares acquired upon exercise or vesting, as applicable, of purchase rights, stock options, RSUs or other awards granted to the Grantee by the Company.*

*(iv) The Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan and that such Data will be protected against unauthorized or unlawful processing and against accidental loss or destruction. The Grantee understands that the Grantee may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting the Microchip Human Resources Department in Chandler, Arizona, U.S.A. in writing. The Grantee understands, however, that refusing or withdrawing the Grantee's consent may affect the Grantee's ability to exercise or realize benefits from purchase rights, stock options, restricted stock units or any other awards the Grantee may receive under the Plan, to satisfy any applicable taxes due in connection with the Grantee's participation in the Plan or to otherwise participate in the Plan. The Grantee further understands that by refusing or withdrawing his or her consent, the Grantee will be unable to use his or her E*Trade account to view the status of the Grantee's awards or to use the modeling features. For more information on the consequences of the Grantee's refusal to consent or withdrawal of consent, the Grantee understands that the Grantee may contact his or her local human resources representative.*

(v) Finally, the Grantee acknowledges and agrees that the Company may, in its sole discretion, decide to deliver any documents related to any awards granted or Shares acquired under the Plan or participation in the Plan or future awards that may be awarded under the Plan by electronic means or request that the Grantee consent to participate in the Plan and agree to the collection, use and transfer of the Grantee's Data in connection with the Plan by electronic means, including through the use of click-through electronic acceptance procedures. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company. The Grantee hereby specifically acknowledges and agrees that his or her acceptance of any documents or agreements provided under the Plan by means of a click-through acceptance procedure will constitute a valid and legally binding acceptance on the Grantee's part of all terms and conditions contained in such documents or agreements.

13. Language. If the Grantee receives this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to the Grantee (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

16. Administrator Authority. The Administrator has the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application thereof as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Grantee, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, the Grant Notice or this Agreement.

17. Notice Requirement. Where there is a legal requirement for any notice or document to be sent to any person by any other person, it shall be considered sent if an electronic transmission of the relevant information is sent in a form previously determined as being acceptable to the Administrator. For the avoidance of doubt, the Administrator may dispense with the requirement to tender a certificate on the issuance of Shares under an RSU Award where the Administrator authorizes any system permitting electronic notification.

18. Address for Notices. Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at 2355 West Chandler Boulevard, Chandler AZ 85224, U.S.A. Attn: Stock Administration, or at such other address as the Company may hereafter designate in writing or electronically.

19. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an online or electronic system established and maintained by the Company or a third party designated by the Company.

20. Appendix. Notwithstanding any provisions in this Agreement, the RSUs shall be subject to any special terms and conditions for the Grantee's country set forth in the Appendix. Moreover, if the Grantee relocates to one of the countries included in the Appendix, the special terms and conditions for such country shall apply to the Grantee, to the extent that the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

21. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the RSUs and on any Shares acquired under this Award, to the extent that the Company determines it is necessary or advisable to comply with local law or facilitate the administration of the Plan, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

22. Entire Agreement; Governing Law. The Plan and Grant Notice are incorporated herein by reference. The Plan, Grant Notice and this Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Grantee with respect to the subject matter hereof, and may not be modified adversely to the Grantee's interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. This Agreement, the Grant Notice and all Awards are governed by the internal substantive laws, but not the choice of law principles, of the State of Arizona, United States of America.

For purposes of litigating any dispute that arises under this grant or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Arizona and agree that such litigation shall be conducted in the courts of Maricopa County, Arizona, or the federal courts for the United States for the District of Arizona, where this grant is made and/or to be performed.

23. Severability. The provisions of this Agreement are severable, and, if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions nevertheless shall be binding and enforceable.

24. Waiver. The Grantee acknowledges that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by the Grantee or any other grantee.

25. Insider Trading/Market Abuse Laws. The Grantee acknowledges that, depending on his or her country, the Grantee may be subject to insider trading restrictions and/or market abuse laws, which may affect his or her ability to acquire or sell Shares or rights to Shares (e.g., RSUs) under the Plan during such times as the Grantee is considered to have "inside information" regarding the Company (as defined by the laws in the Grantee's country). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under the Company's insider trading policy. The Grantee acknowledges that it is his or her responsibility to comply with any applicable restrictions, including those imposed under the Company's insider trading policy, and the Grantee is advised to consult with his or her own personal legal and financial advisors on this matter before taking any action related to the Plan.

26. Foreign Asset / Account Reporting Requirements, Exchange Controls. The Grantee acknowledges that his or her country may have certain foreign asset and/or account reporting requirements and exchange controls which may affect his or her ability to acquire or hold Shares under the Plan or cash received from participating in the Plan (including from any dividends received or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside his or her country. The Grantee understands that he or she may be required to report such accounts, assets or transactions to the tax or other authorities in his or her country. The Grantee also may be required to repatriate sale proceeds or other funds received as a result of the Grantee's participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. In addition, the Grantee may be subject to tax payment and/or reporting obligations in connection with any income realized under the Plan and/or from the sale of Shares. The Grantee acknowledges that it is his or her responsibility to be compliant with all such requirements, and that the Grantee should consult his or her personal legal and tax advisors, as applicable, to ensure the Grantee's compliance.

By the Grantee's electronic acceptance of the Agreement, the Grantee agrees that this Award is granted under and governed by the terms and conditions of the Plan, the Grant Notice and this Agreement. The Grantee has reviewed the Plan, the Grant Notice and this Agreement in their entirety, has had an opportunity to obtain

the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan, the Grant Notice and this Agreement. The Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Grant Notice and this Agreement.

GRANTEE

MICROCHIP TECHNOLOGY INCORPORATED

Acceptance: **By Electronic Agreement**

By: /s/ Steve Sanghi

Steve Sanghi, Chairman and CEO

APPENDIX

COUNTRY-SPECIFIC TERMS AND CONDITIONS OF THE MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN RESTRICTED STOCK UNITS AGREEMENT

Certain capitalized terms used but not defined in this Appendix have the meanings set forth in the Plan and/or the Agreement.

This Appendix contains additional terms and conditions that shall be applicable to the RSUs granted to the Grantee if he or she resides and/or works in one of the countries listed below. If the Grantee is a citizen or resident (or is considered as such for local law purposes) of a country other than the country in which the Grantee is currently residing and/or working, or if the Grantee relocated to another country after the RSUs are granted, the Grantee acknowledges and agrees that the Company will, in its discretion, determine the extent to which the terms and conditions contained herein will be applicable to the Grantee.

This Appendix may also include information regarding exchange controls and certain other issues of which the Grantee should be aware with respect to participation in the Plan. The information is based on the securities, exchange control, and other laws in effect in the respective countries as of July, 2017. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Grantee not rely on the information contained herein as the only source of information relating to the consequences of his or her participation in the Plan because the information may be out of date at the time the Grantee vests in the RSUs or sells Shares acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Grantee's particular situation, and the Company is not in a position to assure the Grantee of a particular result. Accordingly, the Grantee is advised to seek appropriate professional advice as to how the relevant laws in his or her country may apply to the Grantee's particular situation.

AUSTRALIA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Australian Offer Document. The Grantee understands that the offering of the Plan in Australia is intended to qualify for exemption from the prospectus requirements under Australian Securities & Investments Commission ("ASIC") Class Order 14/1000 and relevant provisions of the *Corporations Act 2001*. Additional details are set forth in the Offer Document for the Offer of RSUs to Australian Resident Employees.

Exchange Control Information. Exchange control reporting is required for cash transactions exceeding AUD 10,000 and for international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on behalf of the Grantee.

Tax Information. The Plan is a plan to which subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies (subject to conditions in the Act).

AUSTRIA

Exchange Control Notification. If the Grantee holds Shares or cash (including proceeds from the sale of Shares) obtained through the Plan outside of Austria, the Grantee may be required to submit reports to the Austrian National Bank. An exemption applies if the value of the Shares on any given quarter does not exceed €30,000,000 or if the value of the Shares in any given year as of December 31 does not exceed €5,000,000. If the former threshold is exceeded, quarterly obligations are imposed, whereas if the latter threshold is exceeded, annual reports must be given. The deadline for filing the annual report is January 31 of the following year and the deadline for the quarterly report is the 15th of the month following the end of the respective quarter.

A separate reporting requirement applies when the Grantee sells Shares acquired under the Plan or receives a dividend. In that case, there may be exchange control obligations if the cash proceeds are held outside of Austria. If the transaction volume of all accounts abroad exceed €10,000,000, the movement and balances of all accounts must be reported monthly, on a prescribed form (*Meldungen SI-Forderungen und/oder SI-Verpflichtungen*).

BELGIUM

Foreign Asset/Account Information Reporting. If the Grantee is a Belgian resident, the Grantee is required to report any security (*e.g.*, Shares acquired under the Plan) or bank account (including any brokerage account held by you at E*Trade Financial or other stock plan service provider as may be selected by the Company in the future) held outside Belgium on Grantee's annual income tax return. In a separate report, the Grantee must provide the National Bank of Belgium with certain details regarding such foreign accounts (including the account number, bank name and country in which such account was opened). The forms to complete this report are available on the National Bank of Belgium website. Belgian residents should consult with their personal tax advisors to determine their reporting obligations.

Stock Exchange Tax. From January 1, 2017, a stock exchange tax applies to transactions executed by a Belgian resident through a non-Belgian financial intermediary, such as a U.S. broker. The stock exchange tax will likely apply when the Shares are sold. The Grantee should consult with his personal tax advisor for additional details on his or her obligations with respect to the stock exchange tax.

Agreement for the Grantees in Belgium. Under Belgian tax law, if the Shares acquired at vesting of RSUs cannot be sold for two years from the Vesting Date, the fair market value of the Shares on the Vesting Date is deemed to be 100/120 (83 1/3%) of the actual fair market value of such shares for purposes of calculating the taxable amount. **If the Grantee would like to take advantage of this favourable tax treatment, the Grantee must print, sign and return a copy of the Agreement Regarding a Two Year Lock Up Period for Shares Acquired Upon Vesting of Restricted Stock Units attached as Exhibit A to this Agreement by the deadline specified therein.**

CANADA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Termination of Employment. The following supplements replaces paragraph 10(j) of the Agreement:

Notwithstanding anything in the Plan or the Agreement to the contrary, for purposes of the RSUs, the Grantee's status as a Service Provider will be considered terminated (regardless of the reason for such

termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Grantee is employed or rendering services or the terms of the Grantee's employment or service agreement, if any), as of the date that is the earliest of (i) the date of termination as a Service Provider, (ii) the date on which the Grantee receives a notice of termination of employment, and (iii) the date on which the Grantee is no longer actively providing services to the Company or the Parent or Subsidiary, and shall not include or be extended by any period following such day during which the Grantee is in receipt of or eligible to receive any notice of termination, pay in lieu of notice of termination, severance pay or other payments or damages, where arising under statute, contract, or at common law. The Administrator shall have the exclusive discretion to determine when the Grantee is no longer actively providing services for purposes of the RSUs (including whether the Grantee may still be considered to be providing services while on a leave of absence).

Securities Law Information. The Grantee is permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan, if any, provided that the resale of such Shares takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed (i.e., the NASDAQ Global Select Market).

Foreign Asset / Account Reporting. Any foreign property (including Shares and RSUs acquired under the Plan) must be reported to the Canada Revenue Agency on form T1135 (Foreign Income Verification Statement) if the total cost of the Grantee's foreign property exceeds C\$100,000 at any time in the year. Thus, if the C\$100,000 cost threshold is exceeded by other foreign property held by the Grantee, the RSUs must be reported (generally at nil cost). For purposes of such reporting, Shares acquired under the Plan may be reported at their adjusted cost base ("ACB"). The ACB would normally equal the fair market value of the Shares at time of vesting, but if the Grantee owns other Shares, this ACB may have to be averaged with the ACB of the other Shares.

The following terms and conditions apply if the Grantee is in Quebec:

Authorization to Release and Transfer Necessary Personal Information. The following provision supplements paragraph 12 of the Agreement:

The Grantee hereby authorizes the Company (including any Parent, Subsidiary or Affiliate) and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. The Grantee further authorizes the Company, any Parent, Subsidiary or Affiliate and the administrator of the Plan to disclose and discuss the Plan with their advisors. The Grantee further authorizes the Company, any Parent, Subsidiary or Affiliate to record and keep such information in the Grantee's employment file.

English Language Provision. The following provision supplements paragraph 13 of the Agreement:

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

CHINA

Deposit of Shares and Distribution of Dividends. Due to exchange control laws and regulations in the People's Republic of China ("PRC"), if the Grantee is a PRC national, any Shares acquired at vesting of the RSUs will be deposited in an account established for Grantee by the Company (the "Account") with E*Trade Financial or any successor broker designated by Company, in its sole discretion (the "Designated Broker"). Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to any person, broker or other account with the Designated Broker or to a brokerage account outside of the Designated Broker.

Any dividends related to Shares acquired under the Plan may, at the Company's sole discretion, be deposited into an Account with the Designated Broker, or re-invested by Company on behalf of the Grantee.

Until such time as the Shares acquired at vesting of the RSUs are sold, the Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to another account with the Designated Broker or to a brokerage account outside of the Designated Broker. Due to local regulatory requirements, you agree that the Company may force the sale of the Shares within any time frame as the Company determines to be necessary or advisable for legal or administrative reasons.

Forfeiture and Sale upon Termination as a Service Provider. The following provision replaces paragraph 4 of the Agreement:

(a) Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited at no cost to the Company.

(b) The Grantee must sell all Shares acquired under the Plan on or before the date of termination as a Service Provider. Grantee hereby authorizes Company or the Designated Broker to sell such Shares on behalf of the Grantee without notice to or consent from the Grantee if Grantee has not sold all Shares so acquired as of the date of termination of service. The sale of Shares shall be carried out within a reasonable time of termination of service as determined by Company. The proceeds from such sale, net any Tax-Related Items and broker's fees, shall be deposited in the Grantee's bank account in China, or delivered to the Grantee in China through such other means determined by Company, in its discretion. The Grantee hereby releases and holds harmless Company and any Parent or Subsidiary, employees and agents ("Indemnitees") from any loss that the Grantee may incur due to the timing of the sale of Shares by Company and acknowledges that the Company and the Employer are under no obligation to arrange for the sale of the Shares at any particular price and are not liable for any fluctuations in the trading price of the Shares and/or the U.S. dollar exchange rate.

(c) If the Grantee does transfer Shares into an account to which Company has no visibility, then the Grantee will sell all Shares no later than the date of termination as a Service Provider and provide written evidence of such sale of Shares to Company within two (2) business days of the date of termination as a Service Provider. Such evidence must be in a form acceptable to Company.

(d) The Grantee shall defend, hold harmless and indemnify Indemnitees from any and all penalties, damages, and costs that may be incurred by Indemnitees arising out of or in connection with the Grantee's failure to comply with these obligations and any requirements under local exchange control laws applicable to him/her.

Exchange Control Restriction. The Grantee understands and agrees that, if he or she is a PRC national, due to exchange control laws and regulations in the PRC, the Grantee will be required to repatriate immediately to the PRC any cash proceeds from the sale of the Shares acquired under the Plan. The Grantee understands further that, under applicable laws and regulations, such repatriation may need to be effected through a special foreign exchange account established by the Company, or a Chinese Parent, Subsidiary or Affiliate,, and the Grantee consents and agrees that the proceeds from the sale of the Shares may be transferred to such special account before being delivered to the Grantee. Moreover, if the proceeds from the sale of the Shares are converted to local currency, the Grantee acknowledges that the Company (including its Parent and Subsidiary corporations) is under no obligation to secure any particular currency conversion rate and may face delays in converting the proceeds to local currency due to exchange control restrictions in the PRC. The Grantee agrees to bear the risk of any fluctuation in the U.S. dollar/local currency exchange rate between the date the Grantee realizes U.S. dollar proceeds from his or her participation in the Plan and the date that the Grantee receives cash proceeds converted to local currency. The Grantee also agrees to comply with any other requirements that may be imposed by the Company in the future to facilitate compliance with exchange control requirements in the PRC.

Foreign Asset/Account Reporting Information. The Grantee may be required to report to SAFE all details of your foreign financial assets and liabilities, as well as details of any economic transactions conducted with non-PRC residents.

DENMARK

Nature of Grant. The following provision supplements paragraph 10 of the Agreement:

In accepting the RSUs, the Grantee acknowledges that he or she understands and agrees that this grant relates to future services to be performed and is not a bonus or compensation for past service.

Notifications

Exchange Control Information. If the Grantee establishes accounts holding Shares or cash outside Denmark, the Grantee must report the account to the Danish Tax Administration. The form which should be used in this respect can be obtained from a local bank. (Please note that these obligations are separate from and in addition to the obligations described below.)

Securities/Tax Reporting Information. If the Grantee holds Shares acquired under the Plan in a brokerage account with a broker or bank outside Denmark, the Grantee is required to inform the Danish Tax Administration about the account. For this purpose, the Grantee must file a Form V (Erklaering V) with the Danish Tax Administration. The Form V must be signed both by the Grantee and by the applicable broker or bank where the account is held. By signing the Form V, the broker or bank undertakes to forward information to the Danish Tax Administration concerning the Shares in the account without further request each year. By signing the Form V, the Grantee authorizes the Danish Tax Administration to examine the account. A sample of the Form V can be found at the following website: www.skat.dk/SKAT.aspx?oId=90030&vId=0.

In addition, if the Grantee opens a brokerage account (or a deposit account with a U.S. bank) for the purpose of holding cash outside Denmark, the Grantee is also required to inform the Danish Tax Administration about this account. To do so, the Grantee must also file a Form K (Erklaering K) with the Danish Tax Administration. The Form K must be signed both by the Grantee and by the applicable broker or bank where the account is held. By signing the Form K, the broker/bank undertakes an obligation, without further request each year, to forward information to the Danish Tax Administration concerning the content of the account. By signing

the Form K, Grantee authorizes the Danish Tax Administration to examine the account. A sample of Form K can be found at the following website: www.skat.dk/SKAT.aspx?oId=73346&vId=0.

FINLAND

There are no country-specific provisions.

FRANCE

Consent to Receive Information in English. By accepting this Agreement providing for the terms and conditions of the RSUs, the Grantee confirms that he/she has read and understood the documents relating to this Award (*i.e.*, the U.S. Plan and this Agreement), which were provided in English. The Grantee accepts the terms of those documents accordingly.

En acceptant de manière électronique le présent Contrat d'Attribution décrivant les termes et conditions de votre attribution d'Actions Gratuites, vous confirmez ainsi avoir lu et compris les documents relatifs à cette attribution (*c'est-à-dire*, le Plan Américain et le présent Contrat d'Attribution) qui vous ont été communiqués en langue anglaise. Vous en acceptez les termes en connaissance de cause.

Foreign Asset/Account Reporting Information. The Grantee may hold Shares acquired under the Plan outside of France, provided that the Grantee declares all foreign accounts, whether open, current or closed, on his or her annual income tax return. Failure to comply could trigger significant penalties.

Tax Information. The RSUs are not intended to qualify for the special tax and social security treatment in France under Section L. 225-177 to L. 225-186-1.

GERMANY

Exchange Control Notification. Cross-border payments in excess of €12,500 must be reported monthly to the German Federal Bank. In the event that Grantee makes or receives a payment in excess of this amount, the Grantee must report the payment to Bundesbank electronically using the "General Statistics Reporting Portal" ("*Allgemeines Meldeportal Statistik*") available via Bundesbank's website (www.bundesbank.de).

HONG KONG

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Sale of Shares. In the event that the RSUs vest within six months of the Grant Date, the Grantee agrees that he or she will not sell any Shares thus acquired prior to the six-month anniversary of the Grant Date.

Securities Law Warning. WARNING: The offer of the RSUs and the Shares subject to the RSUs do not constitute a public offering of securities under Hong Kong law and are available only to Employees of the Company or its Subsidiaries participating in the Plan. The Grantee should be aware that the contents of this Agreement (including this Appendix), the Plan and any other RSU grant materials that the Grantee may receive have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. Nor have the documents been reviewed by any regulatory authority in Hong Kong. The RSUs are intended only for the personal use of each Grantee and may not be distributed to any other person. The Grantee is advised to exercise caution in relation to this offer. If the Grantee is in doubt about any of the contents of this Agreement (including

this Appendix) or the Plan or any other RSU grant materials, the Grantee should obtain independent professional advice.

HUNGARY

There are no country-specific provisions.

INDIA

Exchange Control Documentation. Due to Indian exchange control restrictions, Indian residents are required to repatriate the proceeds from the sale of Shares to India within 90 days of receipt and proceeds from any dividends within 180 days of receipt. The Grantee should receive a foreign inward remittance certificate (“FIRC”) from the bank where the foreign currency is deposited. The Grantee should retain the FIRC as evidence of the repatriation of funds in the event that the Reserve Bank of India, the Employer or the Company requests proof of repatriation. It is the Grantee’s responsibility to comply with applicable exchange control laws in India.

Foreign Asset / Account Reporting Notification. The Grantee is required to declare any foreign bank accounts and any foreign financial assets (including Shares held outside India) in the Grantee’s annual tax return. It is the Grantee's responsibility to comply with applicable tax laws in India.

IRELAND

Director Notification Requirement. Directors, shadow directors and secretaries of the Company’s Irish Parent or Subsidiary corporation whose interest in the Company represents more than 1% of the Company’s voting share capital are subject to certain notification requirements under the Irish Companies Act. Directors, shadow directors and secretaries must notify the Irish Parent or Subsidiary corporation in writing of their interest in the Company (e.g., RSUs, Shares, etc.) and the number and class of Shares or rights to which the interest relates within five days of the acquisition or disposal of Shares or within five days of becoming aware of the event giving rise to the notification. This notification requirement also applies with respect to the interests of a spouse or children under the age of 18 (whose interests will be attributed to the director, shadow director or secretary).

ISRAEL

Trustee Arrangement. The Grantee understands and agrees that the RSUs offered are subject to and in accordance with the terms of the Plan, Israeli Subplan (the “Subplan”), Agreement and the Israel Beneficiary 102 Undertaking. The Grantee understands that the RSUs shall be allocated under the provisions of the track referred to as the “Capital Gain Route,” according to Section 102(b)(2) and 102(b)(3) of the Israeli Income Tax Ordinance (“Section 102”) and shall be held by the trustee for the periods stated in Section 102. The Grantee hereby confirms that he or she has: (i) read and understands the Plan, Subplan, Agreement and Israel Beneficiary 102 Undertaking; (ii) received all the clarifications and explanations that the Grantee has requested; and (iii) had the opportunity to consult with his or her advisers before accepting the Agreement. In the event of any inconsistencies between the provisions of this Israeli Appendix and the Agreement, the provisions of this Appendix shall govern the RSUs and any Shares and in no event shall any term require shareholder approval as set out in Section 21(b) of the Plan.

Limited Transferability. This provision supplements Section 7 of the Agreement:

Subject to the provisions of the Plan, Section 102 and any rules or regulations or orders or procedures promulgated thereunder, to obtain favourable tax treatment for Capital Gain Route awards, the Grantee may not sell or transfer any RSU shares received upon vesting or received subsequently following any realization of rights until the lapse of the holding period required is met under Section 102. Notwithstanding the above, if any such sale or release occurs during the holding period, the sanctions under Section 102 and under any rules or regulation or orders or procedures promulgated thereunder will apply to and will be borne by the Grantee.

Issuance of Shares. This provision supplements paragraphs 5 and 8 of the Agreement:

If the vested RSUs are issued during the holding period, such Shares shall be restricted and held by E*Trade Financial or any successor broker and/or trustee designated by Company and the Trustee on the Grantee's behalf. In the event that the vested RSUs are issued after the expiration of the holding period, the Grantee may freely sell the shares held by E*Trade Financial, provided that the Grantee first complies with any Tax-Related Items stipulated under this Agreement to the Trustee's and the Company's satisfaction, or in trust on the Grantee's behalf to the Trustee.

Tax Obligations. This provision supplements paragraph 9 of the Agreement:

The Grantee hereby agrees to indemnify the Company (or any Subsidiary) and/or the Trustee and hold them harmless against and from any and all liability for any Tax-Related Items and other amounts, or interest or penalty thereon, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such amounts from any payment made to the Grantee. Any reference to the Company or the Employer shall include a reference to the Trustee. The Grantee hereby undertakes to release the Trustee from any liability in respect of any action or decisions duly taken and *bona fide* executed in relation to the Plan or any RSUs or Shares acquired under the Plan. The Grantee agrees to execute any and all documents which the Company or the Trustee may reasonably determine to be necessary in order to comply with the Israeli Income Tax Ordinance.

The Grantee shall not be liable for the Employer's components of payments to the national insurance institute, unless otherwise agreed by the Grantee and allowed by applicable tax laws. Furthermore, the Grantee agrees to indemnify the Company, the Employer and/or the Trustee and hold them harmless against and from any and all liability for any such tax or interest or penalty thereon that Grantee has agreed to pay, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax from any payment made to the Grantee for which the Grantee is responsible.

Notwithstanding anything to the contrary in the Agreement, no Tax-Related Items will be settled by withholding Shares, unless the ITA approves otherwise in writing.

Governing Law. This section supplements paragraph 22 of the Agreement:

To the extent any covenant, condition, or other provision of the Agreement and the rights of the Grantee hereunder are intended to be rights granted under Section 102 and therefore determined to be subject to Israeli law, such covenant, condition, or other provision of the Agreement shall be subject to applicable Israeli law, but shall in no way affect, impair, or invalidate any other provision of the Agreement, and the applicability of the Plan to such covenant, condition, or other provision of the Agreement.

Written Acceptance. The Grantee must print, sign and deliver the signed copy of the Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

Securities Law Information. The grant or RSUs does not constitute a public offering under the Securities Law, 1968.

**MICROCHIP TECHNOLOGY INCORPORATED
2004 EQUITY INCENTIVE PLAN**

ISRAEL BENEFICIARY 102 UNDERTAKING

If the Grantee has not already executed an Israel Beneficiary 102 Undertaking in connection with grants made under the Israeli Subplan, the Grantee must print, sign and deliver the signed copy of this Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

1. I hereby agree that any shares (the "Shares") (as defined by Section 102 of the Income Tax Ordinance [New Version], 1961) (the "Tax Ordinance") issued to me by Microchip Technology Incorporated according to and under the terms and conditions of the Plan and the Israeli Subplan adopted by Microchip Technology Incorporated as of 13 December 2013 (collectively, the "Plan") are granted to me to qualify under the capital gain tax treatment in accordance and pursuant to Section 102(b)(2) of the Tax Ordinance after 132 amendment ("Section 102") and the Income Tax Rules (Tax Relief upon the Allotment of Shares to Employees), 2003 (the "Rules") unless I am otherwise notified subject to Microchip Technology Incorporated's absolute discretion to change such election on future grants and subject to the Tax Authorities' approval.
2. I declare and confirm that I am familiar with the terms of Section 102, the Rules, and the implications and consequences of the chosen tax arrangement with respect to the Shares, and consent that all the terms and conditions set forth in Section 102 and the Rules, as shall be amended from time to time, shall apply to me and bind me.
3. I hereby declare and confirm that I am familiar with the provisions of the trust agreement signed between Microchip Technology Israel Ltd. and Tamir Fishman Trusts 2004 Ltd. (the "Trustee") (the "Trust Agreement"), including the deed of trust, attached to the Trust Agreement and constitute an integral part thereto ("Deed of Trust"), and I consent that the Trust Agreement and the Deed of Trust shall fully bind me.
4. Without derogating from the generality of the aforesaid, I agree that the Shares will be deposited in trust with the Trustee and be held in trust in accordance with Section 102, the Rules and the Trust Agreement.
5. I hereby declare and consent that any and all the rights that I shall be entitled to with respect to the Shares, including, without limitation, dividend and shares issued pursuant to adjustments made by Microchip Technology Incorporated and shall be subject to Section 102, the Rules and the Trust Agreement.
6. Without derogating from the generality of the aforesaid, I acknowledge that during the "Holding Period" as determined by the Tax Ordinance I am prevented from selling the Shares, or releasing them from the Trustee, before the termination of the

“Holding Period” and I understand the tax implications and consequences that may be applied as a result of breaching such obligation, as set by Section 102, which I am familiar with.

7. If I will cease to be an Israeli resident or if my employment will be terminated for any reason, the Shares shall remain subject to Section 102, the Rules and the Trust Agreement.
8. I hereby agree that any tax liability whatsoever arising from the grant, vesting of any restricted stock units, the sale of Shares, the release of Shares from the Trustee or any other event or act with respect to the Shares granted to me, shall be borne solely by me. I declare and consent that the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee shall make any tax payment due, out of the proceeds of any sale of Shares, to any tax authority, according to Section 102, the Rules, the Trust Agreement or any other compulsory payments or applicable law.
9. I understand that this grant of Shares under the capital gain track is conditioned upon the receipt, inter alia, of all required approvals from the tax authorities. Accordingly, to the extent that for whatever reason Microchip Technology Israel Ltd. shall not be granted an approval by the Israeli Tax Authorities under Section 102, I shall bear and pay any and all taxes and any other compulsory payments applicable to the grant, exercise, sale or other disposition of stocks; I hereby declare and consent for the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee to deduct any tax payment due, out of the proceeds of any sale of Shares, for any payment to the tax authorities, according to the Rules, or any other applicable compulsory payments.
10. I confirm that Microchip Technology Incorporated and/or the Trustee shall not be required to release any proceeds deriving from the sale of Shares, to me, until all required tax payments according to Section 102, the Rules and the Trust Agreement, including any other compulsory payments, or applicable law, have been fully assured.
11. I acknowledge that the Trustee is not a tax advisor and it is recommended that I consult a tax advisor before I accept this letter, any restricted stock units vest, sell any Shares or release them from the Trustee, or any other act.
12. I agree to indemnify Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee and to hold them harmless against and from any and all liability for any damage and/or loss and/or expense that might occur regarding the tax liability and/or the execution of the Trust Agreement.
13. I hereby agree to bear all the applicable fees and commissions involved in establishing and maintaining trust account in the Trustee's name, and in performing any action in the trust account.
14. I hereby agree to sign any document reasonably required at the company's and/or the Trustee's request.

15. I hereby confirm that I read this letter thoroughly, received all the clarifications and explanations I requested, I understand the contents of this letter and the obligations I undertake in signing it.

Name of the Beneficiary

I.D. Number

Signature

ITALY

Data Privacy Notice. The following provision replaces paragraph 12 of the Agreement:

The Grantee understands that the Employer, the Company and any Parent and/or Subsidiary may hold certain personal information about Grantee, including, without limitation, Grantee's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any directorships held in the Employer, the Company and any Parent and/or Subsidiary, any Shares owned, details of all RSUs, or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, managing, and administering the Plan ("Data").

The Grantee also understands that providing the Company with Data is necessary for the performance of the Plan and that the Grantee's refusal to provide such Data would make it impossible for the Company to perform its contractual obligations and may affect the Grantee's ability to participate in the Plan. The Controller of personal data processing is Microchip Technology Incorporated at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., and, pursuant to Legislative Decree no. 196/2003, its representative in Italy is Microchip Technology SRL with registered offices at Via Pablo Picasso 41, 20025 Legnano (MI) Italy.

*The Grantee understands that Data will not be publicized, but it may be transferred to E*Trade Financial (or one of its affiliates) or such other stock plan service provider as may be selected by the Company in the future (any such entity, "Broker"), or other third parties involved in the management and administration of the Plan. The Grantee understands that Data may also be transferred to the independent registered public accounting firm engaged by the Company. The Grantee further understands that the Company and/or any Parent and/or Subsidiary will transfer Data among themselves as necessary for the purpose of implementing, administering, and managing the Grantee's participation in the Plan, and that the Company or a Subsidiary may each further transfer Data to third parties assisting the Company in the implementation, administration, and management of the Plan, including any requisite transfer of Data to the Broker or other third party with whom the Grantee may elect to deposit any Shares acquired at vesting of the RSUs. Such recipients may receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing the Grantee's participation in the Plan. The Grantee understands that these recipients may be located in or outside the European Economic Area, such as in the United States or elsewhere. Should the Company exercise its discretion in suspending all necessary legal obligations connected with the management and administration of the Plan, it will delete Data as soon as it has completed all the necessary legal obligations connected with the management and administration of the Plan.*

The Grantee understands that Data processing related to the purposes specified above shall take place under automated or non-automated conditions, anonymously when possible, that comply with the purposes for which Data is collected and with confidentiality and security provisions, as set forth by applicable laws and regulations, with specific reference to Legislative Decree no. 196/2003.

The processing activity, including communication, the transfer of Data abroad, including outside of the European Economic Area, as herein specified and pursuant to applicable laws and regulations, does not require the Grantee's consent thereto, as the processing is necessary to performance of contractual obligations related to implementation, administration, and management of the Plan. The Grantee

understands that, pursuant to paragraph 7 of the Legislative Decree no. 196/2003, the Grantee has the right to, without limitation, access, delete, update, correct, or terminate, for legitimate reason, the Data processing.

Furthermore, the Grantee is aware that Data will not be used for direct-marketing purposes. In addition, Data provided can be reviewed and questions or complaints can be addressed by contacting the Grantee's local human resources representative.

Grant Terms Acknowledgment. By accepting the RSUs, the Grantee acknowledges having received and reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

The Grantee further acknowledges having read and specifically approves the following paragraphs of the Agreement: paragraph 9 (“Tax Obligations”), paragraph 10 (“Nature of Grant”), paragraph 13 (“Language”), paragraph 22 (“Entire Agreement; Governing Law”), and the “Data Privacy Notice” provision set forth above in this Appendix.

Foreign Asset / Account Reporting. Italian residents who, at any time during the fiscal year, hold foreign financial assets (*e.g.*, cash, Shares, etc.) which may generate income taxable in Italy are required to report such investments or assets on their annual tax returns (Form UNICO, Schedule RW) or on a special form if no tax return is due. The same reporting duties apply to Italian residents who are beneficial owners of the foreign financial assets pursuant to Italian money laundering provisions, even if they do not directly hold the foreign asset abroad.

Foreign Asset Tax Information. The value of financial assets held outside of Italy by individuals resident of Italy is subject to a foreign asset tax, at an annual rate of 2 per thousand (0.2%). The taxable amount will be the fair market value of the financial assets (including Shares) assessed at the end of the calendar year. No tax payment duties arise of the amount of the foreign financial assets tax calculated on all financial assets held abroad does not exceed €12.

JAPAN

Foreign Asset / Account Reporting Notification. Details of any assets held outside Japan (including Shares acquired under the Plan) as of December 31 of each year must be reported to the tax authorities on an annual basis, to the extent such assets have a total net fair market value exceeding ¥50 million. Such report is due by March 15 each year. The Grantee should consult with his or her personal tax advisor as to whether the reporting obligation applies to Grantee and whether the Grantee will be required to report details of any outstanding RSUs or Shares held by Grantee in the report.

KOREA

Exchange Control Notification. Korean residents who realize US\$500,000 or more from the sale of Shares or the receipt of any dividends in a single transaction are required to repatriate the proceeds to Korea if the grants were made prior to July 18, 2017. *The Grantee should consult with his or her personal tax advisor to ensure compliance with the repatriation requirements, if applicable.*

Foreign Asset / Account Reporting Notification. Korean residents must declare all foreign financial accounts (e.g., non-Korean bank accounts, brokerage accounts holding Shares) in countries that have not entered into an "intergovernmental agreement for automatic exchange of tax information" with Korea to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 1 billion (or an equivalent amount in foreign currency). The Grantee should consult his or her personal tax advisor regarding reporting requirements in Korea, including whether or not there is an applicable intergovernmental agreement between Korea and any other country where the Grantee may hold any Shares or cash acquired in connection with the Plan.

MALAYSIA

Data Privacy Acknowledgement. This provision replaces in its entirety paragraph 12 of the Agreement:

The Grantee hereby explicitly, voluntarily and unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her personal data as described in this Agreement and any other Plan participation materials by and among, as applicable, the employer, the Company and any Parent or affiliate corporation or any third parties authorized by same in assisting in the implementation, administration and management of the Grantee's participation in the Plan.

Penerima Anugerah dengan ini secara eksplisit, secara sukarela dan tanpa sebarang keraguan mengizinkan pengumpulan, penggunaan dan pemindahan, dalam bentuk elektronik atau lain-lain, data peribadinya seperti yang dinyatakan dalam Perjanjian ini dan apa-apa bahan penyertaan Pelan oleh dan di antara, sebagaimana yang berkenaan, Majikan, Syarikat dan Syarikat Sekutu atau mana-mana pihak ketiga yang diberi kuasa oleh yang sama untuk membantu dalam pelaksanaan, pentadbiran dan pengurusan penyertaan Penerima Anugerah dalam Pelan tersebut.

The Grantee may have previously provided the Company and the employer with, and the Company and the employer may hold, certain personal information about the Grantee, including, but not limited to, his or her name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, the fact and conditions of the Grantee's participation in the Plan, details of all RSUs or any other entitlement to Shares of stock awarded, cancelled, exercised, vested, unvested or outstanding in the Grantee's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

Sebelum ini, Penerima mungkin telah membekalkan Syarikat dan Majikan dengan, dan Syarikat dan Majikan mungkin memegang, maklumat peribadi tertentu tentang Penerima, termasuk, tetapi tidak terhad kepada, namanya, alamat rumah dan nombor telefon, tarikh lahir, nombor insurans sosial atau nombor pengenalan lain, gaji, kewarganegaraan, jawatan, apa-apa syer dalam saham atau jawatan pengarah yang dipegang dalam Syarikat, fakta dan syarat-syarat penyertaan Penerima dalam Pelan tersebut, butir-butir semua Unit Saham Terbatas atau apa-apa hak lain untuk syer dalam saham yang dianugerahkan, dibatalkan, dilaksanakan, terletak hak, tidak diletak hak ataupun bagi faedah Penerima ("Data"), untuk tujuan yang eksklusif bagi melaksanakan, mentadbir dan menguruskan Pelan tersebut.

*The Grantee also authorizes any transfer of Data, as may be required, to E*Trade Corporate Financial Services, Inc., or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan and/or with whom any Shares acquired upon vesting and settlement of the RSUs are deposited. The Grantee acknowledges that these recipients may be located in his or her country or elsewhere, and that the recipient's country (e.g., the United States) may have different data privacy laws and protections to the Grantee's country, which may not give the same level of protection to Data. The Grantee understands that he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. The Grantee authorizes the Company, the stock plan service provider and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing the Grantee's participation in the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing the Grantee's participation in the Plan. The Grantee understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan. The Grantee understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case, without cost, by contacting in writing his or her local human resources representative, whose contact details Amy Choi 85229435126, Amy.Choi@microchip.com. Further, the Grantee understands that he or she is providing the consents herein on a purely voluntary basis. If the Grantee does not consent, or if the Grantee later seeks to revoke the consent, his or her employment status or service and career with the Employer will not be adversely affected; the only consequence of refusing or withdrawing the consent is that the Company would not be able to grant future RSUs or other equity awards to the Grantee or administer or maintain such awards. Therefore, the Grantee understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan. For more information on the consequences of the refusal to consent or withdrawal of consent, the Grantee understands that he or she may contact his or her local human resources representative.*

*Penerima juga memberi kuasa untuk membuat apa-apa pemindahan Data, sebagaimana yang diperlukan, kepada E*Trade Corporate Financial Services, Inc. atau pembekal perkhidmatan pelan saham yang lain sebagaimana yang dipilih oleh Syarikat dari semasa ke semasa, yang membantu Syarikat dalam pelaksanaan, pentadbiran dan pengurusan Pelan tersebut dan/atau dengan sesiapa yang menandatangani syer-syer Saham yang diperoleh melalui pemberian hak dan penyelesaian Unit-unit Saham Terbatas. Penerima mengakui bahawa penerima-penerima ini mungkin berada di negara Penerima atau di tempat lain, dan bahawa negara penerima (contohnya, Amerika Syarikat) mungkin mempunyai undang-undang privasi data dan perlindungan yang berbeza daripada negara Penerima, yang mungkin tidak boleh memberi tahap perlindungan yang sama kepada Data. Penerima faham bahawa dia boleh meminta senarai nama dan alamat mana-mana penerima Data dengan menghubungi wakil sumber manusia tempatannya. Penerima memberi kuasa kepada Syarikat, pembekal perkhidmatan pelan saham dan mana-mana penerima lain yang mungkin membantu Syarikat (masa sekarang atau pada masa depan) untuk melaksanakan, mentadbir dan menguruskan penyertaan Penerima dalam Pelan tersebut untuk menerima, memiliki, menggunakan, mengekalkan dan.*

Director Notification Obligation. If the Grantee is a director of the Company's Malaysian Parent or Subsidiary, he or she is subject to certain notification requirements under the Malaysian Companies Act. Among these requirements is an obligation to notify the Malaysian Parent or Subsidiary in writing when the Grantee receives or disposes of an interest (e.g., RSUs, Shares) in the Company or any Parent or Subsidiary. Such notifications must be made within 14 days of receiving or disposing of any interest in the Company or any Parent or Subsidiary.

MEXICO

No Entitlement or Claims for Compensation. These provisions supplement paragraph 10 of the Agreement:

Modification. By accepting the RSUs, the Grantee understands and agrees that any modification of the Plan or the Agreement or its termination shall not constitute a change or impairment of the terms and conditions of employment.

Policy Statement. The Award of RSUs the Company is making under the Plan is unilateral and discretionary and, therefore, the Company reserves the absolute right to amend it and discontinue it at any time without any liability.

The Company, with registered offices at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., is solely responsible for the administration of the Plan and participation in the Plan and the acquisition of Shares does not, in any way, establish an employment relationship between the Grantee and the Company since the Grantee is participating in the Plan on a wholly commercial basis and the sole employer is Microchip Technology Mexico, S.DE R.L. DE C. V. nor does it establish any rights between the Grantee and the Employer.

Plan Document Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he/she has received copies of the Plan, has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement.

In addition, by accepting the Agreement, the Grantee further acknowledges that the Grantee has read and specifically and expressly approve the terms and conditions in paragraph 10 of the Agreement, in which the following is clearly described and established: (i) participation in the Plan does not constitute an acquired right; (ii) the Plan and participation in the Plan is offered by the Company on a wholly discretionary basis; (iii) participation in the Plan is voluntary; and (iv) the Company and any Parent or Subsidiary are not responsible for any decrease in the value of the Shares underlying the RSUs.

Finally, the Grantee hereby declares that he/she does not reserve any action or right to bring any claim against the Company for any compensation or damages as a result of the Grantee's participation in the Plan and therefore grant a full and broad release to the Employer, the Company and any Parent or Subsidiary with respect to any claim that may arise under the Plan.

Spanish Translation

Reconocimiento de la Ley Laboral. Estas disposiciones complementan el apartado 10 del Acuerdo:

Modification. Al aceptar las Unidades de Acción Restringida, usted reconoce y acuerda que cualquier modificación del Plan o su terminación no constituye un cambio o desmejora de los términos y condiciones de empleo.

Declaración de Política. El Otorgamiento de Unidades de Acción Restringida de la Compañía en virtud del Plan es unilateral y discrecional y, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y discontinuar el mismo en cualquier tiempo, sin responsabilidad alguna.

La Compañía, con oficinas registradas ubicadas en 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., es la única responsable de la administración del Plan y de la participación en el mismo y la adquisición de Acciones no establece de forma alguna una relación de trabajo entre usted y la Compañía, ya que su participación en el Plan es completamente comercial y el único empleador es Microchip Technology Mexico, S.DE R.L. DE C. V. en caso de ser aplicable, así como tampoco establece ningún derecho entre la persona que tenga el derecho a optar y el Empleador.

Reconocimiento del Documento del Plan. Al aceptar el Otorgamiento de las Unidades de Acción Restringida, usted reconoce que ha recibido copias del Plan, ha revisado el mismo, al igual que la totalidad del Acuerdo y, que ha entendido y aceptado completamente todas las disposiciones contenidas en el Plan y en el Acuerdo.

Adicionalmente, al firmar el Acuerdo, reconoce que ha leído, y que aprueba específica y expresamente los términos y condiciones contenidos en la Renuncia de Derecho o Reclamo por Compensación, apartado 10 del Acuerdo, en el cual se encuentra claramente descrito y establecido lo siguiente: (i) la participación en el Plan no constituye un derecho adquirido; (ii) el Plan y la participación en el mismo es ofrecida por la Compañía de forma enteramente discrecional; (iii) la participación en el Plan es voluntaria; y (iv) la Compañía, así como su Sociedad controlante, Subsidiaria o Filiales no son responsables por cualquier disminución en el valor de las Acciones en relación a las Unidades de Acción Restringida.

Finalmente, declara que no se reserva ninguna acción o derecho para interponer una demanda en contra de la Compañía por compensación, daño o perjuicio alguno como resultado de su participación en el Plan y, en consecuencia, otorga el más amplio finiquito al Empleador, así como a la Compañía, a su Sociedad controlante o Subsidiaria con respecto a cualquier demanda que pudiera originarse en virtud del Plan.

NETHERLANDS

There are no country-specific provisions.

NORWAY

There are no country-specific provisions.

PHILIPPINES

Securities Law Notice. The offer under the Plan is being made pursuant to an exemption from registration under Section 10.2 of the Philippines Securities Regulation Code that has been approved by the Philippines Securities and Exchange Commission.

The risks of participating in the Plan include (without limitation), the risk of fluctuation in the price of the Shares on the NASDAQ Global Select Market and the risk of currency fluctuations between the U.S. Dollar and the Grantee's local currency. The value of any Shares the Grantee may acquire under the Plan may decrease below the value of the Shares at vesting (on which the Grantee is required to pay taxes) and fluctuations in foreign exchange rates between the Grantee's local currency and the U.S. Dollar may affect the value any amounts due to the Grantee pursuant to the subsequent sale of any Shares acquired upon

vesting. The Company is not making any representations, projections or assurances about the value of the Shares now or in the future.

For further information on risk factors impacting the Company's business that may affect the value of the Shares, the Grantee may refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at www.sec.gov/, as well as on the Company's website at <http://www.microchip.com/doclisting/investorshome.aspx>. In addition, that Grantee may receive, free of charge, a copy of the Company's Annual Report, Quarterly Reports or any other reports, proxy statements or communications distributed to the Company's stockholders by contacting Debbie Wussler at Microchip Technology Incorporated. The telephone number at the executive offices is 480-792-7373.

Securities Law Information. The Grantee is permitted to sell Shares acquired under the Plan through the designated Plan broker appointed by the Company (or such other broker to whom the Grantee may transfer the Shares), provided that such sale takes place outside of the Philippines through the facilities of the NASDAQ Global Select Market on which the Shares are listed.

POLAND

Exchange Control Information. If the Grantee holds foreign securities (including Shares) and maintains accounts abroad, the Grantee may be required to file certain reports with the National Bank of Poland. Specifically, if the value of the securities and cash held in foreign accounts exceeds PLN 7 million, the Grantee must file reports on the transactions and balances of the accounts on a quarterly basis. Further, any fund transfers in excess of €15,000 (or PLN 15,000 if such transfer of funds is connected with business activity of an entrepreneur) into or out of Poland must be effected through a bank in Poland. Polish residents are required to store all documents related to foreign exchange transactions for a period of five years.

ROMANIA

Language Consent. By accepting the grant of RSUs, the Grantee acknowledges that he or she is proficient in reading and understanding English and fully understands the terms of the documents related to the grant, which were provided in the English language. The Grantee accepts the terms of those documents accordingly.

Consimtament cu privire la limba. Prin acceptarea acordarii de RSU-uri, the Granteeul confirma ca acesta sau aceasta are un nivel adecvat de cunoastere in ce priveste citirea si intelegerea limbii engleze, a citit si confirma ca a inteles pe deplin termenii documentelor referitoare la acordare, care au fost furnizate in limba engleza. the Granteeul accepta termenii acestor documente in consecinta.

Exchange Control Information. If the Grantee deposits the proceeds from the sale of Shares issued to him or her at vesting and settlement of the Award in a bank account in Romania, the Grantee may be required to provide the Romanian bank with appropriate documentation explaining the source of the funds. The Grantee should consult his or her personal advisor to determine whether he or she will be required to submit such documentation to the Romanian bank.

SINGAPORE

Securities Law Information. The RSUs are being granted pursuant to the "Qualifying Person" exemption" under section 273(1)(f) of the Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA"). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. The Grantee should note that the RSUs are subject to section 257 of the SFA and that the Grantee will not be able to make any

subsequent sale of the Shares in Singapore or any offers of such subsequent sale of the Shares subject to the RSUs in Singapore, unless such sale or offer is made (i) more than six months from the Grant Date, (ii) pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA, or (iii) pursuant to, and in accordance with the condition of, any other applicable provisions of the SFA.

Chief Executive Officer and Director Notification Obligation. If the Grantee is the chief executive officer (“CEO”), director, associate director or shadow director of a Singapore Parent or Subsidiary, the Grantee is subject to certain notification requirements under the Singapore Companies Act. Among these requirements is an obligation to notify the Singaporean Parent or Subsidiary in writing when the Grantee receives an interest (e.g., RSUs, Shares) in the Company or any related companies. In addition, the Grantee must notify the Singapore Parent or Subsidiary when the Grantee sells Shares of the Company or any Parent or Subsidiary (including when the Recipient sells Shares acquired under the Plan). These notifications must be made within two business days of acquiring or disposing of any interest in the Company or any Parent or Subsidiary. In addition, a notification must be made of the Grantee’s interests in the Company or any Parent or Subsidiary within two business days of becoming the CEO, director, associate director or shadow director.

SPAIN

Termination of Employment. The RSUs provide a conditional right to Shares and may be forfeited or affected by the Grantee’s termination of employment, as set forth in the Agreement. For avoidance of doubt, the Grantee’s rights, if any, to the RSUs upon termination of employment shall be determined as set forth in the Agreement, including, without limitation, where (i) the Grantee is deemed to be constructively dismissed or unfairly dismissed without good cause; (ii) the Grantee is dismissed for disciplinary or objective reasons or due to a collective dismissal; (iii) the Grantee terminates employment due to a change of work location, duties or any other employment or contractual condition (except as otherwise expressly set forth in the Agreement); or (iv) the Grantee terminates employment due to the Company’s or any of its Subsidiaries’ unilateral breach of contract. Consequently, the termination of the Grantee’s employment for any of the above reasons shall be governed by the terms of the Agreement, unless otherwise determined by the Company, in its sole discretion.

Labor Law Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he or she understands and agrees to the terms and conditions applicable to participation in the Plan and that he or she has received a copy of the Plan.

The Grantee understands that the Company has unilaterally, gratuitously and discretionally decided to grant RSUs under the Plan to individuals who may be employees of the Company or any Parent or Subsidiary of the Company throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Parent or Subsidiary on an ongoing basis, other than as expressly set forth in the Plan and the Agreement. Consequently, the Grantee understands that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any Parent or Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Furthermore, the Grantee understands and freely accepts that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant since the future value of the RSUs and the underlying Shares is unknown and unpredictable. In addition, the Grantee understands that this grant would not be made but for the assumptions and conditions referred to above; thus, the Grantee understands, acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the RSUs shall be null and void.

Exchange Control Information. It is the Grantee’s responsibility to comply with exchange control regulations in Spain. The Grantee must declare the acquisition of Shares for statistical purposes to the Spanish *Dirección General de Comercio e Inversiones* (the “DGCI”) of the Ministry of Economy and Competitiveness. Generally, the declaration must be filed a D-6 form in January for Shares owned as of December 31 of each year; however, if the value of the Shares or the sale proceeds exceed €1,502,530, a declaration must be filed within one month of the acquisition or sale, as applicable.

When receiving foreign currency payments in excess of €50,000 derived from the ownership of Shares (*e.g.*, as a result of the sale of the Shares or the receipt of dividends), the Grantee must inform the financial institution receiving the payment of the basis upon which such payment is made. The Grantee will likely need to provide the institution with the following information: (i) the Grantee’s name, address, and fiscal identification number; (ii) the name and corporate domicile of the Company; (iii) the amount of the payment; (iv) the currency used; (v) the country of origin; (vi) the reasons for the payment; and (vii) any additional information that may be required.

Further, the Grantee is required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts if the value of the transactions during the prior tax year or the balances in such accounts as of December 31 of the prior tax year exceed €1,000,000.

Foreign Asset/Account Reporting Information. To the extent that the Grantee holds Shares and/or has bank accounts outside Spain with a value in excess of €50,000 (for each type of asset) as of December 31, the Grantee will be required to report information on such assets on his or her tax return (tax form 720) for such year. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously-reported Shares or accounts increases by more than €20,000.

Securities Law Information. The RSUs and the Shares issued upon vesting do not qualify under Spanish regulations as a security. No “offer of securities to the public,” as defined under Spanish law, has taken place or will take place in the Spanish territory. The Plan and the Agreement, including this Appendix, have not been nor will they be registered with the Comisión Nacional del Mercado de Valores (*Spanish Securities Exchange Commission*), and they do not constitute a public offering prospectus.

SWEDEN

There are no country-specific provisions.

SWITZERLAND

Securities Law Notification. The grant of the RSUs and the issuance of any Shares is not intended to be a public offering in Switzerland. Neither this document nor any other materials relating to the RSUs constitute a prospectus as such term is understood pursuant to article 652a of the Swiss Code of Obligations, and neither this document nor any other materials relating to the RSUs may be publicly distributed nor otherwise made publicly available in Switzerland. Neither this document nor any other offering or marketing material relating to the RSUs have been or will be filed with, or approved or supervised by, any Swiss regulatory authority (in particular, the Swiss Financial Market Supervisory Authority (FINMA)).

TAIWAN

Data Privacy Acknowledgement. The Grantee hereby acknowledges that he or she has read and understood the terms regarding collection, processing and transfer of Data contained in paragraph 12 of the Agreement and by participating in the Plan, the Grantee agrees to such terms. In this regard, upon request of the Company or the Employer, the Grantee agrees to provide an executed data privacy consent form to the Employer or the Company (or any other agreements or consents that may be required by the Employer or the Company) that the Company and/or the Employer may deem necessary to obtain under the data privacy laws in the Grantee's country, either now or in the future. The Grantee understands he or she will not be able to participate in the Plan if the Grantee fails to execute any such consent or agreement.

Securities Law Information. The grant of the RSUs and the Shares to be issued pursuant to the Plan are available only for eligible Service Providers. It is not a public offer of securities by a Taiwanese company; therefore, it is exempt from registration in Taiwan.

Exchange Control Information. Taiwanese residents may acquire and remit foreign currency (including funds to purchase or proceeds from the sale of Shares) into and out of Taiwan up to US\$5 million per year without submission of supporting documentation. If the transaction amount is TWD\$500,000 or more in a single transaction, Taiwanese residents are required to submit a foreign exchange transaction form and if the transaction amount is US\$500,000 or more in a single transaction, such residents may be required to provide supporting documentation to the satisfaction of the remitting bank. The Grantee is personally responsible for complying with exchange control restrictions in Taiwan.

THAILAND

Exchange Control Notification. Thai resident the Grantees realizing US\$50,000 or more in a single transaction from the sale of Shares issued to the Grantee following the vesting and settlement of RSUs must repatriate the proceeds to Thailand and then either convert such proceeds into Thai Baht or deposit the proceeds into a foreign currency account opened with any commercial bank in Thailand within 360 days of repatriation. Further, for repatriated proceeds of US\$50,000 or more, the Grantee must specifically report the inward remittance to the Bank of Thailand on a Foreign Exchange Transaction Form. If the Grantee fails to comply with these obligations, the Grantee may be subject to penalties assessed by the Bank of Thailand. The Grantee is personally responsible for complying with exchange control restrictions in Thailand. *Because exchange control regulations change frequently and without notice, the Grantee should consult his or her personal legal advisor to ensure compliance with applicable exchange control laws in Thailand.*

UNITED KINGDOM

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Tax Obligations. The following provision supplements paragraph 9 (“Tax Obligations”) of the Agreement:

Without limitation to paragraph 9 of the Agreement, the Grantee agrees that he or she is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or the Employer or by Her Majesty’s Revenue and Customs (“HMRC”) (or any other tax authority or any other relevant authority). The Grantee also agrees to indemnify and keep indemnified the Company and the Employer against any Tax-Related Items that the Company or the Employer are required to pay or withhold

or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Grantee's behalf.

Notwithstanding the foregoing, if the Grantee is a director or executive officer of the Company (within the meaning of Section 13(k) of the U.S. Securities and Exchange Act of 1934, as amended), the Grantee understands that he or she may not be able to indemnify the Company for the amount of any income tax not collected from or paid by the Grantee within ninety (90) days of the end of the U.K. tax year in which the event giving rise to the Tax-Related Items occurs, in case the indemnifications would be considered to be a loan. In this case, the income tax not collected or paid may constitute a benefit the Grantee on which additional income tax and National Insurance contributions ("NICs") may be payable. The Grantee understands that he or she will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Company or the Employer, as applicable, for the value of any NICs due on this additional benefit. If the Grantee fails to comply with his or her obligations in connection with the income tax as described in this section, the Company may refuse to deliver the Shares to the Grantee without any liability to the Company or the Employer.

Joint Election for Transfer of Secondary Class 1 National Insurance Contributions to the Grantee. As a condition of vesting of the RSUs, the Grantee agrees to accept any liability for secondary Class 1 national insurance contributions, which may be payable by the Company or the Employer in connection with the RSUs ("Employer NICs"). To accomplish the foregoing, the Grantee agrees to enter into an election between himself or herself and the Employer (the "Election"), by printing, signing and returning the form approved for such Election by HMRC and attached as Exhibit B to this Agreement to the Human Resources Manager prior to vesting of the RSUs. The Grantee further agrees to enter into any other consents or elections required to accomplish the transfer of the Employer NICs to the Grantee, prior to vesting of the RSUs. The Grantee further agrees to enter into such other joint elections as may be required between himself or herself and any successor to the Company and/or the Employer. If the Grantee does not enter into an Election prior to the vesting of the RSUs, the Grantee will permanently forfeit the RSUs without any liability to the Company and/or the Employer and any Shares that have been issued upon vesting will be returned to the Company at no cost to the Company.

The Grantee further agrees that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in paragraph 9 of the Agreement, as supplemented above.

* * *

EXHIBIT A

**AGREEMENT
FOR PARTICIPANTS IN BELGIUM**

**AGREEMENT REGARDING A TWO YEAR LOCK-UP PERIOD
FOR SHARES ACQUIRED UPON VESTING OF RESTRICTED STOCK UNITS**

If you have not already executed an Agreement for the Grantees in Belgium ("*Agreement*") and would like to benefit from the favourable tax regime provided for in the Circular (as defined below), please print, sign and return this Agreement to Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A., c/o Tricia Bajaj, within 120 calendar days from the grant date specified in the Notice of Grant of Restricted Stock Units. Please also retain a copy of this Agreement for your files.

BETWEEN

1) Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A. (hereafter "*Microchip*"); and

2) NAME: _____

ADDRESS: _____

(hereafter the "*Grantee*", and, together with Microchip, the "*Parties*")

WHEREAS

Microchip has granted on the grant date set forth in the applicable Notice of Grant of Restricted Stock Units ("*Grant Notice*") a number of restricted stock units to the Grantee subject to the terms and conditions in the Microchip Technology Incorporated 2004 Equity Incentive Plan (the "*Plan*"), the Grant Notice and the Restricted Stock Units Agreement (the "*RSU Grant*");

This Agreement is also intended to cover any subsequent grant of restricted stock units that may be made under the Plan, in the sole discretion of Microchip, on or after the Effective Date (as defined below) ("*Subsequent Grant*"); and

The Grantee would like to benefit from the favourable tax regime provided for in Administrative Circular nr. Ci.RH.241/467.450 of June 21, 1995 (the "*Circular*") with respect to the shares of common stock of Microchip which he/she will acquire upon the vesting of the aforementioned RSU Grant and any Subsequent Grant;

PARTIES HAVE AGREED AS FOLLOWS:

The shares that will be delivered to the Grantee upon vesting of the RSU Grant and any Subsequent Grant will be subject to a two year lock-up period, starting from the date of vesting of the relevant grant, during which the Grantee cannot sell or otherwise transfer the respective shares.

The Parties reserve the right to terminate this Agreement in its entirety, or as far as it relates to any particular grant, at any time prior to the Vesting Date specified in the relevant Grant Notice. Notice of termination must specify the grant date of the RSU Grant and/or Subsequent Grant to which it is intended to apply. The Parties understand that termination shall disqualify the Grantee from the favourable tax regime provided for in the Circular with respect to shares of common stock of Microchip which he/she will acquire upon the vesting of only the particular grant(s) specified in the notice of termination. Notice of termination shall be provided to Microchip by email to #stockplans@microchip.com.

This Agreement shall be effective as of the date this Agreement is received by Microchip (the "**Effective Date**").

COMPANY

Signature:

Steve Sanghi, Chairman of the Board & CEO
Microchip Technology Incorporated

GRANTEE

Signature:

Printed Name:

Date:

Made in:

City, Country

EXHIBIT B

MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN (UK Employees)

Important Note on the Election to Transfer Employer NICs

As a condition of participation in the Plan and the grant of RSUs over Shares granted under the Microchip Technology Incorporated 2004 Equity Incentive Plan (the "Plan"), you are required to enter into an Election to transfer to you any liability for employer's National Insurance Contributions ("NICs") that may arise in connection with your participation in the Plan.

By entering into the Election:

- you agree that any employer's NICs liability that may arise in connection with your participation in the Plan with respect to RSUs granted under the Plan will be transferred to you;
- you authorise your employer to recover an amount sufficient to cover this liability by such methods including, but not limited to, deductions from your salary or other payments due or the sale of sufficient Shares acquired pursuant to your awards; and
- you acknowledge that even if you have clicked on the ["ACCEPT"] box where indicated, the Company or your employer may still require you to sign a paper copy of this Election (or a substantially similar form) if the Company determines such is necessary to give effect to the Election.

Please read the Election carefully.

Please print and keep a copy of the Election for your records.

Election To Transfer the Employer's National Insurance Liability to the Employee

1. Parties

This Election is between:

- (A) **Employee Name** (the "Employee"), who is eligible to receive Restricted Stock Units granted by Microchip Technology Incorporated of 2355 Chandler Blvd., Chandler, Arizona 85224, United States (the "Company") pursuant to the terms and conditions of the 2004 Equity Incentive Plan (the "Plan"), and
- (B) **Microchip Limited** (registered number 2189500) with registered office at Microchip House, 720 Wharfedale Road, Winnersh Triangle, Wokingham, Berkshire RG41 5TP, United Kingdom (the "Employer"), which employs the Employee.

2. Purpose of Election

2.1 This Election relates to the employer's secondary Class 1 National Insurance Contributions (the "Employer's Liability") which may arise on:

- (i) the acquisition of securities pursuant to the Restricted Stock Units; and/or
- (ii) the assignment or release of the Restricted Stock Units in return for consideration; and/or
- (iii) the receipt of any other benefit in money or money's worth in connection with the Restricted Stock Units; and/or
- (iv) post-acquisition charges relating to the Restricted Stock Units; and/or
- (v) post-acquisition charges relating to the Restricted Stock Units,

(each, a "Taxable Event") pursuant to section 4(4)(a) and/or paragraph 3B(1A) of the Social Security Contributions and Benefits Act 1992.

2.2 This Election applies to all Restricted Stock Unit awards granted to the Employee under the Plan on or after 23rd December 2005 up to the termination date of the Plan.

2.3 This Election does not apply in relation to any liability, or any part of any liability, arising as a result of regulations being given retrospective effect by virtue of section 4B(2) of either the SSCBA, or the Social Security Contributions and Benefits (Northern Ireland) Act 1992.

2.4 This Election does not apply in relation to any liability, or any part of any liability, arising as a result of regulations being given retrospective effect by virtue of section 4B(2) of either the SSCBA, or the Social Security Contributions and Benefits (Northern Ireland) Act 1992.

3. **The Election**

This joint election does not apply with respect to any liability arising as a result of U.K. anti-avoidance legislation. The Employee and the Employer jointly elect that the entire liability of the Employer to pay the Employer's Liability on the Taxable Event is hereby transferred to the Employee. The Employee understands that by signing this Election he or she will become personally liable for the Employer's Liability covered by this Election. This Election is made in accordance with paragraph 3B(1) of Schedule 1 of the SSCBA.

4. **Payment of the Employer's Liability**

4.1 The Employee hereby authorizes the Company and/or the Employer to collect the Employer's Liability from the Employee at any time after the Taxable Event:

- (i) by deduction from salary or any other payment payable to the Employee at any time on or after the date of the Taxable Event; and/or
- (ii) directly from the Employee by payment in cash or cleared funds; and/or
- (iii) by arranging, on behalf of the Employee, for the sale of some of the securities which the Employee is entitled to receive in respect of the Restricted Stock Units; and/or
- (iii) by any other means specified in the applicable award agreement.

4.2 The Employer hereby reserves for itself and the Company the right to withhold the transfer of any securities to the Employee until full payment of the Employer's Liability is received.

4.3 The Employer agrees to remit the Employer's Liability to HM Revenue & Customs on behalf of the Employee within 14 days after the end of the UK tax month during which the Chargeable Event occurs (or within 17 days after the end of the UK tax month during which the Chargeable Event occurs if payments are made electronically)

5. **Duration of Election**

5.1 The Employee and the Employer agree to be bound by the terms of this Election regardless of whether the Employee is transferred abroad or is not employed by the Employer on the date on which the Employer's Liability becomes due.

5.2 This Election will continue in effect until the earliest of the following:

- (i) the Employee and the Employer agree in writing that it should cease to have effect;
- (ii) on the date the Employer serves written notice on the Employee terminating its effect;

- (iii) on the date the HM Revenue and Customs withdraws approval of this Election; or
- (iv) after due payment of the Employer's Liability in respect of the entirety of the Restricted Stock Units to which this Election relates, such that the Election ceases to have effect in accordance with its terms.

5.3 This Election will continue in force regardless of whether the Employee ceases to be an employee of the Employer.

Schedule of Employer Companies

The employing companies to which this Election relates are:

<u>NAME</u>	<u>ADDRESS</u>
Microchip Limited	Microchip House 720 Wharfedale Road Winnersh Trinagle Wokingham Berkshire RG41 5TP United Kingdom

EXHIBIT A

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

1. Grant of Option.

The Plan Administrator of the Company hereby grants to the Optionee (the "Optionee") named in the Notice of Stock Option Grant to which this Agreement is attached as Exhibit A (the "Notice of Grant") an option (the "Option") to purchase the number of Shares, as set forth in the Notice of Grant, at the exercise price per share set forth in the Notice of Grant (the "Exercise Price"), subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 21(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

2. Exercise of Option.

(a) Right to Exercise. This Option is exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option is exercisable by delivery of an exercise notice, in the form attached as Exhibit A-1 (the "Exercise Notice") or in written or electronic form as designated by the Company, which shall state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice shall be completed by the Optionee and delivered to the Stock Administrator of the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by such aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of this Option unless such issuance and exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Exercised Shares shall be considered transferred to the Optionee on the date the Option is exercised with respect to such Exercised Shares.

3. Method of Payment.

Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Optionee:

- (a) cash;
- (b) check; or

(c) to the extent permitted by the Administrator, delivery of a properly executed exercise notice together with such other documentation as the Administrator and the broker, if applicable, shall be required to effect an exercise of the Option and delivery to the Company of the sale proceeds required to pay the Exercise Price.

4. Non-Transferability of Option.

Unless determined otherwise by the Administrator, this Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the recipient, only by the recipient. If the Administrator makes this Option transferable, such Option shall contain this additional terms and conditions as the Administrator deems appropriate.

5. Term of Option.

This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

6. Tax Obligations.

(a) Withholding Taxes. Optionee agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements applicable to the Option exercise. Optionee acknowledges and agrees that the Company may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

7. Entire Agreement; Governing Law.

The Plan and Notice of Grant are incorporated herein by reference. The Plan, Notice of Grant and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to the Optionee's interest except by means of a writing signed by the Company and Optionee. This agreement is governed by the internal substantive laws, but not the choice of law rules, of Arizona.

8. NO GUARANTEE OF CONTINUED SERVICE.

OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED AN OPTION OR PURCHASING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE WITH OPTIONEE'S RIGHT OR THE COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

By your signature, you agree that this Option is granted under and governed by the terms and conditions of the Plan, the Notice of Grant and this Option Agreement. Optionee has reviewed the Plan, the Notice of Grant and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan, the Notice of Grant and Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and Option Agreement. Optionee further agrees to notify the Company upon any change in the residence address indicated below.

9. Choice of Languages For Employees of Canadian Locations Only. The undersigned agrees that it is his express wish that this form and all documents relating to his participation in the scheme be drawn in the English language only. Le soussigné convient que sa volonté expresse est que ce formulaire ainsi que tous les documents se rapportant à sa participation au régime soient rédigés en langue anglaise seulement.

By Grantee's electronic acceptance of the Agreement, Grantee agrees that this Award is granted under and governed by the terms and conditions of the Plan, the Grant Notice and this Agreement. Grantee has reviewed the Plan, the Grant Notice and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan, the Grant Notice and this Agreement. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Grant Notice and this Agreement.

GRANTEE

MICROCHIP TECHNOLOGY INCORPORATED

Acceptance: *By Electronic Signature*

By: /s/ Steve Sanghi

Steve Sanghi, President and CEO

EXHIBIT 10.19

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

NOTICE OF GRANT OF RESTRICTED STOCK UNITS

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant.

Name: «Name»

You have been granted «Shares» Restricted Stock Units (“RSUs”) subject to and in accordance with the express terms and conditions of the Plan and the Restricted Stock Unit Agreement, including the appendix for your country, if any (“Appendix” and together with the Restricted Stock Unit Agreement, the “Agreement”) attached hereto as Exhibit A. The Plan and Agreement are incorporated herein in their entirety. Each RSU is equivalent to the right to receive one share of Common Stock of the Company (“Share”) for purposes of determining the number of Shares subject to this Award. No Shares will be issued until the vesting conditions of the Award described below are satisfied and the restrictions lapse, subject to the terms and conditions set forth in the Plan and the Agreement. This Award does not entitle Grantee to any stockholder rights with respect to the underlying Shares until the vesting conditions of the Award described below are satisfied, the restrictions lapse and Shares are issued to him/her. Additional terms of this Award are as follows:

Date of Grant: «Grant Date»

Vesting Schedule: «Language»

Termination Period. This Award automatically terminates and Grantee’s rights are forfeited with respect to any portion of the RSUs unvested on the date Grantee ceases to be a Service Provider or in the event that Grantee has not accepted this Grant in accordance with Company procedures 31 days or more prior to its Vest Begin Date. In no event shall this Award vest later than the Vesting Schedule outlined above.

Binding Agreements. By signature of Company's representative below, and Grantee’s acceptance of this Grant in accordance with Company procedures, the parties agree that this Grant Notice, the Agreement, and the Plan constitute Grantee’s entire agreement with respect to this Award and agree to be bound by the terms therein. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Agreement, and/or this Award. This Award may be modified by the Company, but in accordance with Section 21(c) of the Plan, it may not be modified adversely to Grantee’s interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. The internal laws of the State of Arizona, United States of America, but not its choice of law principles, will govern this Award.

GRANTEE

Signature

Print Name

Microchip Technology Incorporated

/s/ Lauren Carr

By

Vice President of Human Resources

Title

Exhibit A

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNITS AGREEMENT

1. Grant of Restricted Stock Units. Microchip Technology Incorporated (the “Company”) hereby grants to the Grantee named in the Notice of Grant of Restricted Stock Units (“Grant Notice”) an Award of Restricted Stock Units (“RSUs”), as set forth in the Grant Notice and subject to the terms and conditions in this Restricted Stock Unit Agreement, including any appendix for the Grantee’s country (the “Appendix” and together with the Restricted Stock Unit Agreement, the “Agreement”) and the Company’s 2004 Equity Incentive Plan (the “Plan”). Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Agreement.
2. Company's Obligation. Each RSU represents the right to receive a Share in accordance with the Vesting Period in the Grant Notice. Unless and until the RSUs vest, the Grantee will have no right to receive Shares underlying such RSUs. Prior to actual distribution of Shares pursuant to any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. Vesting Schedule. Subject to paragraph 4 of this Agreement, the RSUs awarded by this Agreement will vest and all restrictions lapse according to the vesting schedule specified in the Grant Notice.
4. Forfeiture upon Termination as a Service Provider. Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited (as determined in accordance with paragraph 10(i) below) at no cost to the Company.
5. Payment after Vesting. Any RSUs that vest in accordance with paragraph 3 of this Agreement will be paid to the Grantee (or in the event of the Grantee's death, to his or her estate) in Shares (unless otherwise determined by the Administrator and stated in the Appendix), upon satisfaction, as determined by the Company, of any Tax-Related Items as set forth in paragraph 9 of this Agreement. The Shares will be issued to the Grantee as soon as practicable after the Vesting Date, but in any event, within the period ending on the later to occur of the date that is two and a half (2 ½) months from the end of (i) the Grantee’s tax year that includes the applicable Vesting Date, or (ii) the Company’s tax year that includes the applicable vesting date.
6. Payments after Death. Any distribution or delivery to be made to the Grantee under this Agreement will, if the Grantee is then deceased, be made to the administrator or executor of the Grantee’s estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. Grant is Not Transferable. Except to the limited extent provided in paragraph 6 of this Agreement, RSUs may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of the RSUs, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, the RSUs grant and the rights and privileges conferred hereby immediately will become null and void.

8. Rights as Stockholder. Neither the Grantee nor any person claiming under or through the Grantee will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until the Grantee's rights with respect to the RSUs have become vested and certificates representing such Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Grantee or Grantee's broker or the Shares have been electronically transferred to Grantee's account.

9. Tax Obligations. Regardless of any action the Company or the Grantee's employer (the "Employer") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the Grantee's participation in the Plan that are legally applicable to the Grantee ("Tax-Related Items"), the Grantee acknowledges that the ultimate liability for all Tax-Related Items is and remains his or her responsibility and that such liability may exceed the amount actually withheld by the Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including the grant or vesting of the RSUs, the issuance of Shares on the relevant Vesting Date, the subsequent sale of Shares acquired at vesting of the RSUs, if any, and the receipt of any dividends; and (2) do not commit and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Grantee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee becomes subject to tax and/or social security contributions in more than one jurisdiction between the Grant Date and the date of any relevant taxable, tax and/or social security contribution withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable, tax and/or social security contribution withholding event, the Grantee shall pay or make appropriate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Grantee authorizes the Company and/or the Employer, at their sole discretion, to satisfy the obligations with respect to Tax-Related Items by one or a combination of the following: (i) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (ii) withholding from proceeds of the sale of Shares acquired upon vesting of the RSUs, either through a voluntary sale or through a mandatory sale arrangement by the Company (on the Grantee's behalf pursuant to this authorization); or (iii) withholding in Shares to be issued upon vesting of the RSUs; or (iv) by requiring direct payment from the Grantee in cash (or its equivalent). To avoid negative accounting treatment, the Company will withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates. If the Grantee's

and/or the Company's withholding obligations for Tax-Related Items are satisfied as described in (iii) of this paragraph, the Company will endeavor to sell only the number of Shares required to satisfy the Grantee's and/or the Company's withholding obligations for Tax-Related Items; however, the Grantee agrees that the Company may sell more Shares than necessary to satisfy the Tax-Related Items. Further, the Grantee will be deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of Shares is held back solely for purposes of paying the Tax-Related Items due as a result of any aspect of the Grantee's participation in the Plan. The Grantee hereby consents to any action reasonably taken by the Company to satisfy his or her obligations for Tax-Related Items.

Finally, the Grantee shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares at vesting if the Grantee fails to comply with his or her obligations in connection with the Tax-Related Items.

10. Nature of Grant. In accepting the RSUs, the Grantee expressly acknowledges, understands and agrees to the following:

(a) The Company is granting the Award under the Plan. The Plan is established voluntarily by the Company, is discretionary in nature, and may be modified, amended, suspended or terminated by the Company at any time;

(b) The grant of the Award, future grants of Awards, if any, and benefits and rights provided under the Plan are voluntary, occasional and at the complete discretion of the Company and do not constitute regular or periodic payments. No grant of Awards will be deemed to create any contractual or other right to receive future RSU Awards or benefits in lieu of RSUs, whether or not such a reservation is explicitly stated at the time of such a grant or whether such Awards have been granted repeatedly in the past. All decisions with respect to future RSU Awards, if any, will be at the sole discretion of the Company;

(c) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are extraordinary items that do not constitute compensation of any kind for services of any kind rendered to the Company or the Employer, and which are outside the scope of the Grantee's employment contract, if any;

(d) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are not intended to replace any pension rights or compensation;

(e) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are not part of Grantee's normal or expected salary or compensation for any purposes, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement or welfare benefits, or any other payments, benefits or rights of any kind, and in no event

should be considered as compensation for, or relating in any way to, past services for the Company, the Employer or any Subsidiary;

(f) The RSUs and the Grantee's participation in the Plan shall not be interpreted to form an employment contract or relationship with the Company or any Subsidiary;

(g) The future value of the underlying Shares is unknown and cannot be predicted with certainty;

(h) No claim or entitlement to compensation or damages shall arise from forfeiture of the RSU Awards resulting from termination of the Grantee's employment by the Company or the Employer (for any reason whatsoever and regardless of whether in breach of local labor laws) and, in consideration of the RSU Awards, to which the Grantee otherwise is not entitled, the Grantee irrevocably agrees never to institute any claim against the Company or the Employer, waives his or her ability, if any, to bring any such claim, and releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, the Grantee shall be deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(i) In the event the Grantee's termination of employment (regardless of whether in breach of local labor laws), the Grantee's right to vest in the RSUs under the Plan, if any, will terminate effective as of the date that the Grantee is no longer actively employed and will not be extended by any notice period mandated under local law (*e.g.*, active employment would not include a period of "garden leave" or similar period pursuant to local law); the Administrator shall have the exclusive discretion to determine when the Grantee is no longer actively employed for purposes of the RSUs;

(j) The Company has the right, at any time to amend, suspend or terminate the Plan. The Plan will not be deemed to constitute, and will not be construed by Grantee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Grantee as a result of any change or amendment, or any cancellation, of the Plan at any time.

(k) The Grantee's employment with the Employer is not affected at all by any Award and shall not create a right to further employment with the Employer. Accordingly, the terms of the Grantee's employment with the Employer will be determined from time to time by the Company or the Subsidiary employing the Grantee (as the case may be), and the Grantee's participation in the Plan shall not interfere with the ability of the Employer, which is hereby expressly reserved, to terminate or change the terms of the employment of the Grantee at any time for any reason whatsoever, with or without good cause or notice, except as may be expressly prohibited by the laws of the jurisdiction in which the Grantee is employed; and

(l) The Grantee is voluntarily participating in the Plan.

11. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying Shares. The Grantee is hereby advised to

consult with his or her own personal tax, legal, and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

12. Data Privacy. By entering into this Agreement, and as a condition of the vesting of the Award, Grantee explicitly and unambiguously consents to the collection, use, and transfer of personal data, as set forth in this Agreement and any other grant materials by and among, as applicable, the Employer, the Company and any Parent or Subsidiary of the Company for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.

(i) Grantee understands that the Employer, the Company and its Subsidiaries hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address and telephone number, date of birth, social security number or other identification number, salary, nationality, job title, any Shares or directorships held in the Company, and details of all Awards or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Grantee's favor, for the exclusive purpose of managing and administering the Plan ("Data").

(ii) Grantee further understands that the Employer, the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Grantee's participation in the Plan, and that the Employer, the Company and/or its Subsidiaries may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan, including the broker or such other stock plan service provider as may be selected by the Administrator ("Data Recipients").

(iii) Grantee understands that the Data Recipients may be located in Grantee's country or elsewhere, including outside the European Economic Area, and that the Data Recipient's country (e.g., the United States) may have different data privacy laws and protections. Grantee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data, in electronic or other form, for the purposes of implementing, administering, and managing Grantee's participation in the Plan. Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan.

(iv) Grantee understands that Grantee may request a list with the names and addresses of the potential Data Recipients by contacting his/her local human resources representative. Grantee further understands that he/she may, at any time, review the Data, request additional information about the storage and processing of Data, request that any necessary amendments be made to it, or withdraw Grantee's consent herein in writing by contacting the Company. Grantee further understands, however, that withdrawing consent may affect Grantee's ability to participate in the Plan. For more information on the consequences of Grantee's refusal to consent or withdrawal of consent, Grantee understands that Grantee may contact his/her local human resources representative.

13. Language. If the Grantee receives this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to the Grantee (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

16. Administrator Authority. The Administrator has the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application thereof as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Grantee, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, the Grant Notice or this Agreement.

17. Notice Requirement. Where there is a legal requirement for any notice or document to be sent to any person by any other person, it shall be considered sent if an electronic transmission of the relevant information is sent in a form previously determined as being acceptable to the Administrator. For the avoidance of doubt, the Administrator may dispense with the requirement to tender a certificate on the issuance of Shares under an RSU Award where the Administrator authorizes any system permitting electronic notification.

18. Address for Notices. Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at 2355 West Chandler Boulevard, Chandler AZ 85224, U.S.A. Attn: Stock Administration, or at such other address as the Company may hereafter designate in writing or electronically.

19. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an online or electronic system established and maintained by the Company or a third party designated by the Company.

20. Appendix. Notwithstanding any provisions in this Agreement, the RSUs shall be subject to any special terms and conditions for the Grantee's country set forth in the Appendix. Moreover, if the Grantee relocates to one of the countries included in the Appendix, the special terms and conditions for such country shall apply to the Grantee, to the extent that the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

21. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the RSUs and on any Shares acquired under this Award, to the extent that the Company determines it is necessary or advisable to comply with local law or facilitate the administration of the Plan, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

22. Entire Agreement; Governing Law. The Plan and Grant Notice are incorporated herein by reference. The Plan, Grant Notice and this Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Grantee with respect to the subject matter hereof, and may not be modified adversely to the Grantee's interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. This Agreement, the Grant Notice and all Awards are governed by the internal substantive laws, but not the choice of law principles, of the State of Arizona, United States of America.

For purposes of litigating any dispute that arises under this grant or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Arizona and agree that such litigation shall be conducted in the courts of Maricopa County, Arizona, or the federal courts for the United States for the District of Arizona, where this grant is made and/or to be performed.

23. Severability. The provisions of this Agreement are severable, and, if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions nevertheless shall be binding and enforceable.

By Grantee's electronic acceptance of the Agreement, Grantee agrees that this Award is granted under and governed by the terms and conditions of the Plan, the Grant Notice and this Agreement. Grantee has reviewed the Plan, the Grant Notice and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan, the Grant Notice and this Agreement. Grantee

hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Grant Notice and this Agreement.

MICROCHIP TECHNOLOGY

By: _____
Vice President of Human Resources

APPENDIX

ADDITIONAL TERMS AND CONDITIONS OF THE MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN RESTRICTED STOCK UNITS AGREEMENT

This Appendix includes additional terms and conditions that govern the RSUs granted to the Grantee under the Plan if the Grantee resides in one of the countries listed below. All capitalized terms used, but not defined herein shall have the meaning given to such terms in the Plan and/or the Agreement.

If the Grantee is a citizen or resident of a country other than the one in which the Grantee is currently working or transfers employment after the RSUs are granted, the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall be applicable to the Grantee.

AUSTRALIA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, due to securities law considerations in Australia, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

AUSTRIA

There are no country-specific terms and conditions.

BELGIUM

Tax Reporting. If the Grantee is a Belgian resident, the Grantee is required to report any security (e.g., Shares acquired under the Plan) or bank account (including any brokerage account held by you at E*Trade Financial or other stock plan service provider as may be selected by the Company in the future) held outside Belgium on your annual income tax return.

Agreement for Participants in Belgium. Under Belgian tax law, if the Shares acquired at vesting of RSUs cannot be sold for two years from the Vesting Date, the fair market value of the Shares on the Vesting Date is deemed to be 100/120 (83 1/3%) of the actual fair market value of such shares for purposes of calculating the taxable amount. **If the Grantee would like to take advantage of this favourable tax treatment, the Grantee must print, sign and return a copy of the Agreement Regarding a Two Year Lock Up Period for Shares Acquired Upon Vesting of Restricted Stock Units attached as Exhibit A to this Agreement by the deadline specified therein.**

CANADA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, due to securities law considerations in Canada, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Termination of Employment. The following provision replaces paragraph 10(i) of the Agreement:

In the event of termination of the Grantee's employment, the Grantee's right to vest in the RSUs under the Plan, if any, will terminate effective as of the date that is the earlier of (i) the date on which the Grantee receives a notice of termination of employment from the Company or the Employer, or (ii) the date on which the Grantee is no longer employed, regardless of any notice period or period of pay in lieu of such notice required under local law; the Administrator shall have the exclusive discretion to determine when the Grantee is no longer employed for purposes of the RSUs.

The following terms and conditions apply if the Grantee is in Quebec:

Authorization to Release and Transfer Necessary Personal Information. The following provision supplements paragraph 12 of the Agreement:

The Grantee hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. The Grantee further authorizes the Company and/or any Parent or Subsidiary to disclose and discuss the Plan with their advisors. The Grantee further authorizes the Company and any Parent or Subsidiary to record and keep such information in the Grantee's employment file.

French Language Acknowledgment. The following provision supplements paragraph 13 of the Agreement:

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or directly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

CHINA

Deposit of Shares and Distribution of Dividends. Due to exchange control laws and regulations in the People's Republic of China ("PRC"), if the Participant is a PRC national, any Shares acquired at vesting of the RSUs will be deposited in an account established for Grantee by the Company (the "Account") with E*Trade Financial or any successor broker designated by Company, in its sole discretion (the "Designated Broker"). Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to any person, broker or other account with the Designated Broker or to a brokerage account outside of the Designated Broker.

Any dividends related to Shares acquired under the Plan may, at the Company's sole discretion, be deposited into an Account with the Designated Broker, or re-invested by Company on behalf of the Grantee.

Until such time as the Shares acquired at vesting of the RSUs are sold, the Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to another account with the Designated Broker or to a brokerage account outside of the Designated Broker.

Forfeiture and Sale upon Termination as a Service Provider. The following provision replaces paragraph 4 of the Agreement:

(a) Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited at no cost to the Company.

(b) The Grantee must sell all Shares acquired under the Plan on or before the date of termination as a Service Provider. Grantee hereby authorizes Company or the Designated Broker to sell such Shares on behalf of the Grantee without notice to or consent from the Grantee if Grantee has not sold all Shares so acquired as of the date of termination of service. The sale of Shares shall be carried out within a reasonable time of termination of service as determined by Company. The proceeds from such sale, net any Tax-Related Items and broker's fees, shall be deposited in Grantee's bank account in China, or delivered to Grantee in China through such other means determined by Company, in its discretion. Grantee hereby releases and holds harmless Company and any Parent or Subsidiary, employees and agents ("Indemnitees") from any loss that Grantee may incur due to the timing of the sale of Shares by Company and acknowledges that the Company and the Employer are under no obligation to arrange for the sale of the Shares at any particular price and are not liable for any fluctuations in the trading price of the Shares and/or the U.S. dollar exchange rate.

(c) If Grantee does transfer Shares into an account to which Company has no visibility, then Grantee will sell all Shares no later than the date of termination as a Service Provider and provide written evidence of such sale of Shares to Company within two (2) business days of the date of termination as a Service Provider. Such evidence must be in a form acceptable to Company.

(d) Grantee shall defend, hold harmless and indemnify Indemnitees from any and all penalties, damages, and costs that may be incurred by Indemnitees arising out of or in connection with Grantee's failure to comply with these obligations and any requirements under local exchange control laws applicable to him/her.

Exchange Control Restriction. The Grantee understands and agrees that, if he or she is a PRC national, due to exchange control laws and regulations in the PRC, the Grantee will be required to repatriate immediately to the PRC any cash proceeds from the sale of the Shares acquired under the Plan. The Grantee understands further that, under applicable laws and regulations, such repatriation may need to be effected through a special foreign exchange account established by the Company or a Parent or Subsidiary, and the Grantee consents and agrees that the proceeds from the sale of the Shares may be transferred to such special account before being delivered to the Grantee. Moreover, if the proceeds from the sale of the Shares are converted to local currency, the Grantee acknowledges that the Company (including its Parent and Subsidiary corporations) is under no obligation to secure any particular currency conversion rate and may face delays in converting the proceeds to local currency due to exchange control restrictions in the PRC. The Grantee agrees to

bear the risk of any fluctuation in the U.S. dollar/local currency exchange rate between the date the Grantee realizes U.S. dollar proceeds from his or her participation in the Plan and the date that the Grantee receives cash proceeds converted to local currency. The Grantee also agrees to comply with any other requirements that may be imposed by the Company in the future to facilitate compliance with exchange control requirements in the PRC.

DENMARK

There are no country-specific terms and conditions.

FRANCE

Nature of RSUs. The RSUs granted to you pursuant to this Agreement are not intended to qualify for the favorable tax and social security treatment in France applicable to shares granted for no consideration under Sections L. 225-197 to L. 225-197-6 of the French Commercial Code, as amended.

Consent to Receive Information in English. By accepting this Agreement providing for the terms and conditions of the RSUs, the Grantee confirms that he/she has read and understood the documents relating to this Award (*i.e.*, the U.S. Plan and this Agreement), which were provided in English. The Grantee accepts the terms of those documents accordingly.

En acceptant de manière électronique le présent Contrat d'Attribution décrivant les termes et conditions de votre attribution d'Actions Gratuites, vous confirmez ainsi avoir lu et compris les documents relatifs à cette attribution (c'est-à-dire, le Plan Américain et le présent Contrat d'Attribution) qui vous ont été communiqués en langue anglaise. Vous en acceptez les termes en connaissance de cause.

Exchange Control Information. If the Grantee maintains a foreign bank account, he/she is required to report such to the French tax authorities when filing his/her annual tax return.

GERMANY

There are no country-specific terms and conditions.

HONG KONG

Securities Law Warning. The offer of the RSUs and the Shares subject to the RSUs do not constitute a public offering of securities under Hong Kong law and are available only to Employees of the Company or its Subsidiaries participating in the Plan. The Grantee should be aware that the contents of this Agreement have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. Nor have the documents been reviewed by any regulatory authority in Hong Kong. The RSUs are intended only for the personal use of each Grantee and may not be distributed to any other person. The Grantee is advised to exercise caution in relation to this offer. If the Grantee is in doubt about any of the contents of this Agreement or the Plan, the Grantee should obtain independent professional advice.

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Sale of Shares. In the event that the RSUs vest within six months of the date of grant, the Grantee agrees that he or she will not sell any Shares thus acquired prior to the six-month anniversary of the date of grant.

HUNGARY

There are no country-specific terms and conditions.

INDIA

Exchange Control Documentation. The Grantee understands that he or she must repatriate the sale proceeds upon the sale of Shares acquired under the Plan to India and convert the proceeds into local currency within 90 days of receipt. The Grantee will receive a foreign inward remittance certificate (“FIRC”) from the bank where the foreign currency is deposited. The Grantee should retain the FIRC as evidence of the repatriation of funds in the event that the Reserve Bank of India, the Employer or the Company requests proof of repatriation.

IRELAND

There are no country-specific terms and conditions.

ISRAEL

Terms and Conditions

The following provision applies to Grantees located in Israel on the Grant Date.

Trust Arrangement. The Grantee understands and agrees that the RSUs offered are subject to and in accordance with the terms of the Plan, Israeli Subplan (the “Subplan”), Agreement and the Israel Beneficiary 102 Undertaking. The Grantee understands that the RSUs shall be allocated under the provisions of the track referred to as the “Capital Gain Route,” according to Section 102(b)(2) and 102(b)(3) of the Israeli Income Tax Ordinance (“Section 102”) and shall be held by the trustee for the periods stated in Section 102. The Grantee hereby confirms that he or she has: (i) read and understands the Plan, Subplan, Agreement and Israel Beneficiary 102 Undertaking; (ii) received all the clarifications and explanations that the Grantee has requested; and (iii) had the opportunity to consult with his or her advisers before accepting the Agreement. In the event of any inconsistencies between the provisions of this Israeli Appendix and the Agreement, the provisions of this Appendix shall govern the RSUs and any Shares and in no event shall any term require shareholder approval as set out in Section 21(b) of the Plan.

Limited Transferability. This provision supplements Section 7 of the Agreement:

Subject to the provisions of the Plan, Section 102 and any rules or regulations or orders or procedures promulgated thereunder, to obtain favourable tax treatment for Capital Gain Route awards, the Grantee may not sell or transfer any RSU shares received upon vesting or received

subsequently following any realization of rights until the lapse of the holding period required is met under Section 102. Notwithstanding the above, if any such sale or release occurs during the holding period, the sanctions under Section 102 and under any rules or regulation or orders or procedures promulgated thereunder will apply to and will be borne by the Grantee.

Issuance of Shares. This provision supplements Sections 5 and 8 of the Agreement:

If the vested RSUs are issued during the holding period, such Shares shall be restricted and held by E*Trade Financial or any successor broker and/or trustee designated by Company and the Trustee on the Grantee's behalf. In the event that the vested RSUs are issued after the expiration of the holding period, the Grantee may freely sell the shares held by E*Trade Financial, provided that the Grantee first complies with any Tax-Related Items stipulated under this Agreement to the Trustee's and the Company's satisfaction, or in trust on the Grantee's behalf to the Trustee.

Tax Obligations. This provision supplements Section 9 of the Agreement:

The Grantee hereby agrees to indemnify the Company (or any Subsidiary) and/or the Trustee and hold them harmless against and from any and all liability for any Tax-Related Items and other amounts, or interest or penalty thereon, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such amounts from any payment made to the Grantee. Any reference to the Company or the Employer shall include a reference to the Trustee. The Grantee hereby undertakes to release the Trustee from any liability in respect of any action or decisions duly taken and *bona fide* executed in relation to the Plan or any RSUs or Shares acquired under the Plan. The Grantee agrees to execute any and all documents which the Company or the Trustee may reasonably determine to be necessary in order to comply with the Israeli Income Tax Ordinance.

The Grantee shall not be liable for the Employer's components of payments to the national insurance institute, unless otherwise agreed by the Grantee and allowed by applicable tax laws. Furthermore, the Grantee agrees to indemnify the Company, the Employer and/or the Trustee and hold them harmless against and from any and all liability for any such tax or interest or penalty thereon that Grantee has agreed to pay, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax from any payment made to the Grantee for which the Grantee is responsible.

Notwithstanding anything to the contrary in the Agreement, no Tax-Related Items will be settled by withholding Shares, unless the ITA approves otherwise in writing.

Governing Law. This section supplements Section 22 of the Agreement:

To the extent any covenant, condition, or other provision of the Agreement and the rights of the Grantee hereunder are intended to be rights granted under Section 102 and therefore determined to be subject to Israeli law, such covenant, condition, or other provision of the Agreement shall be subject to applicable Israeli law, but shall in no way affect, impair, or invalidate any other provision of the Agreement, and the applicability of the Plan to such covenant, condition, or other provision of the Agreement.

Written Acceptance. The Grantee must print, sign and deliver the signed copy of the Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

**MICROCHIP TECHNOLOGY INCORPORATED
2004 EQUITY INCENTIVE PLAN**

ISRAEL BENEFICIARY 102 UNDERTAKING

If the Grantee has not already executed an Israel Beneficiary 102 Undertaking in connection with grants made under the Israeli Subplan, the Grantee must print, sign and deliver the signed copy of this Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

1. I hereby agree that any shares (the "Shares") (as defined by Section 102 of the Income Tax Ordinance [New Version], 1961) (the "Tax Ordinance") issued to me by Microchip Technology Incorporated according to and under the terms and conditions of the Plan and the Israeli Subplan adopted by Microchip Technology Incorporated as of 13 December 2013 (collectively, the "Plan") are granted to me to qualify under the capital gain tax treatment in accordance and pursuant to Section 102(b)(2) of the Tax Ordinance after 132 amendment ("Section 102") and the Income Tax Rules (Tax Relief upon the Allotment of Shares to Employees), 2003 (the "Rules") unless I am otherwise notified subject to Microchip Technology Incorporated's absolute discretion to change such election on future grants and subject to the Tax Authorities' approval.
2. I declare and confirm that I am familiar with the terms of Section 102, the Rules, and the implications and consequences of the chosen tax arrangement with respect to the Shares, and consent that all the terms and conditions set forth in Section 102 and the Rules, as shall be amended from time to time, shall apply to me and bind me.
3. I hereby declare and confirm that I am familiar with the provisions of the trust agreement signed between Microchip Technology Israel Ltd. and Tamir Fishman Trusts 2004 Ltd. (the "Trustee") (the "Trust Agreement"), including the deed of trust, attached to the Trust Agreement and constitute an integral part thereto ("Deed of Trust"), and I consent that the Trust Agreement and the Deed of Trust shall fully bind me.
4. Without derogating from the generality of the aforesaid, I agree that the Shares will be deposited in trust with the Trustee and be held in trust in accordance with Section 102, the Rules and the Trust Agreement.
5. I hereby declare and consent that any and all the rights that I shall be entitled to with respect to the Shares, including, without limitation, dividend and shares issued pursuant to adjustments made by Microchip Technology

Incorporated and shall be subject to Section 102, the Rules and the Trust Agreement.

6. Without derogating from the generality of the aforesaid, I acknowledge that during the "Holding Period" as determined by the Tax Ordinance I am prevented from selling the Shares, or releasing them from the Trustee, before the termination of the "Holding Period" and I understand the tax implications and consequences that may be applied as a result of breaching such obligation, as set by Section 102, which I am familiar with.
7. If I will cease to be an Israeli resident or if my employment will be terminated for any reason, the Shares shall remain subject to section 102, the Rules and the Trust Agreement.
8. I hereby agree that any tax liability whatsoever arising from the grant, vesting of any restricted stock units, the sale of Shares, the release of Shares from the Trustee or any other event or act with respect to the Shares granted to me, shall be borne solely by me. I declare and consent that the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee shall make any tax payment due, out of the proceeds of any sale of Shares, to any tax authority, according to Section 102, the Rules, the Trust Agreement or any other compulsory payments or applicable law.
9. I understand that this grant of Shares under the capital gain track is conditioned upon the receipt, inter alia, of all required approvals from the tax authorities. Accordingly, to the extent that for whatever reason Microchip Technology Israel Ltd. shall not be granted an approval by the Israeli Tax Authorities under section 102, I shall bear and pay any and all taxes and any other compulsory payments applicable to the grant, exercise, sale or other disposition of stocks; I hereby declare and consent for the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee to deduct any tax payment due, out of the proceeds of any sale of Shares, for any payment to the tax authorities, according to the Rules, or any other applicable compulsory payments.
10. I confirm that Microchip Technology Incorporated and/or the Trustee shall not be required to release any proceeds deriving from the sale of Shares, to me, until all required tax payments according to section 102, the Rules and the Trust Agreement, including any other compulsory payments, or applicable law, have been fully assured.
11. I acknowledge that the Trustee is not a tax advisor and it is recommended that I consult a tax advisor before I accept this letter, any restricted stock units vest, sell any Shares or release them from the Trustee, or any other act.

12. I agree to indemnify Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee and to hold them harmless against and from any and all liability for any damage and/or loss and/or expense that might occur regarding the tax liability and/or the execution of the Trust Agreement.
13. I hereby agree to bear all the applicable fees and commissions involved in establishing and maintaining trust account in the Trustee's name, and in performing any action in the trust account.
14. I hereby agree to sign any document reasonably required at the company's and/or the Trustee's request.
15. I hereby confirm that I read this letter thoroughly, received all the clarifications and explanations I requested, I understand the contents of this letter and the obligations I undertake in signing it.

Name of the Beneficiary

I.D. Number

Signature

ITALY

Data Privacy Notice. The following provision replaces paragraph 12 of the Agreement:

The Grantee hereby explicitly and unambiguously consents to the collection, use, processing and transfer, in electronic or other form, of the Grantee's personal data as described in this provision of this Appendix by and among, as applicable, the Employer, the Company and any Parent and/or Subsidiary for the exclusive purpose of implementing, administering, and managing the Grantee's participation in the Plan.

The Grantee understands that the Employer, the Company and any Parent and/or Subsidiary may hold certain personal information about the Grantee, including, without limitation, the Grantee's name, home address and telephone number, date of birth, social insurance or other identification number, salary, nationality, job title, any Shares or directorships held in the Company or a Parent or Subsidiary, details of all RSUs, or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, managing, and administering the Plan ("Data").

The Grantee also understands that providing the Company with Data is necessary for the performance of the Plan and that the Grantee's refusal to provide such Data would make it impossible for the Company to perform its contractual obligations and may affect the Grantee's ability to participate in the Plan. The Controller of personal data processing is Microchip

Technology Incorporated at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., and, pursuant to Legislative Decree no. 196/2003, its representative in Italy is Microchip Technology SRL with registered offices at Via Pablo Picasso 41, 20025 Legnano (MI) Italy.

*The Grantee understands that Data will not be publicized, but it may be transferred to E*Trade Financial (or one of its affiliates) or such other stock plan service provider as may be selected by the Company in the future (any such entity, "Broker"), or other third parties involved in the management and administration of the Plan. The Grantee understands that Data may also be transferred to the independent registered public accounting firm engaged by the Company. The Grantee further understands that the Company and/or any Parent and/or Subsidiary will transfer Data among themselves as necessary for the purpose of implementing, administering, and managing the Grantee's participation in the Plan, and that the Company or a Subsidiary may each further transfer Data to third parties assisting the Company in the implementation, administration, and management of the Plan, including any requisite transfer of Data to the Broker or other third party with whom the Grantee may elect to deposit any Shares acquired at vesting of the RSUs. Such recipients may receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing the Grantee's participation in the Plan. The Grantee understands that these recipients may be located in or outside the European Economic Area, such as in the United States or elsewhere. Should the Company exercise its discretion in suspending all necessary legal obligations connected with the management and administration of the Plan, it will delete Data as soon as it has completed all the necessary legal obligations connected with the management and administration of the Plan.*

The Grantee understands that Data processing related to the purposes specified above shall take place under automated or non-automated conditions, anonymously when possible, that comply with the purposes for which Data is collected and with confidentiality and security provisions, as set forth by applicable laws and regulations, with specific reference to Legislative Decree no. 196/2003.

The processing activity, including communication, the transfer of Data abroad, including outside of the European Economic Area, as herein specified and pursuant to applicable laws and regulations, does not require the Grantee's consent thereto, as the processing is necessary to performance of contractual obligations related to implementation, administration, and management of the Plan. The Grantee understands that, pursuant to paragraph 7 of the Legislative Decree no. 196/2003, the Grantee has the right to, without limitation, access, delete, update, correct, or terminate, for legitimate reason, the Data processing.

Furthermore, the Grantee is aware that Data will not be used for direct-marketing purposes. In addition, Data provided can be reviewed and questions or complaints can be addressed by contacting the Grantee's local human resources representative.

Grant Terms Acknowledgment. By accepting the RSUs, the Grantee acknowledges having received and reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

The Grantee further acknowledges having read and specifically approves the following paragraphs of the Agreement: paragraph 9 (“Tax Obligations”), paragraph 10 (“Nature of Grant”), paragraph 13 (“Language”), paragraph 22 (“Entire Agreement; Governing Law”), and the “Data Privacy Notice” provision set forth above in this Appendix.

JAPAN

There are no country-specific terms and conditions.

KOREA

There are no country-specific terms and conditions.

MALAYSIA

There are no country-specific terms and conditions.

MEXICO

No Entitlement or Claims for Compensation. These provisions supplement paragraph 10 of the Agreement:

Modification. By accepting the RSUs, the Grantee understands and agrees that any modification of the Plan or the Agreement or its termination shall not constitute a change or impairment of the terms and conditions of employment.

Policy Statement. The Award of RSUs the Company is making under the Plan is unilateral and discretionary and, therefore, the Company reserves the absolute right to amend it and discontinue it at any time without any liability.

The Company, with registered offices at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., is solely responsible for the administration of the Plan and participation in the Plan and the acquisition of Shares does not, in any way, establish an employment relationship between the Grantee and the Company since the Grantee is participating in the Plan on a wholly commercial basis and the sole employer is Microchip Technology Mexico, S.DE R.L. DE C. V. nor does it establish any rights between the Grantee and the Employer.

Plan Document Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he/she has received copies of the Plan, has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement.

In addition, by accepting the Agreement, the Grantee further acknowledges that the Grantee has read and specifically and expressly approve the terms and conditions in paragraph 10 of the Agreement, in which the following is clearly described and established: (i) participation in the Plan does not constitute an acquired right; (ii) the Plan and participation in the Plan is offered by the Company on a wholly discretionary basis; (iii) participation in the Plan is voluntary; and (iv)

the Company and any Parent or Subsidiary are not responsible for any decrease in the value of the Shares underlying the RSUs.

Finally, the Grantee hereby declares that he/she does not reserve any action or right to bring any claim against the Company for any compensation or damages as a result of the Grantee's participation in the Plan and therefore grant a full and broad release to the Employer, the Company and any Parent or Subsidiary with respect to any claim that may arise under the Plan.

Spanish Translation

Reconocimiento de la Ley Laboral. Estas disposiciones complementan el apartado 10 del Acuerdo:

Modification. Al aceptar las Unidades de Acción Restringida, usted reconoce y acuerda que cualquier modificación del Plan o su terminación no constituye un cambio o desmejora de los términos y condiciones de empleo.

Declaración de Política. El Otorgamiento de Unidades de Acción Restringida de la Compañía en virtud del Plan es unilateral y discrecional y, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y discontinuar el mismo en cualquier tiempo, sin responsabilidad alguna.

La Compañía, con oficinas registradas ubicadas en 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., es la única responsable de la administración del Plan y de la participación en el mismo y la adquisición de Acciones no establece de forma alguna una relación de trabajo entre usted y la Compañía, ya que su participación en el Plan es completamente comercial y el único empleador es Microchip Technology Mexico, S.DE R.L. DE C. V. en caso de ser aplicable, así como tampoco establece ningún derecho entre la persona que tenga el derecho a optar y el Empleador.

Reconocimiento del Documento del Plan. Al aceptar el Otorgamiento de las Unidades de Acción Restringida, usted reconoce que ha recibido copias del Plan, ha revisado el mismo, al igual que la totalidad del Acuerdo y, que ha entendido y aceptado completamente todas las disposiciones contenidas en el Plan y en el Acuerdo.

Adicionalmente, al firmar el Acuerdo, reconoce que ha leído, y que aprueba específica y expresamente los términos y condiciones contenidos en la Renuncia de Derecho o Reclamo por Compensación, apartado 10 del Acuerdo, en el cual se encuentra claramente descrito y establecido lo siguiente: (i) la participación en el Plan no constituye un derecho adquirido; (ii) el Plan y la participación en el mismo es ofrecida por la Compañía de forma enteramente discrecional; (iii) la participación en el Plan es voluntaria; y (iv) la Compañía, así como su Sociedad controlante, Subsidiaria o Filiales no son responsables por cualquier disminución en el valor de las Acciones en relación a las Unidades de Acción Restringida.

Finalmente, declara que no se reserva ninguna acción o derecho para interponer una demanda en contra de la Compañía por compensación, daño o perjuicio alguno como resultado de su participación en el Plan y, en consecuencia, otorga el más amplio finiquito al Empleador, así

como a la Compañía, a su Sociedad controlante o Subsidiaria con respecto a cualquier demanda que pudiera originarse en virtud del Plan.

NETHERLANDS

There are no country-specific terms and conditions.

PHILIPPINES

There are no country-specific terms and conditions.

ROMANIA

There are no country-specific terms and conditions.

SINGAPORE

Securities Law Legend. The RSUs are being granted pursuant to the “Qualifying Person” exemption” under section 273(1)(f) of the Securities and Futures Act (Chapter 289, 2006 Ed.) (“SFA”). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. The Grantee should note that the RSUs are subject to section 257 of the SFA, and the Grantee will not be able to make (i) any subsequent sale of the Shares in Singapore or (ii) any offer of such subsequent sale of the Shares subject to the RSUs in Singapore, unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA (Chapter 289, 2006 Ed.).

SPAIN

Termination of Employment. The RSUs provide a conditional right to Shares and may be forfeited or affected by the Grantee’s termination of employment, as set forth in the Agreement. For avoidance of doubt, the Grantee’s rights, if any, to the RSUs upon termination of employment shall be determined as set forth in the Agreement, including, without limitation, where (i) the Grantee is deemed to be constructively dismissed or unfairly dismissed without good cause; (ii) the Grantee is dismissed for disciplinary or objective reasons or due to a collective dismissal; (iii) the Grantee terminates employment due to a change of work location, duties or any other employment or contractual condition (except as otherwise expressly set forth in the Agreement); or (iv) the Grantee terminates employment due to the Company’s or any of its Subsidiaries’ unilateral breach of contract. Consequently, the termination of the Grantee’s employment for any of the above reasons shall be governed by paragraphs 4 and 19(i) of the Agreement, unless otherwise determined by the Company, in its sole discretion.

Labor Law Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he or she understands and agrees to the terms and conditions applicable to participation in the Plan and that he or she has received a copy of the Plan.

The Grantee understands that the Company has unilaterally, gratuitously and discretionally decided to grant RSUs under the Plan to individuals who may be employees of the Company or any Parent

or Subsidiary of the Company throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Parent or Subsidiary on an ongoing basis, other than as expressly set forth in the Plan and the Agreement. Consequently, the Grantee understands that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any Parent or Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Furthermore, the Grantee understands and freely accepts that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant since the future value of the RSUs and the underlying Shares is unknown and unpredictable. In addition, the Grantee understands that this grant would not be made but for the assumptions and conditions referred to above; thus, the Grantee understands, acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the RSUs shall be null and void.

Securities Law Legend. The RSUs and the Shares issued upon vesting are considered a private placement outside of the scope of Spanish laws on public offerings and issuances of securities.

SWEDEN

There are no country-specific terms and conditions.

SWITZERLAND

There are no country-specific terms and conditions.

TAIWAN

There are no country-specific terms and conditions.

THAILAND

There are no country-specific terms and conditions.

UNITED KINGDOM

Tax Obligations. The following provision supplements paragraph 9 (“Tax Obligations”) of the Agreement:

If payment or withholding of the Tax-Related Items is not made within ninety (90) days of the event giving rise to the Tax-Related Items or such other period specified in Section 222(1)(c) of the U.K. Income Tax (Earnings and Pensions) Act 2003 (the “Due Date”), the amount of any uncollected Tax-Related Items shall constitute a loan owed by the Grantee to the Employer, effective as of the Due Date. The Grantee agrees that the loan will bear interest at the then-current official rate of Her Majesty’s Revenue & Customs (“HMRC”), it will be immediately due and repayable, and the Company or the Employer may recover it at any time thereafter by any of the means referred to in paragraph 9 of the Agreement.

Notwithstanding the foregoing, if the Grantee is a director or executive officer of the Company (within the meaning of Section 13(k) of the U.S. Securities and Exchange Act of 1934, as amended), the Grantee shall not be eligible for a loan from the Company to cover the Tax-Related Items. In the event that the Grantee is a director or executive officer and any such Tax-Related Items are not collected from or paid by the Grantee by the Due Date, the amount of any uncollected Tax-Related Items will constitute a benefit to the Grantee on which additional income tax and National Insurance contributions (“NICs”) will be payable. The Grantee understands that he or she will be responsible for reporting any income tax and NICs (including the Employer NICs, as defined below) due on this additional benefit directly to HMRC under the self-assessment regime.

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Joint Election for Transfer of Secondary Class 1 National Insurance Contributions to the Grantee. As a condition of vesting of the RSUs, the Grantee agrees to accept any liability for secondary Class 1 national insurance contributions, which may be payable by the Company or the Employer in connection with the RSUs (“Employer NICs”). To accomplish the foregoing, the Grantee agrees to enter into an election between himself or herself and the Employer (the “Election”), by printing, signing and returning the form approved for such Election by HMRC and attached as Exhibit B to this Agreement to the Human Resources Manager prior to vesting of the RSUs. The Grantee further agrees to enter into any other consents or elections required to accomplish the transfer of the Employer NICs to the Grantee, prior to vesting of the RSUs. The Grantee further agrees to enter into such other joint elections as may be required between himself or herself and any successor to the Company and/or the Employer. If the Grantee does not enter into an Election prior to the vesting of the RSUs, the Grantee will permanently forfeit the RSUs without any liability to the Company and/or the Employer and any Shares that have been issued upon vesting will be returned to the Company at no cost to the Company.

The Grantee further agrees that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in paragraph 9 of the Agreement, as supplemented above.

* * *

EXHIBIT A

**AGREEMENT
FOR PARTICIPANTS IN BELGIUM**

**AGREEMENT REGARDING A TWO YEAR LOCK-UP PERIOD
FOR SHARES ACQUIRED UPON VESTING OF RESTRICTED STOCK UNITS**

If you have not already executed an Agreement for Participants in Belgium ("*Agreement*") and would like to benefit from the favourable tax regime provided for in the Circular (as defined below), please print, sign and return this Agreement to Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A., c/o Tricia Bajaj, within 120 calendar days from the grant date specified in the Notice of Grant of Restricted Stock Units. Please also retain a copy of this Agreement for your files.

BETWEEN

- 1) Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A. (hereafter "*Microchip*"); and

NAME: _____

ADDRESS: _____

(hereafter the "*Grantee*", and, together with Microchip, the "*Parties*")

WHEREAS

Microchip has granted on the grant date set forth in the applicable Notice of Grant of Restricted Stock Units ("*Grant Notice*") a number of restricted stock units to the Grantee subject to the terms and conditions in the Microchip Technology Incorporated 2004 Equity Incentive Plan (the "*Plan*"), the Grant Notice and the Restricted Stock Units Agreement (the "*RSU Grant*");

This Agreement is also intended to cover any subsequent grant of restricted stock units that may be made under the Plan, in the sole discretion of Microchip, on or after the Effective Date (as defined below) ("*Subsequent Grant*"); and

The Grantee would like to benefit from the favourable tax regime provided for in Administrative Circular nr. Ci.RH.241/467.450 of June 21, 1995 (the "*Circular*") with respect to the shares of common stock of Microchip which he/she will acquire upon the vesting of the aforementioned RSU Grant and any Subsequent Grant;

PARTIES HAVE AGREED AS FOLLOWS:

The shares that will be delivered to the Grantee upon vesting of the RSU Grant and any Subsequent Grant will be subject to a two year lock-up period, starting from the date of vesting of the relevant grant, during which the Grantee cannot sell or otherwise transfer the respective shares.

The Parties reserve the right to terminate this Agreement in its entirety, or as far as it relates to any particular grant, at any time prior to the Vesting Date specified in the relevant Grant Notice. Notice of termination must specify the grant date of the RSU Grant and/or Subsequent Grant to which it is intended to apply. The Parties understand that termination shall disqualify the Grantee from the favourable tax regime provided for in the Circular with respect to shares of common stock of Microchip which he/she will acquire upon the vesting of only the particular grant(s) specified in the notice of termination. Notice of termination shall be provided to Microchip by email to #stockplans@microchip.com.

This Agreement shall be effective as of the date this Agreement is received by Microchip (the "**Effective Date**").

COMPANY

Signature: /s/ Steve Sanghi
Steve Sanghi, CEO
Microchip Technology Incorporated

GRANTEE

Signature: _____

Printed Name: _____

Date: _____

Made in: _____
City, Country

EXHIBIT B

MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN (UK Employees)

Election To Transfer the Employer's National Insurance Liability to the Employee

1. **Parties**

This Election is between:

- (A) **Employee Name** (the "Employee"), who is eligible to receive Restricted Stock Units granted by Microchip Technology Incorporated of 2355 Chandler Blvd., Chandler, Arizona 85224, United States (the "Company") pursuant to the terms and conditions of the 2004 Equity Incentive Plan (the "Plan"), and
- (B) **Microchip Limited** (registered number 2189500) with registered office at Microchip House, 720 Wharfedale Road, Winnersh Triangle, Wokingham, Berkshire RG41 5TP, United Kingdom (the "Employer"), which employs the Employee.

2. **Purpose of Election**

2.1 This Election relates to the employer's secondary Class 1 National Insurance Contributions (the "Employer's Liability") which may arise on:

- (i) the acquisition of securities pursuant to the Restricted Stock Units; and/or
- (ii) the assignment or release of the Restricted Stock Units in return for consideration; and/or
- (iii) the receipt of any other benefit in money or money's worth in connection with the Restricted Stock Units,

(each, a "Taxable Event") pursuant to section 4(4)(a) of the Social Security Contributions and Benefits Act 1992.

2.2 This Election applies to all Restricted Stock Unit awards granted to the Employee under the Plan on or after 23rd December 2005 up to the termination date of the Plan.

3. **The Election**

This joint election does not apply with respect to any liability arising as a result of U.K. anti-avoidance legislation. The Employee and the Employer jointly elect that the entire liability of the Employer to pay the Employer's Liability on the Taxable Event is hereby transferred to the Employee. The Employee understands that by

signing this Election he or she will become personally liable for the Employer's Liability covered by this Election.

4. Payment of the Employer's Liability

- 4.1 The Employee hereby authorizes the Company and/or the Employer to collect the Employer's Liability from the Employee at any time after the Taxable Event:
- (i) by deduction from salary or any other payment payable to the Employee at any time on or after the date of the Taxable Event; and/or
 - (ii) directly from the Employee by payment in cash or cleared funds; and/or
 - (iii) by arranging, on behalf of the Employee, for the sale of some of the securities which the Employee is entitled to receive in respect of the Restricted Stock Units.
- 4.2 The Employer hereby reserves for itself and the Company the right to withhold the transfer of any securities to the Employee until full payment of the Employer's Liability is received.
- 4.3 The Employer agrees to remit the Employer's Liability to the HM Revenue and Customs on behalf of the Employee within 14 days after the end of the UK tax month during which the Taxable Event occurs.

5. Duration of Election

- 5.1 The Employee and the Employer agree to be bound by the terms of this Election regardless of whether the Employee is transferred abroad or is not employed by the Employer on the date on which the Employer's Liability becomes due.
- 5.2 This Election will continue in effect until the earliest of the following:
- (i) the Employee and the Employer agree in writing that it should cease to have effect;
 - (ii) on the date the Employer serves written notice on the Employee terminating its effect;
 - (iii) on the date the HM Revenue and Customs withdraws approval of this Election; or
 - (iv) after due payment of the Employer's Liability in respect of the entirety of the Restricted Stock Units to which this Election relates, such that the Election ceases to have effect in accordance with its terms.

GRANTEE

Microchip Technology Incorporated

Signature

By:

Vice President of Human Resources

By

Print Name

Title

Date

Schedule of Employer Companies

The employing companies to which this Election relates are:

NAME

ADDRESS

Microchip Limited

Microchip House
720 Wharfedale Road
Winnersh Trinagle
Wokingham
Berkshire
RG41 5TP
United Kingdom

EXHIBIT 10.20

**MICROCHIP TECHNOLOGY INCORPORATED
2004 EQUITY INCENTIVE PLAN
NOTICE OF GRANT OF RESTRICTED STOCK UNITS**

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Notice of Grant.

Name: <Last Name, First Name>

You have been granted <# of shares> Restricted Stock Units (“RSUs”) subject to and in accordance with the express terms and conditions of the Plan and the Restricted Stock Unit Agreement, including the appendix for your country, if any (“Appendix” and together with the Restricted Stock Unit Agreement, the “Agreement”) attached hereto as Exhibit A. The Plan and Agreement are incorporated herein in their entirety. Each RSU is equivalent to the right to receive one share of Common Stock of the Company (“Share”) for purposes of determining the number of Shares subject to this Award. No Shares will be issued until the vesting conditions of the Award described below are satisfied and the restrictions lapse, subject to the terms and conditions set forth in the Plan and the Agreement. This Award does not entitle Grantee to any stockholder rights with respect to the underlying Shares until the vesting conditions of the Award described below are satisfied, the restrictions lapse and Shares are issued to him/her. Additional terms of this Award are as follows:

Date of Grant: <enter date>

Vesting Schedule: <insert vesting>

Termination Period. This Award automatically terminates and Grantee’s rights are forfeited with respect to any portion of the RSUs invested on the date Grantee ceases to be a Service Provider or in the event that Grantee has not accepted this Grant in accordance with Company procedures 31 days or more prior to its Vest Begin Date. In no event shall this Award vest later than the Vesting Schedule outlined above.

Binding Agreements. By signature of Company's representative below, and Grantee’s acceptance of this Grant in accordance with Company procedures, the parties agree that this Grant Notice, the Agreement, and the Plan constitute Grantee’s entire agreement with respect to this Award and agree to be bound by the terms therein. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Agreement, and/or this Award. This Award may be modified by the Company, but in accordance with Section 21(c) of the Plan, it may not be modified adversely to Grantee’s interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. The internal laws of the State of Arizona, United States of America, but not its choice of law principles, will govern this Award.

GRANTEE:

Microchip Technology Incorporates

Signature

/s/ Steve Sanghi

By

Print Name

Chairman of the Board & CEO

Title

Exhibit A

MICROCHIP TECHNOLOGY INCORPORATED

2004 EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNITS AGREEMENT

1. Grant of Restricted Stock Units. Microchip Technology Incorporated (the “Company”) hereby grants to the Grantee named in the Notice of Grant of Restricted Stock Units (“Grant Notice”) an Award of Restricted Stock Units (“RSUs”), as set forth in the Grant Notice and subject to the terms and conditions in this Restricted Stock Unit Agreement, including any appendix for the Grantee’s country (the “Appendix” and together with the Restricted Stock Unit Agreement, the “Agreement”) and the Company’s 2004 Equity Incentive Plan (the “Plan”). Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Agreement.
2. Company's Obligation. Each RSU represents the right to receive a Share in accordance with the Vesting Period in the Grant Notice. Unless and until the RSUs vest, the Grantee will have no right to receive Shares underlying such RSUs. Prior to actual distribution of Shares pursuant to any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.
3. Vesting Schedule. Subject to paragraph 4 of this Agreement, the RSUs awarded by this Agreement will vest and all restrictions lapse according to the vesting schedule specified in the Grant Notice.
4. Forfeiture upon Termination as a Service Provider. Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited (as determined in accordance with paragraph 10(i) below) at no cost to the Company.
5. Payment after Vesting. Any RSUs that vest in accordance with paragraph 3 of this Agreement will be paid to the Grantee (or in the event of the Grantee's death, to his or her estate) in Shares (unless otherwise determined by the Administrator and stated in the Appendix), upon satisfaction, as determined by the Company, of any Tax-Related Items as set forth in paragraph 9 of this Agreement. The Shares will be issued to the Grantee as soon as practicable after the Vesting Date, but in any event, within the period ending on the later to occur of the date that is two and a half (2 ½) months from the end of (i) the Grantee’s tax year that includes the applicable Vesting Date, or (ii) the Company’s tax year that includes the applicable vesting date.
6. Payments after Death. Any distribution or delivery to be made to the Grantee under this Agreement will, if the Grantee is then deceased, be made to the administrator or executor of the Grantee’s estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. Grant is Not Transferable. Except to the limited extent provided in paragraph 6 of this Agreement, RSUs may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of the RSUs, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, the RSUs grant and the rights and privileges conferred hereby immediately will become null and void.

8. Rights as Stockholder. Neither the Grantee nor any person claiming under or through the Grantee will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until the Grantee's rights with respect to the RSUs have become vested and certificates representing such Shares have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Grantee or Grantee's broker or the Shares have been electronically transferred to Grantee's account.

9. Tax Obligations. Regardless of any action the Company or the Grantee's employer (the "Employer") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related items related to the Grantee's participation in the Plan that are legally applicable to the Grantee ("Tax-Related Items"), the Grantee acknowledges that the ultimate liability for all Tax-Related Items is and remains his or her responsibility and that such liability may exceed the amount actually withheld by the Company or the Employer. The Grantee further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including the grant or vesting of the RSUs, the issuance of Shares on the relevant Vesting Date, the subsequent sale of Shares acquired at vesting of the RSUs, if any, and the receipt of any dividends; and (2) do not commit and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Grantee's liability for Tax-Related Items or achieve any particular tax result. Further, if the Grantee becomes subject to tax and/or social security contributions in more than one jurisdiction between the Grant Date and the date of any relevant taxable, tax and/or social security contribution withholding event, as applicable, the Grantee acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to any relevant taxable, tax and/or social security contribution withholding event, the Grantee shall pay or make appropriate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. In this regard, the Grantee authorizes the Company and/or the Employer, at their sole discretion, to satisfy the obligations with respect to Tax-Related Items by one or a combination of the following: (i) withholding from the Grantee's wages or other cash compensation paid to the Grantee by the Company and/or the Employer; or (ii) withholding from proceeds of the sale of Shares acquired upon vesting of the RSUs, either through a voluntary sale or through a mandatory sale arrangement by the Company (on the Grantee's behalf pursuant to this authorization); or (iii) withholding in Shares to be issued upon vesting of the RSUs; or (iv) by requiring direct payment from the Grantee in cash (or its equivalent). To avoid negative accounting treatment, the Company will withhold or account for Tax-Related Items by considering applicable minimum statutory withholding amounts or other applicable withholding rates. If the Grantee's

and/or the Company's withholding obligations for Tax-Related Items are satisfied as described in (iii) of this paragraph, the Company will endeavor to sell only the number of Shares required to satisfy the Grantee's and/or the Company's withholding obligations for Tax-Related Items; however, the Grantee agrees that the Company may sell more Shares than necessary to satisfy the Tax-Related Items. Further, the Grantee will be deemed to have been issued the full number of Shares subject to the vested RSUs, notwithstanding that a number of Shares is held back solely for purposes of paying the Tax-Related Items due as a result of any aspect of the Grantee's participation in the Plan. The Grantee hereby consents to any action reasonably taken by the Company to satisfy his or her obligations for Tax-Related Items.

Finally, the Grantee shall pay to the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of the Grantee's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares at vesting if the Grantee fails to comply with his or her obligations in connection with the Tax-Related Items.

10. Nature of Grant. In accepting the RSUs, the Grantee expressly acknowledges, understands and agrees to the following:

(a) The Company is granting the Award under the Plan. The Plan is established voluntarily by the Company, is discretionary in nature, and may be modified, amended, suspended or terminated by the Company at any time;

(b) The grant of the Award, future grants of Awards, if any, and benefits and rights provided under the Plan are voluntary, occasional and at the complete discretion of the Company and do not constitute regular or periodic payments. No grant of Awards will be deemed to create any contractual or other right to receive future RSU Awards or benefits in lieu of RSUs, whether or not such a reservation is explicitly stated at the time of such a grant or whether such Awards have been granted repeatedly in the past. All decisions with respect to future RSU Awards, if any, will be at the sole discretion of the Company;

(c) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are extraordinary items that do not constitute compensation of any kind for services of any kind rendered to the Company or the Employer, and which are outside the scope of the Grantee's employment contract, if any;

(d) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are not intended to replace any pension rights or compensation;

(e) For Grantee's residing outside the U.S., the RSUs and the Shares subject to the RSUs are not part of Grantee's normal or expected salary or compensation for any purposes, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, vacation, bonuses, long-term service awards, indemnification, pension or retirement or welfare benefits, or any other payments, benefits or rights of any kind, and in no event

should be considered as compensation for, or relating in any way to, past services for the Company, the Employer or any Subsidiary;

(f) The RSUs and the Grantee's participation in the Plan shall not be interpreted to form an employment contract or relationship with the Company or any Subsidiary;

(g) The future value of the underlying Shares is unknown and cannot be predicted with certainty;

(h) No claim or entitlement to compensation or damages shall arise from forfeiture of the RSU Awards resulting from termination of the Grantee's employment by the Company or the Employer (for any reason whatsoever and regardless of whether in breach of local labor laws) and, in consideration of the RSU Awards, to which the Grantee otherwise is not entitled, the Grantee irrevocably agrees never to institute any claim against the Company or the Employer, waives his or her ability, if any, to bring any such claim, and releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, the Grantee shall be deemed irrevocably to have agreed not to pursue such claim and agrees to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(i) In the event the Grantee's termination of employment (regardless of whether in breach of local labor laws), the Grantee's right to vest in the RSUs under the Plan, if any, will terminate effective as of the date that the Grantee is no longer actively employed and will not be extended by any notice period mandated under local law (*e.g.*, active employment would not include a period of "garden leave" or similar period pursuant to local law); the Administrator shall have the exclusive discretion to determine when the Grantee is no longer actively employed for purposes of the RSUs;

(j) The Company has the right, at any time to amend, suspend or terminate the Plan. The Plan will not be deemed to constitute, and will not be construed by Grantee to constitute, part of the terms and conditions of employment, and that the Company will not incur any liability of any kind to Grantee as a result of any change or amendment, or any cancellation, of the Plan at any time.

(k) The Grantee's employment with the Employer is not affected at all by any Award and shall not create a right to further employment with the Employer. Accordingly, the terms of the Grantee's employment with the Employer will be determined from time to time by the Company or the Subsidiary employing the Grantee (as the case may be), and the Grantee's participation in the Plan shall not interfere with the ability of the Employer, which is hereby expressly reserved, to terminate or change the terms of the employment of the Grantee at any time for any reason whatsoever, with or without good cause or notice, except as may be expressly prohibited by the laws of the jurisdiction in which the Grantee is employed; and

(l) The Grantee is voluntarily participating in the Plan.

11. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Grantee's participation in the Plan, or the Grantee's acquisition or sale of the underlying Shares. The Grantee is hereby advised to

consult with his or her own personal tax, legal, and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

12. Data Privacy. By entering into this Agreement, and as a condition of the vesting of the Award, Grantee explicitly and unambiguously consents to the collection, use, and transfer of personal data, as set forth in this Agreement and any other grant materials by and among, as applicable, the Employer, the Company and any Parent or Subsidiary of the Company for the exclusive purpose of implementing, administering and managing the Grantee's participation in the Plan.

(i) Grantee understands that the Employer, the Company and its Subsidiaries hold certain personal information about the Grantee, including, but not limited to, the Grantee's name, home address and telephone number, date of birth, social security number or other identification number, salary, nationality, job title, any Shares or directorships held in the Company, and details of all Awards or other entitlement to Shares awarded, canceled, exercised, vested, unvested, or outstanding in Grantee's favor, for the exclusive purpose of managing and administering the Plan ("Data").

(ii) Grantee further understands that the Employer, the Company and/or its Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Grantee's participation in the Plan, and that the Employer, the Company and/or its Subsidiaries may each further transfer Data to any third parties assisting the Company in the implementation, administration, and management of the Plan, including the broker or such other stock plan service provider as may be selected by the Administrator ("Data Recipients").

(iii) Grantee understands that the Data Recipients may be located in Grantee's country or elsewhere, including outside the European Economic Area, and that the Data Recipient's country (e.g., the United States) may have different data privacy laws and protections. Grantee authorizes the Data Recipients to receive, possess, use, retain, and transfer Data, in electronic or other form, for the purposes of implementing, administering, and managing Grantee's participation in the Plan. Grantee understands that Data will be held only as long as is necessary to implement, administer and manage the Grantee's participation in the Plan.

(iv) Grantee understands that Grantee may request a list with the names and addresses of the potential Data Recipients by contacting his/her local human resources representative. Grantee further understands that he/she may, at any time, review the Data, request additional information about the storage and processing of Data, request that any necessary amendments be made to it, or withdraw Grantee's consent herein in writing by contacting the Company. Grantee further understands, however, that withdrawing consent may affect Grantee's ability to participate in the Plan. For more information on the consequences of Grantee's refusal to consent or withdrawal of consent, Grantee understands that Grantee may contact his/her local human resources representative.

13. Language. If the Grantee receives this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to the Grantee (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

16. Administrator Authority. The Administrator has the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application thereof as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Grantee, the Company and all other interested persons. No member of the Administrator will be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, the Grant Notice or this Agreement.

17. Notice Requirement. Where there is a legal requirement for any notice or document to be sent to any person by any other person, it shall be considered sent if an electronic transmission of the relevant information is sent in a form previously determined as being acceptable to the Administrator. For the avoidance of doubt, the Administrator may dispense with the requirement to tender a certificate on the issuance of Shares under an RSU Award where the Administrator authorizes any system permitting electronic notification.

18. Address for Notices. Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at 2355 West Chandler Boulevard, Chandler AZ 85224, U.S.A. Attn: Stock Administration, or at such other address as the Company may hereafter designate in writing or electronically.

19. Electronic Delivery and Acceptance. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an online or electronic system established and maintained by the Company or a third party designated by the Company.

20. Appendix. Notwithstanding any provisions in this Agreement, the RSUs shall be subject to any special terms and conditions for the Grantee's country set forth in the Appendix. Moreover, if the Grantee relocates to one of the countries included in the Appendix, the special terms and conditions for such country shall apply to the Grantee, to the extent that the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

21. Imposition of Other Requirements. The Company reserves the right to impose other requirements on the Grantee's participation in the Plan, on the RSUs and on any Shares acquired under this Award, to the extent that the Company determines it is necessary or advisable to comply with local law or facilitate the administration of the Plan, and to require the Grantee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

22. Entire Agreement; Governing Law. The Plan and Grant Notice are incorporated herein by reference. The Plan, Grant Notice and this Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Grantee with respect to the subject matter hereof, and may not be modified adversely to the Grantee's interest except by means of a writing signed by the Company and Grantee. The Company will administer the Plan from the United States of America. This Agreement, the Grant Notice and all Awards are governed by the internal substantive laws, but not the choice of law principles, of the State of Arizona, United States of America.

For purposes of litigating any dispute that arises under this grant or the Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Arizona and agree that such litigation shall be conducted in the courts of Maricopa County, Arizona, or the federal courts for the United States for the District of Arizona, where this grant is made and/or to be performed.

23. Severability. The provisions of this Agreement are severable, and, if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions nevertheless shall be binding and enforceable.

By Grantee's electronic acceptance of the Agreement, Grantee agrees that this Award is granted under and governed by the terms and conditions of the Plan, the Grant Notice and this Agreement. Grantee has reviewed the Plan, the Grant Notice and this Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Agreement and fully understands all provisions of the Plan, the Grant Notice and this Agreement. Grantee

hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan, the Grant Notice and this Agreement.

MICROCHIP TECHNOLOGY

By: /s/ Steve Sanghi

Steve Sanghi, Chairman of the Board & CEO

APPENDIX

ADDITIONAL TERMS AND CONDITIONS OF THE MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN RESTRICTED STOCK UNITS AGREEMENT

This Appendix includes additional terms and conditions that govern the RSUs granted to the Grantee under the Plan if the Grantee resides in one of the countries listed below. All capitalized terms used, but not defined herein shall have the meaning given to such terms in the Plan and/or the Agreement.

If the Grantee is a citizen or resident of a country other than the one in which the Grantee is currently working or transfers employment after the RSUs are granted, the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall be applicable to the Grantee.

AUSTRALIA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, due to securities law considerations in Australia, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

AUSTRIA

There are no country-specific terms and conditions.

BELGIUM

Tax Reporting. If the Grantee is a Belgian resident, the Grantee is required to report any security (e.g., Shares acquired under the Plan) or bank account (including any brokerage account held by you at E*Trade Financial or other stock plan service provider as may be selected by the Company in the future) held outside Belgium on your annual income tax return.

Agreement for Participants in Belgium. Under Belgian tax law, if the Shares acquired at vesting of RSUs cannot be sold for two years from the Vesting Date, the fair market value of the Shares on the Vesting Date is deemed to be 100/120 (83 1/3%) of the actual fair market value of such shares for purposes of calculating the taxable amount. **If the Grantee would like to take advantage of this favourable tax treatment, the Grantee must print, sign and return a copy of the Agreement Regarding a Two Year Lock Up Period for Shares Acquired Upon Vesting of Restricted Stock Units attached as Exhibit A to this Agreement by the deadline specified therein.**

CANADA

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, due to securities law considerations in Canada, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Termination of Employment. The following provision replaces paragraph 10(i) of the Agreement:

In the event of termination of the Grantee's employment, the Grantee's right to vest in the RSUs under the Plan, if any, will terminate effective as of the date that is the earlier of (i) the date on which the Grantee receives a notice of termination of employment from the Company or the Employer, or (ii) the date on which the Grantee is no longer employed, regardless of any notice period or period of pay in lieu of such notice required under local law; the Administrator shall have the exclusive discretion to determine when the Grantee is no longer employed for purposes of the RSUs.

The following terms and conditions apply if the Grantee is in Quebec:

Authorization to Release and Transfer Necessary Personal Information. The following provision supplements paragraph 12 of the Agreement:

The Grantee hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. The Grantee further authorizes the Company and/or any Parent or Subsidiary to disclose and discuss the Plan with their advisors. The Grantee further authorizes the Company and any Parent or Subsidiary to record and keep such information in the Grantee's employment file.

French Language Acknowledgment. The following provision supplements paragraph 13 of the Agreement:

The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or directly hereto, be drawn up in English.

Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention, ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

CHINA

Deposit of Shares and Distribution of Dividends. Due to exchange control laws and regulations in the People's Republic of China ("PRC"), if the Participant is a PRC national, any Shares acquired at vesting of the RSUs will be deposited in an account established for Grantee by the Company (the "Account") with E*Trade Financial or any successor broker designated by Company, in its sole discretion (the "Designated Broker"). Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to any person, broker or other account with the Designated Broker or to a brokerage account outside of the Designated Broker.

Any dividends related to Shares acquired under the Plan may, at the Company's sole discretion, be deposited into an Account with the Designated Broker, or re-invested by Company on behalf of the Grantee.

Until such time as the Shares acquired at vesting of the RSUs are sold, the Grantee must maintain the Shares issued to Grantee under the Plan in the Account and must not transfer the Shares to another account with the Designated Broker or to a brokerage account outside of the Designated Broker.

Forfeiture and Sale upon Termination as a Service Provider. The following provision replaces paragraph 4 of the Agreement:

(a) Notwithstanding any contrary provision of this Agreement or the Grant Notice, if the Grantee terminates service as a Service Provider for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited at no cost to the Company.

(b) The Grantee must sell all Shares acquired under the Plan on or before the date of termination as a Service Provider. Grantee hereby authorizes Company or the Designated Broker to sell such Shares on behalf of the Grantee without notice to or consent from the Grantee if Grantee has not sold all Shares so acquired as of the date of termination of service. The sale of Shares shall be carried out within a reasonable time of termination of service as determined by Company. The proceeds from such sale, net any Tax-Related Items and broker's fees, shall be deposited in Grantee's bank account in China, or delivered to Grantee in China through such other means determined by Company, in its discretion. Grantee hereby releases and holds harmless Company and any Parent or Subsidiary, employees and agents ("Indemnitees") from any loss that Grantee may incur due to the timing of the sale of Shares by Company and acknowledges that the Company and the Employer are under no obligation to arrange for the sale of the Shares at any particular price and are not liable for any fluctuations in the trading price of the Shares and/or the U.S. dollar exchange rate.

(c) If Grantee does transfer Shares into an account to which Company has no visibility, then Grantee will sell all Shares no later than the date of termination as a Service Provider and provide written evidence of such sale of Shares to Company within two (2) business days of the date of termination as a Service Provider. Such evidence must be in a form acceptable to Company.

(d) Grantee shall defend, hold harmless and indemnify Indemnitees from any and all penalties, damages, and costs that may be incurred by Indemnitees arising out of or in connection with Grantee's failure to comply with these obligations and any requirements under local exchange control laws applicable to him/her.

Exchange Control Restriction. The Grantee understands and agrees that, if he or she is a PRC national, due to exchange control laws and regulations in the PRC, the Grantee will be required to repatriate immediately to the PRC any cash proceeds from the sale of the Shares acquired under the Plan. The Grantee understands further that, under applicable laws and regulations, such repatriation may need to be effected through a special foreign exchange account established by the Company or a Parent or Subsidiary, and the Grantee consents and agrees that the proceeds from the sale of the Shares may be transferred to such special account before being delivered to the Grantee. Moreover, if the proceeds from the sale of the Shares are converted to local currency, the Grantee acknowledges that the Company (including its Parent and Subsidiary corporations) is under no obligation to secure any particular currency conversion rate and may face delays in converting the proceeds to local currency due to exchange control restrictions in the PRC. The Grantee agrees to

bear the risk of any fluctuation in the U.S. dollar/local currency exchange rate between the date the Grantee realizes U.S. dollar proceeds from his or her participation in the Plan and the date that the Grantee receives cash proceeds converted to local currency. The Grantee also agrees to comply with any other requirements that may be imposed by the Company in the future to facilitate compliance with exchange control requirements in the PRC.

DENMARK

There are no country-specific terms and conditions.

FRANCE

Nature of RSUs. The RSUs granted to you pursuant to this Agreement are not intended to qualify for the favorable tax and social security treatment in France applicable to shares granted for no consideration under Sections L. 225-197 to L. 225-197-6 of the French Commercial Code, as amended.

Consent to Receive Information in English. By accepting this Agreement providing for the terms and conditions of the RSUs, the Grantee confirms that he/she has read and understood the documents relating to this Award (*i.e.*, the U.S. Plan and this Agreement), which were provided in English. The Grantee accepts the terms of those documents accordingly.

En acceptant de manière électronique le présent Contrat d'Attribution décrivant les termes et conditions de votre attribution d'Actions Gratuites, vous confirmez ainsi avoir lu et compris les documents relatifs à cette attribution (c'est-à-dire, le Plan Américain et le présent Contrat d'Attribution) qui vous ont été communiqués en langue anglaise. Vous en acceptez les termes en connaissance de cause.

Exchange Control Information. If the Grantee maintains a foreign bank account, he/she is required to report such to the French tax authorities when filing his/her annual tax return.

GERMANY

There are no country-specific terms and conditions.

HONG KONG

Securities Law Warning. The offer of the RSUs and the Shares subject to the RSUs do not constitute a public offering of securities under Hong Kong law and are available only to Employees of the Company or its Subsidiaries participating in the Plan. The Grantee should be aware that the contents of this Agreement have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. Nor have the documents been reviewed by any regulatory authority in Hong Kong. The RSUs are intended only for the personal use of each Grantee and may not be distributed to any other person. The Grantee is advised to exercise caution in relation to this offer. If the Grantee is in doubt about any of the contents of this Agreement or the Plan, the Grantee should obtain independent professional advice.

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Sale of Shares. In the event that the RSUs vest within six months of the date of grant, the Grantee agrees that he or she will not sell any Shares thus acquired prior to the six-month anniversary of the date of grant.

HUNGARY

There are no country-specific terms and conditions.

INDIA

Exchange Control Documentation. The Grantee understands that he or she must repatriate the sale proceeds upon the sale of Shares acquired under the Plan to India and convert the proceeds into local currency within 90 days of receipt. The Grantee will receive a foreign inward remittance certificate (“FIRC”) from the bank where the foreign currency is deposited. The Grantee should retain the FIRC as evidence of the repatriation of funds in the event that the Reserve Bank of India, the Employer or the Company requests proof of repatriation.

IRELAND

There are no country-specific terms and conditions.

ISRAEL

Terms and Conditions

The following provision applies to Grantees located in Israel on the Grant Date.

Trust Arrangement. The Grantee understands and agrees that the RSUs offered are subject to and in accordance with the terms of the Plan, Israeli Subplan (the “Subplan”), Agreement and the Israel Beneficiary 102 Undertaking. The Grantee understands that the RSUs shall be allocated under the provisions of the track referred to as the “Capital Gain Route,” according to Section 102(b)(2) and 102(b)(3) of the Israeli Income Tax Ordinance (“Section 102”) and shall be held by the trustee for the periods stated in Section 102. The Grantee hereby confirms that he or she has: (i) read and understands the Plan, Subplan, Agreement and Israel Beneficiary 102 Undertaking; (ii) received all the clarifications and explanations that the Grantee has requested; and (iii) had the opportunity to consult with his or her advisers before accepting the Agreement. In the event of any inconsistencies between the provisions of this Israeli Appendix and the Agreement, the provisions of this Appendix shall govern the RSUs and any Shares and in no event shall any term require shareholder approval as set out in Section 21(b) of the Plan.

Limited Transferability. This provision supplements Section 7 of the Agreement:

Subject to the provisions of the Plan, Section 102 and any rules or regulations or orders or procedures promulgated thereunder, to obtain favourable tax treatment for Capital Gain Route awards, the Grantee may not sell or transfer any RSU shares received upon vesting or received

subsequently following any realization of rights until the lapse of the holding period required is met under Section 102. Notwithstanding the above, if any such sale or release occurs during the holding period, the sanctions under Section 102 and under any rules or regulation or orders or procedures promulgated thereunder will apply to and will be borne by the Grantee.

Issuance of Shares. This provision supplements Sections 5 and 8 of the Agreement:

If the vested RSUs are issued during the holding period, such Shares shall be restricted and held by E*Trade Financial or any successor broker and/or trustee designated by Company and the Trustee on the Grantee's behalf. In the event that the vested RSUs are issued after the expiration of the holding period, the Grantee may freely sell the shares held by E*Trade Financial, provided that the Grantee first complies with any Tax-Related Items stipulated under this Agreement to the Trustee's and the Company's satisfaction, or in trust on the Grantee's behalf to the Trustee.

Tax Obligations. This provision supplements Section 9 of the Agreement:

The Grantee hereby agrees to indemnify the Company (or any Subsidiary) and/or the Trustee and hold them harmless against and from any and all liability for any Tax-Related Items and other amounts, or interest or penalty thereon, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such amounts from any payment made to the Grantee. Any reference to the Company or the Employer shall include a reference to the Trustee. The Grantee hereby undertakes to release the Trustee from any liability in respect of any action or decisions duly taken and *bona fide* executed in relation to the Plan or any RSUs or Shares acquired under the Plan. The Grantee agrees to execute any and all documents which the Company or the Trustee may reasonably determine to be necessary in order to comply with the Israeli Income Tax Ordinance.

The Grantee shall not be liable for the Employer's components of payments to the national insurance institute, unless otherwise agreed by the Grantee and allowed by applicable tax laws. Furthermore, the Grantee agrees to indemnify the Company, the Employer and/or the Trustee and hold them harmless against and from any and all liability for any such tax or interest or penalty thereon that Grantee has agreed to pay, including without limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax from any payment made to the Grantee for which the Grantee is responsible.

Notwithstanding anything to the contrary in the Agreement, no Tax-Related Items will be settled by withholding Shares, unless the ITA approves otherwise in writing.

Governing Law. This section supplements Section 22 of the Agreement:

To the extent any covenant, condition, or other provision of the Agreement and the rights of the Grantee hereunder are intended to be rights granted under Section 102 and therefore determined to be subject to Israeli law, such covenant, condition, or other provision of the Agreement shall be subject to applicable Israeli law, but shall in no way affect, impair, or invalidate any other provision of the Agreement, and the applicability of the Plan to such covenant, condition, or other provision of the Agreement.

Written Acceptance. The Grantee must print, sign and deliver the signed copy of the Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

**MICROCHIP TECHNOLOGY INCORPORATED
2004 EQUITY INCENTIVE PLAN**

ISRAEL BENEFICIARY 102 UNDERTAKING

If the Grantee has not already executed an Israel Beneficiary 102 Undertaking in connection with grants made under the Israeli Subplan, the Grantee must print, sign and deliver the signed copy of this Israel Beneficiary 102 Undertaking within 45 days of the new hire grant date to: Microchip Technology Israel Ltd., Zarchin 10, Raanana, P.O Box 4319, 43662. If the Company does not receive the signed Israel Beneficiary 102 Undertaking within 45 days, the RSUs may not qualify for preferential tax treatment.

1. I hereby agree that any shares (the "Shares") (as defined by Section 102 of the Income Tax Ordinance [New Version], 1961) (the "Tax Ordinance") issued to me by Microchip Technology Incorporated according to and under the terms and conditions of the Plan and the Israeli Subplan adopted by Microchip Technology Incorporated as of 13 December 2013 (collectively, the "Plan") are granted to me to qualify under the capital gain tax treatment in accordance and pursuant to Section 102(b)(2) of the Tax Ordinance after 132 amendment ("Section 102") and the Income Tax Rules (Tax Relief upon the Allotment of Shares to Employees), 2003 (the "Rules") unless I am otherwise notified subject to Microchip Technology Incorporated's absolute discretion to change such election on future grants and subject to the Tax Authorities' approval.
2. I declare and confirm that I am familiar with the terms of Section 102, the Rules, and the implications and consequences of the chosen tax arrangement with respect to the Shares, and consent that all the terms and conditions set forth in Section 102 and the Rules, as shall be amended from time to time, shall apply to me and bind me.
3. I hereby declare and confirm that I am familiar with the provisions of the trust agreement signed between Microchip Technology Israel Ltd. and Tamir Fishman Trusts 2004 Ltd. (the "Trustee") (the "Trust Agreement"), including the deed of trust, attached to the Trust Agreement and constitute an integral part thereto ("Deed of Trust"), and I consent that the Trust Agreement and the Deed of Trust shall fully bind me.
4. Without derogating from the generality of the aforesaid, I agree that the Shares will be deposited in trust with the Trustee and be held in trust in accordance with Section 102, the Rules and the Trust Agreement.
5. I hereby declare and consent that any and all the rights that I shall be entitled to with respect to the Shares, including, without limitation, dividend and shares issued pursuant to adjustments made by Microchip Technology

Incorporated and shall be subject to Section 102, the Rules and the Trust Agreement.

6. Without derogating from the generality of the aforesaid, I acknowledge that during the "Holding Period" as determined by the Tax Ordinance I am prevented from selling the Shares, or releasing them from the Trustee, before the termination of the "Holding Period" and I understand the tax implications and consequences that may be applied as a result of breaching such obligation, as set by Section 102, which I am familiar with.
7. If I will cease to be an Israeli resident or if my employment will be terminated for any reason, the Shares shall remain subject to section 102, the Rules and the Trust Agreement.
8. I hereby agree that any tax liability whatsoever arising from the grant, vesting of any restricted stock units, the sale of Shares, the release of Shares from the Trustee or any other event or act with respect to the Shares granted to me, shall be borne solely by me. I declare and consent that the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee shall make any tax payment due, out of the proceeds of any sale of Shares, to any tax authority, according to Section 102, the Rules, the Trust Agreement or any other compulsory payments or applicable law.
9. I understand that this grant of Shares under the capital gain track is conditioned upon the receipt, inter alia, of all required approvals from the tax authorities. Accordingly, to the extent that for whatever reason Microchip Technology Israel Ltd. shall not be granted an approval by the Israeli Tax Authorities under section 102, I shall bear and pay any and all taxes and any other compulsory payments applicable to the grant, exercise, sale or other disposition of stocks; I hereby declare and consent for the Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee to deduct any tax payment due, out of the proceeds of any sale of Shares, for any payment to the tax authorities, according to the Rules, or any other applicable compulsory payments.
10. I confirm that Microchip Technology Incorporated and/or the Trustee shall not be required to release any proceeds deriving from the sale of Shares, to me, until all required tax payments according to section 102, the Rules and the Trust Agreement, including any other compulsory payments, or applicable law, have been fully assured.
11. I acknowledge that the Trustee is not a tax advisor and it is recommended that I consult a tax advisor before I accept this letter, any restricted stock units vest, sell any Shares or release them from the Trustee, or any other act.

12. I agree to indemnify Microchip Technology Incorporated, Microchip Technology Israel Ltd. and/or the Trustee and to hold them harmless against and from any and all liability for any damage and/or loss and/or expense that might occur regarding the tax liability and/or the execution of the Trust Agreement.
13. I hereby agree to bear all the applicable fees and commissions involved in establishing and maintaining trust account in the Trustee's name, and in performing any action in the trust account.
14. I hereby agree to sign any document reasonably required at the company's and/or the Trustee's request.
15. I hereby confirm that I read this letter thoroughly, received all the clarifications and explanations I requested, I understand the contents of this letter and the obligations I undertake in signing it.

Name of the Beneficiary

I.D. Number

Signature

ITALY

Data Privacy Notice. The following provision replaces paragraph 12 of the Agreement:

The Grantee hereby explicitly and unambiguously consents to the collection, use, processing and transfer, in electronic or other form, of the Grantee's personal data as described in this provision of this Appendix by and among, as applicable, the Employer, the Company and any Parent and/or Subsidiary for the exclusive purpose of implementing, administering, and managing the Grantee's participation in the Plan.

The Grantee understands that the Employer, the Company and any Parent and/or Subsidiary may hold certain personal information about the Grantee, including, without limitation, the Grantee's name, home address and telephone number, date of birth, social insurance or other identification number, salary, nationality, job title, any Shares or directorships held in the Company or a Parent or Subsidiary, details of all RSUs, or any other entitlement to Shares awarded, canceled, exercised, vested, unvested or outstanding in the Grantee's favor, for the exclusive purpose of implementing, managing, and administering the Plan ("Data").

The Grantee also understands that providing the Company with Data is necessary for the performance of the Plan and that the Grantee's refusal to provide such Data would make it impossible for the Company to perform its contractual obligations and may affect the Grantee's

ability to participate in the Plan. The Controller of personal data processing is Microchip Technology Incorporated at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., and, pursuant to Legislative Decree no. 196/2003, its representative in Italy is Microchip Technology SRL with registered offices at Via Pablo Picasso 41, 20025 Legnano (MI) Italy.

*The Grantee understands that Data will not be publicized, but it may be transferred to E*Trade Financial (or one of its affiliates) or such other stock plan service provider as may be selected by the Company in the future (any such entity, "Broker"), or other third parties involved in the management and administration of the Plan. The Grantee understands that Data may also be transferred to the independent registered public accounting firm engaged by the Company. The Grantee further understands that the Company and/or any Parent and/or Subsidiary will transfer Data among themselves as necessary for the purpose of implementing, administering, and managing the Grantee's participation in the Plan, and that the Company or a Subsidiary may each further transfer Data to third parties assisting the Company in the implementation, administration, and management of the Plan, including any requisite transfer of Data to the Broker or other third party with whom the Grantee may elect to deposit any Shares acquired at vesting of the RSUs. Such recipients may receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing the Grantee's participation in the Plan. The Grantee understands that these recipients may be located in or outside the European Economic Area, such as in the United States or elsewhere. Should the Company exercise its discretion in suspending all necessary legal obligations connected with the management and administration of the Plan, it will delete Data as soon as it has completed all the necessary legal obligations connected with the management and administration of the Plan.*

The Grantee understands that Data processing related to the purposes specified above shall take place under automated or non-automated conditions, anonymously when possible, that comply with the purposes for which Data is collected and with confidentiality and security provisions, as set forth by applicable laws and regulations, with specific reference to Legislative Decree no. 196/2003.

The processing activity, including communication, the transfer of Data abroad, including outside of the European Economic Area, as herein specified and pursuant to applicable laws and regulations, does not require the Grantee's consent thereto, as the processing is necessary to performance of contractual obligations related to implementation, administration, and management of the Plan. The Grantee understands that, pursuant to paragraph 7 of the Legislative Decree no. 196/2003, the Grantee has the right to, without limitation, access, delete, update, correct, or terminate, for legitimate reason, the Data processing.

Furthermore, the Grantee is aware that Data will not be used for direct-marketing purposes. In addition, Data provided can be reviewed and questions or complaints can be addressed by contacting the Grantee's local human resources representative.

Grant Terms Acknowledgment. By accepting the RSUs, the Grantee acknowledges having received and reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Appendix.

The Grantee further acknowledges having read and specifically approves the following paragraphs of the Agreement: paragraph 9 (“Tax Obligations”), paragraph 10 (“Nature of Grant”), paragraph 13 (“Language”), paragraph 22 (“Entire Agreement; Governing Law”), and the “Data Privacy Notice” provision set forth above in this Appendix.

JAPAN

There are no country-specific terms and conditions.

KOREA

There are no country-specific terms and conditions.

MALAYSIA

There are no country-specific terms and conditions.

MEXICO

No Entitlement or Claims for Compensation. These provisions supplement paragraph 10 of the Agreement:

Modification. By accepting the RSUs, the Grantee understands and agrees that any modification of the Plan or the Agreement or its termination shall not constitute a change or impairment of the terms and conditions of employment.

Policy Statement. The Award of RSUs the Company is making under the Plan is unilateral and discretionary and, therefore, the Company reserves the absolute right to amend it and discontinue it at any time without any liability.

The Company, with registered offices at 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., is solely responsible for the administration of the Plan and participation in the Plan and the acquisition of Shares does not, in any way, establish an employment relationship between the Grantee and the Company since the Grantee is participating in the Plan on a wholly commercial basis and the sole employer is Microchip Technology Mexico, S.DE R.L. DE C. V. nor does it establish any rights between the Grantee and the Employer.

Plan Document Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he/she has received copies of the Plan, has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement.

In addition, by accepting the Agreement, the Grantee further acknowledges that the Grantee has read and specifically and expressly approve the terms and conditions in paragraph 10 of the Agreement, in which the following is clearly described and established: (i) participation in the Plan does not constitute an acquired right; (ii) the Plan and participation in the Plan is offered by the Company on a wholly discretionary basis; (iii) participation in the Plan is voluntary; and (iv)

the Company and any Parent or Subsidiary are not responsible for any decrease in the value of the Shares underlying the RSUs.

Finally, the Grantee hereby declares that he/she does not reserve any action or right to bring any claim against the Company for any compensation or damages as a result of the Grantee's participation in the Plan and therefore grant a full and broad release to the Employer, the Company and any Parent or Subsidiary with respect to any claim that may arise under the Plan.

Spanish Translation

Reconocimiento de la Ley Laboral. Estas disposiciones complementan el apartado 10 del Acuerdo:

Modification. Al aceptar las Unidades de Acción Restringida, usted reconoce y acuerda que cualquier modificación del Plan o su terminación no constituye un cambio o desmejora de los términos y condiciones de empleo.

Declaración de Política. El Otorgamiento de Unidades de Acción Restringida de la Compañía en virtud del Plan es unilateral y discrecional y, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y discontinuar el mismo en cualquier tiempo, sin responsabilidad alguna.

La Compañía, con oficinas registradas ubicadas en 2355 West Chandler Boulevard, Chandler, AZ 85224, U.S.A., es la única responsable de la administración del Plan y de la participación en el mismo y la adquisición de Acciones no establece de forma alguna una relación de trabajo entre usted y la Compañía, ya que su participación en el Plan es completamente comercial y el único empleador es Microchip Technology Mexico, S.DE R.L. DE C. V. en caso de ser aplicable, así como tampoco establece ningún derecho entre la persona que tenga el derecho a optar y el Empleador.

Reconocimiento del Documento del Plan. Al aceptar el Otorgamiento de las Unidades de Acción Restringida, usted reconoce que ha recibido copias del Plan, ha revisado el mismo, al igual que la totalidad del Acuerdo y, que ha entendido y aceptado completamente todas las disposiciones contenidas en el Plan y en el Acuerdo.

Adicionalmente, al firmar el Acuerdo, reconoce que ha leído, y que aprueba específica y expresamente los términos y condiciones contenidos en la Renuncia de Derecho o Reclamo por Compensación, apartado 10 del Acuerdo, en el cual se encuentra claramente descrito y establecido lo siguiente: (i) la participación en el Plan no constituye un derecho adquirido; (ii) el Plan y la participación en el mismo es ofrecida por la Compañía de forma enteramente discrecional; (iii) la participación en el Plan es voluntaria; y (iv) la Compañía, así como su Sociedad controlante, Subsidiaria o Filiales no son responsables por cualquier disminución en el valor de las Acciones en relación a las Unidades de Acción Restringida.

Finalmente, declara que no se reserva ninguna acción o derecho para interponer una demanda en contra de la Compañía por compensación, daño o perjuicio alguno como resultado de su participación en el Plan y, en consecuencia, otorga el más amplio finiquito al Empleador, así

como a la Compañía, a su Sociedad controlante o Subsidiaria con respecto a cualquier demanda que pudiera originarse en virtud del Plan.

NETHERLANDS

There are no country-specific terms and conditions.

PHILIPPINES

There are no country-specific terms and conditions.

ROMANIA

There are no country-specific terms and conditions.

SINGAPORE

Securities Law Legend. The RSUs are being granted pursuant to the “Qualifying Person” exemption” under section 273(1)(f) of the Securities and Futures Act (Chapter 289, 2006 Ed.) (“SFA”). The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore. The Grantee should note that the RSUs are subject to section 257 of the SFA, and the Grantee will not be able to make (i) any subsequent sale of the Shares in Singapore or (ii) any offer of such subsequent sale of the Shares subject to the RSUs in Singapore, unless such sale or offer is made pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA (Chapter 289, 2006 Ed.).

SPAIN

Termination of Employment. The RSUs provide a conditional right to Shares and may be forfeited or affected by the Grantee’s termination of employment, as set forth in the Agreement. For avoidance of doubt, the Grantee’s rights, if any, to the RSUs upon termination of employment shall be determined as set forth in the Agreement, including, without limitation, where (i) the Grantee is deemed to be constructively dismissed or unfairly dismissed without good cause; (ii) the Grantee is dismissed for disciplinary or objective reasons or due to a collective dismissal; (iii) the Grantee terminates employment due to a change of work location, duties or any other employment or contractual condition (except as otherwise expressly set forth in the Agreement); or (iv) the Grantee terminates employment due to the Company’s or any of its Subsidiaries’ unilateral breach of contract. Consequently, the termination of the Grantee’s employment for any of the above reasons shall be governed by paragraphs 4 and 19(i) of the Agreement, unless otherwise determined by the Company, in its sole discretion.

Labor Law Acknowledgment. By accepting the RSUs, the Grantee acknowledges that he or she understands and agrees to the terms and conditions applicable to participation in the Plan and that he or she has received a copy of the Plan.

The Grantee understands that the Company has unilaterally, gratuitously and discretely decided to grant RSUs under the Plan to individuals who may be employees of the Company or any Parent

or Subsidiary of the Company throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any Parent or Subsidiary on an ongoing basis, other than as expressly set forth in the Plan and the Agreement. Consequently, the Grantee understands that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any Parent or Subsidiary) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Furthermore, the Grantee understands and freely accepts that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant since the future value of the RSUs and the underlying Shares is unknown and unpredictable. In addition, the Grantee understands that this grant would not be made but for the assumptions and conditions referred to above; thus, the Grantee understands, acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the RSUs shall be null and void.

Securities Law Legend. The RSUs and the Shares issued upon vesting are considered a private placement outside of the scope of Spanish laws on public offerings and issuances of securities.

SWEDEN

There are no country-specific terms and conditions.

SWITZERLAND

There are no country-specific terms and conditions.

TAIWAN

There are no country-specific terms and conditions.

THAILAND

There are no country-specific terms and conditions.

UNITED KINGDOM

Tax Obligations. The following provision supplements paragraph 9 (“Tax Obligations”) of the Agreement:

If payment or withholding of the Tax-Related Items is not made within ninety (90) days of the event giving rise to the Tax-Related Items or such other period specified in Section 222(1)(c) of the U.K. Income Tax (Earnings and Pensions) Act 2003 (the “Due Date”), the amount of any uncollected Tax-Related Items shall constitute a loan owed by the Grantee to the Employer, effective as of the Due Date. The Grantee agrees that the loan will bear interest at the then-current official rate of Her Majesty’s Revenue & Customs (“HMRC”), it will be immediately due and repayable, and the Company or the Employer may recover it at any time thereafter by any of the means referred to in paragraph 9 of the Agreement.

Notwithstanding the foregoing, if the Grantee is a director or executive officer of the Company (within the meaning of Section 13(k) of the U.S. Securities and Exchange Act of 1934, as amended), the Grantee shall not be eligible for a loan from the Company to cover the Tax-Related Items. In the event that the Grantee is a director or executive officer and any such Tax-Related Items are not collected from or paid by the Grantee by the Due Date, the amount of any uncollected Tax-Related Items will constitute a benefit to the Grantee on which additional income tax and National Insurance contributions (“NICs”) will be payable. The Grantee understands that he or she will be responsible for reporting any income tax and NICs (including the Employer NICs, as defined below) due on this additional benefit directly to HMRC under the self-assessment regime.

RSUs Payable in Shares Only. Notwithstanding any discretion in the Plan, the RSUs will be settled in Shares only. The RSUs do not provide any right for the Grantee to receive a cash payment.

Joint Election for Transfer of Secondary Class 1 National Insurance Contributions to the Grantee. As a condition of vesting of the RSUs, the Grantee agrees to accept any liability for secondary Class 1 national insurance contributions, which may be payable by the Company or the Employer in connection with the RSUs (“Employer NICs”). To accomplish the foregoing, the Grantee agrees to enter into an election between himself or herself and the Employer (the “Election”), by printing, signing and returning the form approved for such Election by HMRC and attached as Exhibit B to this Agreement to the Human Resources Manager prior to vesting of the RSUs. The Grantee further agrees to enter into any other consents or elections required to accomplish the transfer of the Employer NICs to the Grantee, prior to vesting of the RSUs. The Grantee further agrees to enter into such other joint elections as may be required between himself or herself and any successor to the Company and/or the Employer. If the Grantee does not enter into an Election prior to the vesting of the RSUs, the Grantee will permanently forfeit the RSUs without any liability to the Company and/or the Employer and any Shares that have been issued upon vesting will be returned to the Company at no cost to the Company.

The Grantee further agrees that the Company and/or the Employer may collect the Employer NICs by any of the means set forth in paragraph 9 of the Agreement, as supplemented above.

* * *

EXHIBIT A

**AGREEMENT
FOR PARTICIPANTS IN BELGIUM**

**AGREEMENT REGARDING A TWO YEAR LOCK-UP PERIOD
FOR SHARES ACQUIRED UPON VESTING OF RESTRICTED STOCK UNITS**

If you have not already executed an Agreement for Participants in Belgium ("*Agreement*") and would like to benefit from the favourable tax regime provided for in the Circular (as defined below), please print, sign and return this Agreement to Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A., c/o Tricia Bajaj, within 120 calendar days from the grant date specified in the Notice of Grant of Restricted Stock Units. Please also retain a copy of this Agreement for your files.

BETWEEN

1) Microchip Technology Incorporated, 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 U.S.A. (hereafter "*Microchip*"); and

2) NAME: _____

ADDRESS: _____

(hereafter the "*Grantee*", and, together with Microchip, the "*Parties*")

WHEREAS

Microchip has granted on the grant date set forth in the applicable Notice of Grant of Restricted Stock Units ("*Grant Notice*") a number of restricted stock units to the Grantee subject to the terms and conditions in the Microchip Technology Incorporated 2004 Equity Incentive Plan (the "*Plan*"), the Grant Notice and the Restricted Stock Units Agreement (the "*RSU Grant*");

This Agreement is also intended to cover any subsequent grant of restricted stock units that may be made under the Plan, in the sole discretion of Microchip, on or after the Effective Date (as defined below) ("*Subsequent Grant*"); and

The Grantee would like to benefit from the favourable tax regime provided for in Administrative Circular nr. Ci.RH.241/467.450 of June 21, 1995 (the "*Circular*") with respect to the shares of common stock of Microchip which he/she will acquire upon the vesting of the aforementioned RSU Grant and any Subsequent Grant;

PARTIES HAVE AGREED AS FOLLOWS:

The shares that will be delivered to the Grantee upon vesting of the RSU Grant and any Subsequent Grant will be subject to a two year lock-up period, starting from the date of vesting of the relevant grant, during which the Grantee cannot sell or otherwise transfer the respective shares.

The Parties reserve the right to terminate this Agreement in its entirety, or as far as it relates to any particular grant, at any time prior to the Vesting Date specified in the relevant Grant Notice. Notice of termination must specify the grant date of the RSU Grant and/or Subsequent Grant to which it is intended to apply. The Parties understand that termination shall disqualify the Grantee from the favourable tax regime provided for in the Circular with respect to shares of common stock of Microchip which he/she will acquire upon the vesting of only the particular grant(s) specified in the notice of termination. Notice of termination shall be provided to Microchip by email to #stockplans@microchip.com.

This Agreement shall be effective as of the date this Agreement is received by Microchip (the "**Effective Date**").

COMPANY

Signature: By: /s/ Steve Sanghi
Steve Sanghi, Chairman of the Board & CEO
Microchip Technology Incorporated

GRANTEE

Signature: _____

Printed Name: _____

Date: _____

Made in: _____
City, Country

EXHIBIT B

MICROCHIP TECHNOLOGY INCORPORATED 2004 EQUITY INCENTIVE PLAN (UK Employees)

Election To Transfer the Employer's National Insurance Liability to the Employee

1. Parties

This Election is between:

- (A) **Employee Name** (the "Employee"), who is eligible to receive Restricted Stock Units granted by Microchip Technology Incorporated of 2355 Chandler Blvd., Chandler, Arizona 85224, United States (the "Company") pursuant to the terms and conditions of the 2004 Equity Incentive Plan (the "Plan"), and
- (B) **Microchip Limited** (registered number 2189500) with registered office at Microchip House, 720 Wharfedale Road, Winnersh Triangle, Wokingham, Berkshire RG41 5TP, United Kingdom (the "Employer"), which employs the Employee.

2. Purpose of Election

2.1 This Election relates to the employer's secondary Class 1 National Insurance Contributions (the "Employer's Liability") which may arise on:

- (i) the acquisition of securities pursuant to the Restricted Stock Units; and/or
- (ii) the assignment or release of the Restricted Stock Units in return for consideration; and/or
- (iii) the receipt of any other benefit in money or money's worth in connection with the Restricted Stock Units,

(each, a "Taxable Event") pursuant to section 4(4)(a) of the Social Security Contributions and Benefits Act 1992.

2.2 This Election applies to all Restricted Stock Unit awards granted to the Employee under the Plan on or after 23rd December 2005 up to the termination date of the Plan.

3. The Election

This joint election does not apply with respect to any liability arising as a result of U.K. anti-avoidance legislation. The Employee and the Employer jointly elect that the entire liability of the Employer to pay the Employer's Liability on the Taxable Event is hereby transferred to the Employee. The Employee understands that by

signing this Election he or she will become personally liable for the Employer's Liability covered by this Election.

4. Payment of the Employer's Liability

- 4.1 The Employee hereby authorizes the Company and/or the Employer to collect the Employer's Liability from the Employee at any time after the Taxable Event:
- (i) by deduction from salary or any other payment payable to the Employee at any time on or after the date of the Taxable Event; and/or
 - (ii) directly from the Employee by payment in cash or cleared funds; and/or
 - (iii) by arranging, on behalf of the Employee, for the sale of some of the securities which the Employee is entitled to receive in respect of the Restricted Stock Units.
- 4.2 The Employer hereby reserves for itself and the Company the right to withhold the transfer of any securities to the Employee until full payment of the Employer's Liability is received.
- 4.3 The Employer agrees to remit the Employer's Liability to the HM Revenue and Customs on behalf of the Employee within 14 days after the end of the UK tax month during which the Taxable Event occurs.

5. Duration of Election

- 5.1 The Employee and the Employer agree to be bound by the terms of this Election regardless of whether the Employee is transferred abroad or is not employed by the Employer on the date on which the Employer's Liability becomes due.
- 5.2 This Election will continue in effect until the earliest of the following:
- (i) the Employee and the Employer agree in writing that it should cease to have effect;
 - (ii) on the date the Employer serves written notice on the Employee terminating its effect;
 - (iii) on the date the HM Revenue and Customs withdraws approval of this Election; or
 - (iv) after due payment of the Employer's Liability in respect of the entirety of the Restricted Stock Units to which this Election relates, such that the Election ceases to have effect in accordance with its terms.

Grantee:

Microchip Technology Incorporated

Signature

By: /s/ Steve Sanghi

Steve Sanghi, Chairman of the Board & CEO

By

Print Name

Title

Date

Schedule of Employer Companies

The employing companies to which this Election relates are:

<u>NAME</u>	<u>ADDRESS</u>
Microchip Limited	Microchip House 720 Wharfedale Road Winnersh Trinagle Wokingham Berkshire RG41 5TP United Kingdom

EXHIBIT 10.21

MICROCHIP TECHNOLOGY INCORPORATED

2001 EMPLOYEE STOCK PURCHASE PLAN

As Amended Through February 19, 2019

The following constitute the provisions of the 2001 Employee Stock Purchase Plan of Microchip Technology Incorporated, as amended through February 19, 2019.

1. Purpose. The purpose of the Plan is to provide employees of the Company and one or more of its Corporate Affiliates an opportunity to purchase Common Stock of the Company through accumulated payroll deductions. It is the intention of the Company to have the Plan have two components: a component that is intended to qualify as an “Employee Stock Purchase Plan” under Section 423 of the Code (the “423 Component”) and a component that is not intended to qualify as an “employee stock purchase plan” under Section 423 of the Code (the “Non-423 Component”). The provisions of the Plan with respect the 423 Component, accordingly, shall be construed so as to extend and limit participation in a uniform and nondiscriminatory basis consistent with the requirements of Section 423. An option to purchase shares of Common Stock under the Non-423 Component will be granted pursuant to rules, procedures, or sub-plans adopted by the Administrator designed to achieve tax, securities laws, or other objectives for Eligible Employees and the Company. Except as otherwise provided herein, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

2. Definitions.

(a) “Administrator” shall mean the Committee designated by the Board to administer the Plan pursuant to Section 14.

(b) “Board” shall mean the Board of Directors of the Company.

(c) “Change of Control” shall mean the occurrence of any of the following events:

(i) a merger or other reorganization in which the Company will not be the surviving corporation (other than a reorganization effected primarily to change the State in which the Company is incorporated); or

(ii) the consummation of the sale or disposition by the Company of all or substantially all of the Company’s assets; or

(iii) a reverse merger in which the Company is the surviving corporation but in which more than fifty percent (50%) of the Company's outstanding voting stock is transferred to a person or persons different from those who held the stock immediately prior to such merger.

(d) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(e) "Committee" means a committee of the Board appointed by the Board in accordance with Section 14 hereof.

(f) "Common Stock" shall mean the common stock of the Company, par value \$0.001.

(g) "Company" shall mean Microchip Technology Incorporated, a Delaware corporation.

(h) "Compensation" shall mean the following items paid to an Eligible Employee by the Company and/ or one or more Corporate Affiliates during such individual's period of participation in the Plan: (i) regular base salary, and (ii) any pre-tax contributions made by the Eligible Employees to any Code Section 401(k) plan, any Code Section 125 Plan, any unfunded non-qualified deferred compensation plan described in Sections 201(2), 301(a)(3) or 401(a)(1) of ERISA, and (iii) all overtime payments, bonuses, commissions, profit-sharing distributions and other incentive type payments. There shall be excluded any contributions (except 401(k) and 125 contributions) made on the Eligible Employee's behalf by the Company or Corporate Affiliate.

(i) "Corporate Affiliate" shall mean any parent or subsidiary of the Company (as defined in Section 424 of the Code) which is incorporated in the United States, including any parent or subsidiary corporation which becomes such after the Effective Date.

(j) "Effective Date" shall mean March 1, 2002.

(k) "Eligible Employee" shall mean any individual who is a common law employee of any Participating Company and whose customary employment with the Participating Company or group of Participating Companies is at least 20 hours per week and more than five (5) months in any calendar year. For purposes of the Plan, the employment relationship shall be treated as continuing intact while the individual is on sick leave or other leave of absence approved by the Company. Where the period of leave exceeds 90 days and the individual's right to reemployment is not guaranteed either by statute or in writing signed by a duly authorized officer of the Company, the employment relationship shall be deemed to have terminated on the 91st day of such leave. Unless otherwise determined by the Administrator, with respect to the Non-423 Component, any individual otherwise meeting the

requirements to be an “Eligible Employee” will only qualify as an Eligible Employee if such individual is tax resident in the United States as of the first Trading Day of any Offering Period.

(l) “Entry Date” shall mean the first Trading Day of any Offering Period. An Entry Date occurs on the first Trading Day in March or September.

(m) “ERISA” shall mean the Employee Retirement Income Security of 1974, as amended.

(n) “Exercise Date” shall mean the first Trading Day of March and September.

(o) “Fair Market Value” shall mean the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the date of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable; provided, however, that if there is no closing sales price (or closing bid price, if applicable) for such date, then the closing sales price (or closing bid price, if applicable) for the next day for which such quotation exists.

(p) “Offering Periods” shall mean a period of time during which an option granted pursuant to the Plan may be exercised. The Plan shall be implemented by a series of Offering Periods (“Series of Offering Periods”). Each Series of Offering Periods shall contain four (4) Offering Periods. The first Offering Period in the Series shall commence on the first Trading Day on or after March 1, 2002, and shall end on the first Trading Day on or after March 1, 2004 (the “Last Day of the Series”). The second Offering Period in the Series shall commence on the next following Entry Date, shall last approximately 18 months and shall end on the Last Day of the Series. The third Offering Period in the Series shall commence on the next following Entry Date, shall last approximately 12 months and shall end on the Last Day of the Series. The fourth Offering Period in the Series shall commence on the next following Entry Date, shall last approximately six (6) months and shall end on the Last Day of the Series. A new Series of Offering Periods shall commence on the Last Day of the Series. The duration and timing of Offering Periods may be changed pursuant to Section 20 of this Plan.

(q) “Participating Company” shall mean the Company and such Corporate Affiliates as may be designated from time to time by the Board to extend the benefits of the Plan to their Eligible Employees. The Companies participating in the Plan are listed on the attached Schedule A.

(r) “Plan” shall mean this Employee Stock Purchase Plan.

(s) “Purchase Period” shall mean the approximately six (6) month period commencing on one Exercise Date and ending with the next Exercise Date, except that the first Purchase

Period of any Offering Period shall commence on the first Entry Date and end with the next Exercise Date.

(t) “Purchase Price” shall mean 85% of the Fair Market Value of a share of Common Stock on the Entry Date or on the Exercise Date, whichever is lower; provided, however, that the Purchase Price may be adjusted by the Administrator pursuant to Section 20.

(u) “Trading Day” shall mean a day on which national stock exchanges and the Nasdaq System are open for trading.

3. Eligibility.

(a) Generally. Any Eligible Employee on a given Entry Date shall be eligible to participate in the Plan.

(b) Limitations. Any provisions of the Plan to the contrary notwithstanding, no Eligible Employee shall be granted an option under the Plan (i) to the extent that, immediately after the grant, such Eligible Employee (or any other person whose stock would be attributed to such Eligible Employee pursuant to Section 424(d) of the Code) would own capital stock of the Company and/or hold outstanding options to purchase such stock possessing five percent (5%) or more of the total combined voting power or value of all classes of the capital stock of the Company or of any Subsidiary, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans of the Company and its subsidiaries accrues at a rate which exceeds \$25,000.00 worth of stock (determined at the fair market value of the shares at the time such option is granted) for each calendar year in which such option is outstanding at any time.

4. Offering Periods. The Plan shall be implemented by a series of Offering Periods (“Series of Offering Periods”). Each Series of Offering Periods shall contain four (4) Offering Periods. The first Offering Period in the Series shall commence on the first Trading Day on or after March 1, 2002, and shall end on the first Trading Day on or after March 1, 2004 (the “Last Day of the Series”). The second Offering Period in the Series shall commence on the next following Entry Date, shall last approximately 18 months and shall end on the Last Day of the Series. The third Offering Period in the Series shall commence on the next following Entry Date, shall last approximately 12 months and shall end on the Last Day of the Series. The fourth Offering Period in the Series shall commence on the next following Entry Date, shall last approximately six (6) months and shall end on the Last Day of the Series. A new Series of Offering Periods shall commence on the Last Day of the Series. The duration and timing of Offering Periods may be changed pursuant to Section 20 of this Plan.

5. Participation. An Eligible Employee may become a participant in the Plan by enrolling via E*Trade or completing a subscription agreement authorizing payroll deductions in the form of

Exhibit A to this Plan and filing it with the Company's stock plan administrator, on a date determined by such administrator, which shall be no later than five (5) Trading Days prior to the applicable Entry Date.

6. Payroll Deductions.

(a) At the time a participant enrolls via E*Trade or files his or her subscription agreement, he or she shall elect to have payroll deductions made on each pay day during the Offering Period in any multiple of one-percent (1%), but not exceeding ten-percent (10%) of the Compensation which he or she receives during each Purchase Period; provided, however, that should a payday occur on an Exercise Date, a participant shall have the payroll deductions made on such day applied to his or her account under the new Offering Period or Purchase Period, as the case may be. A participant's elections via E*Trade enrollment or a subscription agreement shall remain in effect for successive Offering Periods unless terminated as provided in Section 10 hereof.

(b) Payroll deductions for a participant shall commence on the first payday following the Entry Date and shall end on the last payday in the Offering Period to which such authorization is applicable, unless sooner terminated by the participant as provided in Section 10 hereof. All payroll deductions made for a participant shall be credited to his or her account under the Plan and shall be withheld in whole percentages only. A participant may not make any additional payments into such account.

(c) A participant may discontinue his or her participation in the Plan as provided in Section 10 hereof, or may decrease (but not increase) the rate of his or her payroll deductions during the Offering Period by changing deductions via E*Trade or completing or filing with the Company a new subscription agreement authorizing a change in payroll deduction rate. No more than one (1) such reduction shall be allowed in any Purchase Period. A participant may only increase the rate of his or her payroll deductions beginning with the next Offering Period which lasts 24 months. The change in rate shall be effective as soon as administratively practicable.

(d) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(b) hereof, a participant's payroll deductions may be decreased to zero percent (0%) at any time during a Purchase Period. Payroll deductions shall recommence at the rate provided in such participant's E*Trade elections or subscription agreement at the beginning of the first Purchase Period which is scheduled to end in the following calendar year, unless terminated by the participant as provided in Section 10 hereof.

(e) At the time the option is exercised, in whole or in part, or at the time some or all of the Company's Common Stock issued under the Plan is disposed of, the participant must make

adequate provision for the Company's federal, state, or other tax withholding obligations, if any, which arise upon the exercise of the option or the disposition of the Common Stock. At any time, the Company may, but shall not be obligated to, withhold from the participant's compensation the amount necessary for the Company to meet applicable withholding obligations, including any withholding required to make available to the Company any tax deductions or benefits attributable to sale or early disposition of Common Stock by the Eligible Employee.

7. Grant of Option. On the Entry Date of each Offering Period, each Eligible Employee participating in such Offering Period shall be granted an option to purchase on each Exercise Date during such Offering Period (at the applicable Purchase Price) up to a number of shares of the Company's Common Stock determined by dividing such Eligible Employee's payroll deductions accumulated prior to such Exercise Date and retained in the Participant's account as of the Exercise Date by the applicable Purchase Price; provided that in no event shall an Eligible Employee be permitted to purchase during each Purchase Period more than 7,500¹ shares of the Company's Common Stock (subject to any adjustment pursuant to Section 19), and provided further that such purchase shall be subject to the limitations set forth in Sections 3(b) and 6 hereof. The Eligible Employee may accept the grant of such option by enrolling via E*Trade or turning in a completed Subscription Agreement (attached hereto as Exhibit A) to the stock plan administrator, on a date determined by such administrator, which shall be no later than five (5) Trading Days prior to an applicable Entry Date. The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of the Company's Common Stock an Eligible Employee may purchase during each Purchase Period of such Offering Period. Exercise of the option shall occur as provided in Section 8 hereof, unless the participant has withdrawn pursuant to Section 10 hereof. The option shall expire on the last day of the Offering Period.

8. Exercise of Option.

(a) Unless a participant withdraws from the Plan as provided in Section 10 hereof, his or her option for the purchase of shares shall be exercised automatically on the Exercise Date, and the maximum number of full shares subject to option shall be purchased for such participant at the applicable Purchase Price with the accumulated payroll deductions in his or her account. No fractional shares shall be purchased; any payroll deductions accumulated in a participant's account which are not sufficient to purchase a full share shall be retained in the participant's account for the subsequent Purchase Period or Offering Period, subject to earlier withdrawal by the participant as provided in Section 10

¹ As adjusted for a May 2002 3-for-2 stock split

hereof. Any other funds left over in a participant's account after the Exercise Date shall be returned to the participant. During a participant's lifetime, a participant's option to purchase shares hereunder is exercisable only by him or her.

(b) If the Administrator determines that, on a given Exercise Date, the number of shares with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for sale under the Plan on the Entry Date of the applicable Offering Period, or (ii) the number of shares available for sale under the Plan on such Exercise Date, the Administrator may in its sole discretion (x) provide that the Company shall make a pro rata allocation of the shares of Common Stock available for purchase on such Entry Date or Exercise Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and continue all Offering Periods then in effect, or (y) provide that the Company shall make a pro rata allocation of the shares available for purchase on such Entry Date or Exercise Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and terminate any or all Offering Periods then in effect pursuant to Section 20 hereof. The Company may make pro rata allocation of the shares available on the Entry Date of any applicable Offering Period pursuant to the preceding sentence, notwithstanding any authorization of additional shares for issuance under the Plan by the Company's shareholders subsequent to such Entry Date.

9. Delivery. As soon as reasonably practicable after each Exercise Date on which a purchase of shares occurs, the Company shall arrange the delivery to each participant the shares purchased upon exercise of his or her option in a form determined by the Administrator.

10. Withdrawal.

(a) At any time prior to the last five (5) Trading Days of a Purchase Period, a participant may withdraw from the Plan by giving written notice to the Company in the form of Exhibit A to this Plan. The participant shall elect to either have (i) all of the participant's payroll deductions credited to his or her account used to purchase shares at the next Exercise Date or (ii) all payroll deductions credited to his or her account refunded. In neither event will any further payroll deductions for the purchase of shares be made for such Offering Period. If a participant withdraws from an Offering Period, the participant may not re-enroll in the Plan until the next Offering Period which lasts 24 months, and payroll deductions shall not resume at the beginning of such Offering Period unless the participant re-enrolls in the Plan via E*Trade or delivers to the Company a new subscription agreement in a manner provided for in Section 5.

(b) A participant's withdrawal from an Offering Period shall not have any effect upon his or her eligibility to participate in any similar plan which may hereafter be adopted by the Company.

11. Termination of Employment. In the event a participant ceases to be an Eligible Employee of the Company or any Participating Company (other than as a result of death or Permanent Disability), any payroll deductions credited to such participant's account during the Offering Period but not yet used to purchase shares under the Plan shall be returned to such participant and such participant's option shall be automatically terminated. In the event a participant ceases to be an Employee of the Company or any Participating Company as a result of death or Permanent Disability, then such participant (or personal representative of the estate of the deceased participant) may elect at any time prior to the last five (5) Trading Days of a Purchase Period in which such termination occurs, to (i) have all of such participant's payroll deductions for such Purchase Period refunded to the Participant or (ii) have all such payroll deductions used to purchase the Company's common stock on the Exercise Date following such termination. Further, if a Participant transfers from an offering under the 423 Component to the Non-423 Component, the exercise of the option will be qualified under the 423 Component only to the extent it complies with Section 423 of the Code, unless otherwise provided by the Administrator.

12. Interest. No interest shall accrue on the payroll deductions of a participant in the Plan.

13. Stock.

(a) Subject to adjustment upon changes in capitalization of the Company as provided in Section 19 hereof, the number of shares of the Company's Common Stock which shall be made available for sale under the Plan shall be 3,275,000 shares, plus up to 150,000 remaining unissued shares available as of the Effective Date under the Company's previous ESPP, and plus beginning January 1, 2005, and each January 1 thereafter during the term of the Plan, an automatic annual increase in shares reserved of the lesser of (i) 1,500,000 shares, (ii) one half of one percent (0.5%) of the then outstanding shares of our common stock, or (iii) such lesser amount as is approved by our Board of Directors²; provided, however, that the shares under the Company's previous ESPP shall not be available

² Approved by shareholders August 15, 2003.

for issuance under the Plan to the extent that such reservation would, in the opinion of the Company's independent auditors, result in a compensation expense to the Company under either EITF 97-12 or ASC 718³.

(b) Until the shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), a participant shall only have the rights of an unsecured creditor with respect to such shares, and no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to such shares.

(c) Shares to be delivered to a participant under the Plan shall be held in a brokerage account in street name.

14. Administration. The Administrator shall administer the Plan and shall have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to determine eligibility and to adjudicate all disputed claims filed under the Plan. Every finding, decision and determination made by the Administrator shall, to the full extent permitted by law, be final and binding upon all parties.

15. Designation of Beneficiary.

(a) A participant may file a written designation of a beneficiary who is to receive any payroll deductions, if any, from the participant's account under the Plan in the event of such participant's death subsequent to an Exercise Date on which the option is exercised but prior to delivery to such participant of such payroll deductions. In addition, a participant may file a written designation of a beneficiary who is to receive any payroll deductions from the participant's account under the Plan in the event of such participant's death prior to exercise of the option. If a participant is married and the designated beneficiary is not the spouse, spousal consent shall be required for such designation to be effective.

³ All numbers in this Section 13(a) have been adjusted to reflect a May 2002 3-for-2 stock split, the additional 500,000 shares approved by the stockholders on August 16, 2002 and the additional 975,000 shares approved by the stockholders on August 15, 2003.

(b) Such designation of beneficiary may be changed by the participant at any time by written notice. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such payroll deductions to the executor or administrator of the estate of the participant, or if no such

(c) All beneficiary designations shall be in such form and manner as the Administrator may designate from time to time.

16. Transferability. Neither payroll deductions credited to a participant's account nor any rights with regard to the exercise of an option or to receive shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15 hereof) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds from an Offering Period in accordance with Section 10 hereof.

17. Use of Funds. All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions except under any offering under the Plan or for participants in the Non-423 Component for which Applicable Laws require that Contributions to the Plan by participants be segregated from the Company's general corporate funds and/or deposited with an independent third party. Until shares are issued, participants shall only have the rights of an unsecured creditor.

18. Reports. Individual accounts shall be maintained for each participant in the Plan. Statements of account shall be given to participating Eligible Employees at least annually, which statements shall set forth the amounts of payroll deductions, the Purchase Price, the number of shares purchased and the remaining cash balance, if any.

19. Adjustments Upon Changes in Capitalization, Dissolution, Liquidation, Merger or Change of Control.

(a) Changes in Capitalization. Subject to any required action by the shareholders of the Company, the maximum number of shares of the Company's Common Stock which shall be made available for sale under the Plan, the maximum number of shares each participant may purchase each Purchase Period (pursuant to Section 7), as well as the price per share and the number of shares of Common Stock covered by each option under the Plan which has not yet been exercised shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other change in the number of shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of

the Company shall not be deemed to have been “effected without receipt of consideration.” Such adjustment shall be made by the Administrator, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an option.

(b) Change in Control. In the event of a Change of Control, each outstanding option shall be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the option, any Purchase Periods then in progress shall be shortened by setting a New Exercise Date and any Offering Periods then in progress shall end on the New Exercise Date. The New Exercise Date shall be before the date of the Company's proposed Change of Control. The Administrator shall notify each participant in writing, at least 10 business days prior to the New Exercise Date, that the Exercise Date for the participant's option has been changed to the New Exercise Date and that the participant's option shall be exercised automatically on the New Exercise Date, unless prior to such date the participant has withdrawn from the Offering Period as provided in Section 10 hereof.

20. Amendment or Termination.

(a) The Administrator may at any time and for any reason terminate or amend the Plan. Except as otherwise provided in the Plan, no such termination can affect options previously granted, provided that an Offering Period may be terminated by the Administrator on any Exercise Date if the Administrator determines that the termination of the Offering Period or the Plan is in the best interests of the Company and its shareholders. Except as provided in Section 19 and this Section 20 hereof, no amendment may make any change in any option theretofore granted which adversely affects the rights of any participant. To the extent necessary to comply with Section 423 of the Code (or any successor rule or provision or any other applicable law, regulation or stock exchange rule), the Company shall obtain shareholder approval in such a manner and to such a degree as required.

(b) Without shareholder consent and without regard to whether any participant rights may be considered to have been “adversely affected,” the Administrator shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such

other limitations or procedures as the Administrator determines in its sole discretion advisable which are consistent with the Plan.

(c) In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Board may, in its discretion and, to the extent necessary or desirable, modify or amend the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) increasing the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price;

(ii) shortening any Offering Period so that Offering Period ends on a new Exercise Date, including an Offering Period underway at the time of the Board action; and

(iii) allocating shares.

Such modifications or amendments shall not require stockholder approval or the consent of any Plan participants.

21. Notices. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form and manner specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Term of Plan. The Plan, as amended through May 19, 2014, shall continue in effect until August 31, 2024, unless sooner terminated under Section 20 hereof.

24. Automatic Transfer to Low Price Offering Period. To the extent permitted by any applicable laws, regulations, or stock exchange rules if the Fair Market Value of the Common Stock on any Exercise Date in an Offering Period is lower than the Fair Market Value of the Common Stock on the Entry Date of such Offering Period, then all participants in such Offering Period shall be automatically withdrawn from such Offering Period immediately after the exercise of their option on such Exercise Date and automatically re-enrolled in the immediately following Offering Period.

EXHIBIT A
MICROCHIP TECHNOLOGY INCORPORATED
2001 Employee Stock Purchase Plan
Subscription Agreement
Enrollment, Change and Withdrawal Form

Please print and complete all information below:

Full Name: _____ Badge #: _____
Last First M

Home Address: _____

SECTION I – PARTICIPATION ELECTION

Choose One:

- I hereby **decline** to participate in the Employee Stock Purchase Plan for this semi-annual participation period.
- I hereby **authorize** Microchip Technology Inc. to deduct the following amount from my salary each pay period (gross salary).

CIRCLE ONE: 1% 2% 3% 4% 5% 6% 7% 8% 9% 10%

My participation will automatically remain in effect from one offering period to the next offering period in accordance with my payroll deduction authorization, unless I withdraw from the ESPP, change the rate of my payroll deduction or my employment status changes.

I can decrease my contribution percentage no more than one time during each six-month purchase period. I can increase my contribution percentage only at the beginning of each 24-month offering period.

I can withdraw from any offering period, provided that my withdrawal is received no later than 5 business days prior to a purchase date. See next section.

My shares will be placed in a brokerage account in street name.

SECTION II- WITHDRAWAL

I choose to stop my payroll deductions and either (select only one):

- purchase** Microchip Technology Inc. shares on the next purchase date.*
- refund** my Employee Stock Purchase Plan payroll deductions collected.*

I can withdraw from any offering period, provided that my withdrawal is received by stock plan administration at least 5 business days prior to a purchase date.

***Note: When withdrawing from the ESPP, per the Plan you will not be eligible to re-enroll until the beginning of the next 24-month offering period.**

Signature of Employee

Date

SECTION III – BENEFICIARY (for payroll deducted, cash balance of contributions prior to a purchase)

I understand that if I am married, my spouse shall automatically be my designated beneficiary unless I elect otherwise and my spouse consents to such election. When more than one beneficiary is designated, if the percentage is not specified, payment will be made in equal dollars to each surviving beneficiary, or all to the last surviving beneficiary.

Primary Beneficiary

I hereby designate the following person(s) as primary beneficiary of my payroll deduction account under the Plan payable by reason of my death.

Name	Relationship of Beneficiary	Percentage
_____	_____	_____
_____	_____	_____

Contingent Beneficiary

In the event that there is no living primary beneficiary at my death, I hereby designate the following person(s) as contingent beneficiary of my payroll deduction account.

Name

Relationship of Beneficiary

Percentage

SECTION IV- CONSENT OF SPOUSE

Note: If your spouse is not your Designated Primary Beneficiary, then this Designation of Beneficiary is invalid without the consent of your spouse unless your spouse waived the right to consent to any change in the beneficiary designation under a prior beneficiary designation.

I acknowledge that I am the spouse of the Participant named on the reverse side of this form. I hereby certify that I have read this Designation of Beneficiary Form and understand that I possess a beneficial interest in my spouse's payroll deduction account under the Plan if I survive him/her. I hereby acknowledge and consent to the Designation of Beneficiary on the reverse side of this form. My consent shall be irrevocable unless my spouse subsequently changes the Designation of Beneficiary.

If my spouse changes the designation, (Choose A or B):

- (A) I understand I must sign a new consent to the new designation for it to be effective.
- (B) I waive my right to consent to any future change in designation. I understand I have the right to restrict my consent only to the beneficiary designated on the reverse side of this form by checking box (A.)

I have executed this consent this _____ day of _____, 20__.

Signature of Participant's Spouse

SCHEDULE A

LIST OF SUBSIDIARIES PARTICIPATING IN THE 2001 EMPLOYEE STOCK PURCHASE PLAN Amended February 19, 2019

Participation in 423 Component

Microchip Technology Inc. and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries

- Micrel, LLC
- Microchip Technology LLC
- Standard Microsystems, LLC and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries
 - o BridgeCo, LLC
 - o Standard Microsystems (Asia) LLC
- Supertex, LLC

Microsemi Corporation and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries

- Microsemi Corp. International
- Microsemi Corp (Taiwan Branch)

Microsemi Corp. – Analog Mixed Signal Group

Microsemi Corp. – Massachusetts

Microsemi Corp. – Power Management Group

Microsemi Corp. – Power Products Group

Microsemi Corp. – RFIS Diode Solutions

Microsemi Corp. – RF Power Products

Microsemi Corp. – RF Signal Processing

Microsemi Frequency and Time Corporation and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries

- Microsemi Frequency and Time Corporation (Hong Kong Branch)
- Symmetricom Puerto Rico Ltd.

Microsemi PoE, Inc.

Microsemi Semiconductor (U.S.), Inc. and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries

- Microsemi International, Inc.

Microsemi SoC Corp. and its following disregarded subsidiaries, but only for so long as they remain its disregarded subsidiaries

- Microsemi SOC Corp (Canada Branch)

Microsemi Solutions (U.S.), Inc.

Wintegra Holding, LLC

Participation in non-423 Component

Participation of employees of these entities is subject to approval by the Administrator.

Microchip Technology Ireland Limited

EXHIBIT 10.22

**MICROCHIP TECHNOLOGY INCORPORATED
1994 INTERNATIONAL EMPLOYEE STOCK PURCHASE PLAN
AS AMENDED MAY 6, 2019**

I. PURPOSE

This 1994 International Employee Stock Purchase Plan ("Plan") is hereby established by Microchip Technology Incorporated, a Delaware corporation ("Microchip"), in order to provide eligible employees of foreign Microchip subsidiaries with the opportunity to acquire a proprietary interest in Microchip through the purchase of shares of Microchip common stock at periodic intervals with their accumulated payroll deductions. The Plan authorizes the grant of purchase rights which do not qualify under Code Section 423 pursuant to any rules, procedures, agreements, appendices, or sub-plans adopted by the Plan Administrator for such purpose.

II. DEFINITIONS

For purposes of administration of the Plan, the following terms shall have the meanings indicated:

"Common Stock" means shares of Microchip common stock, par value \$0.001 per share.

"Earnings" means regular base salary plus such additional items of compensation as the Plan Administrator may deem appropriate.

"Effective Date" means June 1, 1994. A list of the participating Foreign Subsidiaries is hereto attached as Schedule A. For any other Foreign Subsidiary, the effective date shall be determined by the Microchip Board of Directors or the Employee Committee of the Board of Directors prior to the time such Foreign Subsidiary is to become a participating company in the Plan.

"Eligible Employee" means any person who is engaged, on a regularly-scheduled basis, in the rendition of personal services outside the U.S. as an employee of a Foreign Subsidiary subject to the control and direction of that Foreign Subsidiary as to both the work to be performed and the manner and method of performance and has been designated as having the right to be granted purchase rights under the Plan.

"Entry Date" shall mean the first Trading Day of any Purchase Period. An Entry Date occurs on the first Trading Day in December or June.

"Foreign Subsidiary" means any non-U.S. Microchip subsidiary which elects, with the approval of the Microchip Board of Directors or the Employee Committee of the Board of Directors, to extend the benefits of this Plan to its Eligible Employees. The Foreign Subsidiaries participating in the Plan are listed on attached Schedule A.

"Participant" means any Eligible Employee of a Foreign Subsidiary who is actively participating in the Plan.

"Purchase Period" means the first U.S. business day of December to the last U.S. business day of May and from the first U.S. business day of June to the last U.S. business day of November; provided that Purchase Periods commencing after June, 2014 shall run from the first U.S. business day of December to the first U.S. business day of June and from the first U.S. business day in June to the first U.S. business day of December.

"Service" means the period during which an individual performs services as an Eligible Employee and shall be measured from his or her hire date, whether that date is before or after the Effective Date of the Plan.

"Trading Day" shall mean a day on which national stock exchanges and the Nasdaq System are open for trading.

III. ADMINISTRATION

Each Foreign Subsidiary shall have responsibility for the administration of the Plan with respect to its Eligible Employees. Accordingly, the Plan shall, as to each Foreign Subsidiary, be separately administered by a plan administrator comprised of two or more Members of the Board of Directors, the Employee Committee of the Board of Directors, or a designee as may be appointed by either of them from time to time ("Plan Administrator"). The Plan Administrator shall have full authority to administer the Plan, including the authority to designate Eligible Employees that are granted purchase rights and the authority to interpret and construe any provision of the Plan and to adopt such rules and regulations for administering the Plan as it may deem necessary. Decisions of the Plan Administrator shall be subject to ratification by the Microchip Board of Directors and, when so ratified, shall be final and binding on all parties who have an interest in the Plan.

IV. PURCHASE PERIODS

A. Shares of Common Stock shall be offered for purchase under the Plan through a series of successive purchase periods until such time as (i) the maximum number of shares of Common Stock available for issuance under the Plan shall have been purchased or (ii) the Plan shall have been sooner terminated in accordance with Article VIII.

B. The Plan shall be implemented in a series of successive purchase periods, each to be of a duration of six (6) months. The initial purchase period will begin on June 1, 1994 and end on the last U.S. business day in November 1994. Subsequent purchase periods shall run from the first U.S. business day of December to the last U.S. business day of May and from the first U.S. business day of June to the last U.S. business day of November; provided that purchase periods commencing after June, 2014 shall run from the first U.S. business day of December to the first U.S. business day of June and from the first U.S. business day of June to the first U.S. business day of December.

C. No purchase period shall commence under the Plan, nor shall any shares of Common Stock be issued hereunder, until such time as (i) the Plan shall have been approved by the Microchip

Board of Directors and (ii) Microchip shall have complied with all applicable requirements of the Securities Act of 1933 (as amended), all applicable listing requirements of any securities exchange on which shares of the Common Stock are listed and all other applicable statutory and regulatory requirements.

D. The Participant shall be granted a separate purchase right for each purchase period in which he/she participates. The purchase right shall be granted on the start date of the purchase period and shall be automatically exercised on the last U.S. business day of that purchase period.

E. The acquisition of Common Stock through plan participation for any purchase period shall neither limit nor require the acquisition of Common Stock by the Participant in any subsequent purchase period.

V. ELIGIBILITY AND PARTICIPATION

A. Any Eligible Employee that has been designated as having the right to be granted purchase rights on a given Entry Date shall be eligible to participate in the Plan. Unless otherwise determined by the Plan Administrator, all Eligible Employees meeting the conditions under this Section V are eligible for the grant of purchase rights under the Plan.

B. Each Eligible Employee of each Foreign Subsidiary participating in the Plan may join the Plan in accordance with the following provisions:

- An individual who is an Eligible Employee on a given Entry Date may enter that purchase period on such Entry Date, provided he/she enrolls in the purchase period on or before such Entry Date in accordance with Section V.C below. Should any such Eligible Employee not enter the purchase period on or before the given Entry Date, then he/she may not subsequently join that particular purchase period on any later date.

- An individual who is an Eligible Employee but was not employed on a given Entry Date may not participate in that purchase period but will be eligible to join the Plan on the next Entry Date thereafter provided that he or she is then an Eligible Employee.

C. To participate for a particular purchase period, the Eligible Employee must complete the enrollment forms prescribed by the Plan Administrator (including a purchase agreement and a payroll deduction authorization) and file such forms with the Plan Administrator (or its designate) at least five U.S. business days before the start date of that purchase period.

D. The payroll deduction authorized by the Participant shall be collected under the Plan in the currency in which paid by the Foreign Subsidiary and may be any multiple of one percent (1%) of the Earnings paid to the Participant during each purchase period, up to a maximum of ten percent (10%). Any changes or fluctuations in the exchange rate at which the currency collected from the Participant through such payroll deductions is converted into U.S. Dollars on each purchase date under the Plan shall be borne solely by the Participant. The deduction rate so authorized shall continue in effect for the entire purchase period and for each successive purchase period, except to the extent such rate is changed in accordance with the following guidelines:

- The Participant may, at any time during the purchase period, reduce his/her rate of payroll deduction. Such reduction shall become effective as soon as possible after filing of the requisite reduction form with the Plan Administrator (or its designate), but the Participant may not effect more than one such reduction during the same purchase period.

- The Participant may, prior to the start date of any subsequent purchase period, increase or decrease the rate of his/her payroll deduction by filing the appropriate form with the Plan Administrator (or its designate). The new rate (which may not exceed the ten percent (10%) maximum) shall become effective as of the start date of the new six (6)-month purchase period.

Payroll deductions will automatically cease upon the termination of the Participant's purchase right in accordance with the applicable provisions of Section VII below.

VI. STOCK SUBJECT TO PLAN

A. The Common Stock purchasable under the Plan shall, solely in the discretion of the Microchip Board, be made available from authorized but unissued shares of Common Stock or from shares of Common Stock reacquired by Microchip, including shares of Common Stock purchased on the open market. The total number of shares reserved under the Plan prior to January 2007 is 348,593 shares, plus beginning January 1, 2007, and each January 1 thereafter during the term of the Plan, an automatic annual increase in shares reserved of one tenth of one percent (0.1%) of the then outstanding shares of Microchip Common Stock. The total number of shares which may be issued under the Plan shall not exceed the number reserved.

B. In the event any change is made to the outstanding Common Stock by reason of any stock dividend, stock split, combination of shares or other change affecting such outstanding Common Stock as a class without Microchip's receipt of consideration, appropriate adjustments shall be made by the Microchip Board of Directors to (i) the class and maximum number of securities issuable over the term of the Plan, (ii) the class and maximum number of securities purchasable per Participant during any one purchase period and (iii) the class and number of securities and the price per share in effect under each purchase right at the time outstanding under the Plan. Such adjustments shall be designed to preclude the dilution or enlargement of rights and benefits under the Plan.

VII. PURCHASE RIGHTS

An Eligible Employee who participates in the Plan for a particular purchase period shall have the right to purchase shares of Common Stock upon the terms and conditions set forth below and shall execute a purchase agreement incorporating such terms and conditions and such other provisions (not inconsistent with the Plan) as the Plan Administrator may deem advisable.

Purchase Price. Common Stock shall be issuable at the end of each purchase period at a purchase price equal to eighty-five percent (85%) of the lower of (i) the fair market value per share on the start date of that purchase period or (ii) the market price per share of Common Stock on the purchase date.

Valuation. The fair market value per share of Common Stock on any relevant date under the Plan shall be the closing selling price per share of Common Stock on that date, as officially quoted on the Nasdaq Global Select Market. If there is no quoted selling price for such date, then the closing selling price per share of Common Stock on the next day for which there does exist such a quotation shall be determinative of fair market value.

Number of Purchasable Shares.

- The number of shares purchasable per Participant during each purchase period shall be determined as follows: first, the payroll deductions in the currency in which collected from the Participant during that purchase period shall be converted into U.S. Dollars on the last U.S. business day of the purchase period at the exchange rate in effect on that day; then, the U.S. Dollar amount calculated for the Participant on the basis of such exchange rate shall be divided by the purchase price in effect for such period to determine the number of whole shares of Common Stock purchasable on the Participant's behalf for that purchase period.

- However, no Participant may, during any one purchase period, purchase more than one thousand eight hundred ninety-nine (1,899) shares of Common Stock.

- And any provisions of the Plan to the contrary notwithstanding, no Participant shall be granted an option under the Plan (i) to the extent that, immediately after the grant, such Participant (or any other person whose stock would be attributed to such Participant) would own capital stock of Microchip and/or hold outstanding options to purchase such stock possessing five percent (5%) or more of the total combined voting power or value of all classes of the capital stock of Microchip or of any Subsidiary, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans of Microchip and its subsidiaries accrues at a rate which exceeds \$25,000.00 worth of stock (determined at the fair market value of the shares at the time such option is granted) for each calendar year in which such option is outstanding at any time.

Payment. Payment for the Common Stock purchased under the Plan shall be effected by means of the Participant's authorized payroll deductions in the currency in which paid by the Foreign Subsidiary. Such deductions shall begin with the first full payroll period beginning with or immediately following the start date of the purchase period and shall (unless sooner terminated by the Participant) continue through the pay day ending with or immediately prior to the last day of such purchase period. The amounts so collected shall be credited to the Participant's book account under the Plan, but no interest shall be paid on the balance from time to time outstanding in such account. The amounts collected from a Participant may be commingled with the general assets of the Foreign Subsidiary or Microchip and may be used for general corporate purposes. However, all purchases of Common Stock

under the Plan shall be made in U.S. Dollars on the basis of the exchange rate in effect on the last day of each purchase period.

Termination of Purchase Right. The following provisions shall govern the termination of outstanding purchase rights:

- A Participant may, at any time prior to the last five (5) business days of the Foreign Subsidiary falling within the purchase period, terminate his/her outstanding purchase right by filing the prescribed notification form with the Plan Administrator. No further payroll deductions shall be collected from the Participant with respect to the terminated purchase right, and any payroll deductions collected for the purchase period in which such termination occurs shall, at the Participant's election, be immediately refunded in the currency in which paid by the Foreign Subsidiary or held for the purchase of shares at the end of such purchase period. If no such election is made at the time the termination notice is filed, then the Participant's payroll deductions shall be refunded as soon as possible after the termination date of his/her purchase right.

- The termination of such purchase right shall be irrevocable, and the Participant may not subsequently rejoin the purchase period for which the terminated purchase right was granted. In order to resume participation in any subsequent purchase period, such individual must re-enroll in the Plan (by making a timely filing of a new purchase agreement and payroll deduction authorization) on or before the date he/she is first eligible to join the new purchase period.

- If the Participant ceases to remain an Eligible Employee while his/her purchase right is outstanding, then such purchase right shall immediately terminate, and the payroll deductions collected from such Participant for the purchase period shall be promptly refunded in the currency in which paid by the Foreign Subsidiary to the Participant. However, should the Participant's cessation of Eligible Employee status occur by reason of death or permanent disability, then such individual (or the personal representative of a deceased Participant) shall have the following election, exercisable up until the last day of the purchase period:

- to withdraw all of the Participant's payroll deductions for such purchase period, in the currency in which paid by the Foreign Subsidiary, or

- to have such funds held for the purchase of shares at the end of the purchase period.

If no such election is made, then such funds shall be refunded as soon as possible after the end of the purchase period. In no event, however, may any payroll deductions be made on the Participant's behalf following his/her cessation of Eligible Employee status.

Stock Purchase. Shares of Common Stock shall automatically be purchased on behalf of each Participant (other than Participants whose payroll deductions have previously been refunded in accordance with the Termination of Purchase Right provisions above) on the last U.S. business day of each purchase period. The purchase shall be effected as follows: first, each Participant's payroll

deductions for that purchase period (together with any carryover deductions from the preceding purchase period) shall be converted from the currency in which paid by the Foreign Subsidiary into U.S. Dollars at the exchange rate in effect on the purchase date, and then the amount of U.S. Dollars calculated for each Participant on the basis of such exchange rate shall be applied to the purchase of whole shares of Common Stock (subject to the limitation on the maximum number of purchasable shares set forth above) at the purchase price in effect for such purchase period. Any payroll deductions not applied to such purchase because they are not sufficient to purchase a whole share shall be held for the purchase of Common Stock in the next purchase period. However, any payroll deductions not applied to the purchase of Common Stock by reason of the limitation on the maximum number of shares purchasable by the Participant during the purchase period shall be promptly refunded to the Participant in the currency in which paid by the Foreign Subsidiary.

Proration of Purchase Rights. Should the total number of shares of Common Stock which are to be purchased pursuant to outstanding purchase rights on any particular date exceed the number of shares then available for issuance under the Plan, the Plan Administrator shall make a pro-rata allocation of the available shares on a uniform and nondiscriminatory basis, and the payroll deductions of each Participant, to the extent in excess of the aggregate purchase price payable for the Common Stock pro-rated to such individual, shall be refunded to such Participant in the currency in which paid by the Foreign Subsidiary.

Rights as Stockholder. A Participant shall have no stockholder rights with respect to the shares subject to his/her outstanding purchase right until the shares are actually purchased on the Participant's behalf in accordance with the applicable provisions of the Plan. No adjustments shall be made for dividends, distributions or other rights for which the record date is prior to the date of such purchase.

A Participant shall be entitled to receive, as soon as practicable after the end of each purchase period, a stock certificate (as evidenced by the appropriate entry on the books of Microchip or of a duly authorized transfer agent of Microchip) for the number of shares purchased on the Participant's behalf. Such certificate will be issued in "street name" for immediate deposit in a designated brokerage account. Until the stock certificate evidencing such Shares is issued no right to vote or receive dividends or any other rights as a stockholder shall exist. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued.

Assignability. No purchase right granted under the Plan shall be assignable or transferable by the Participant other than by will or by the laws of descent and distribution following the Participant's death, and during the Participant's lifetime the purchase right shall be exercisable only by the Participant.

Change in Ownership. Should any of the following transactions (a "Corporate Transaction") occur during the purchase period:

(i) a merger or other reorganization in which Microchip will not be the surviving corporation (other than a reorganization effected primarily to change the State in which Microchip is incorporated), or

(ii) a sale of all or substantially all of Microchip's assets in liquidation or dissolution of Microchip, or

(iii) a reverse merger in which Microchip is the surviving corporation but in which more than fifty percent (50%) of Microchip's outstanding voting stock is transferred to person or persons different from those who held the stock immediately prior to such merger, then all outstanding purchase rights under the Plan shall automatically be exercised immediately prior to the effective date of such Corporate Transaction by applying the payroll deductions of each Participant for the purchase period in which such Corporate Transaction occurs to the purchase of whole shares of Common Stock at eighty-five percent (85%) of the lower of (i) the fair market value of the Common Stock on the start date of the purchase period in which such Corporate Transaction occurs or (ii) the fair market value of the Common Stock immediately prior to the effective date of such Corporate Transaction. Payroll deductions shall be converted from the currency in which paid by the Foreign Subsidiary into U.S. Dollars on the basis of the exchange rate in effect on the purchase date, and the applicable share limitation of Article VII shall continue to apply to each such purchase. Should Microchip sell or otherwise dispose of its ownership interest in any Foreign Subsidiary participating in the Plan, whether through merger or sale of all or substantially all of the assets or outstanding capital stock of that Foreign Subsidiary, then a similar exercise of outstanding purchase rights shall be effected immediately prior to the effective date of such disposition, but only to the extent those purchase rights are attributable to the employees of such Foreign Subsidiary.

Microchip shall use its best efforts to provide at least ten (10) days advance written notice of the occurrence of any such Corporate Transaction, and the Participants shall, following the receipt of such notice, have the right to terminate their outstanding purchase rights in accordance with the applicable provisions of this Article VII.

VIII. AMENDMENT AND TERMINATION

The Plan has been established voluntarily by Microchip. The Microchip Board of Directors may alter, amend, suspend or discontinue the Plan with respect to one or more Foreign Subsidiaries following the end of any purchase period. The Microchip Board may also terminate the Plan in its entirety immediately following the end of any purchase period. In such event, no further purchase rights shall thereafter be granted or exercised, and no further payroll deductions shall thereafter be collected, under the Plan.

IX. GENERAL PROVISIONS

A. The Plan shall become effective on the designated effective date for each Foreign Subsidiary, provided Microchip shall have complied with all applicable requirements of the Securities Act of 1933 (as amended), all applicable listing requirements of any securities exchange on which shares of the Common Stock are listed and all other applicable requirements established by law or regulation.

B. The Plan shall terminate upon the earlier of (i) November 30, 2024 or (ii) the date on which all shares available for issuance under the Plan shall have been sold pursuant to purchase rights exercised under the Plan.

C. All costs and expenses incurred in the administration of the Plan shall be paid by the Foreign Subsidiary.

D. Neither the action of Microchip or the Foreign Subsidiary in establishing the Plan, nor any action taken under the Plan by the Microchip Board or the Plan Administrator, nor any provision of the Plan itself shall constitute any form of employment contract, be construed so as to grant any person the right to remain in the employ of the Foreign Subsidiary for any period of specific duration, and except where expressly prohibited by applicable law such person's employment may be terminated at any time, with or without cause.

E. Participation in the Plan is voluntary and occasional and does not create any contractual or other right to participate in the Plan in the future, or benefits in lieu of participation in the Plan, even if the Participant has continually participated in the Plan in the past.

F. Participation in the Plan does not constitute normal or expected salary or compensation for any purposes, including but not limited to, calculating any severance, resignation, termination, redundancy, end of service payments, bonuses, long-term service awards, pension or retirement benefits or similar payments and in no event should be considered as compensation for, or relating in any way to past services for Microchip or the Foreign Subsidiary.

G. Microchip, Foreign Subsidiaries and the Plan Administrator must collect, use, and transfer personal data of Participants as described in this subsection in order to administer the Plan. By participating in the Plan, the Participant is consenting to the collection, transfer and use of personal data as generally described in this subsection except where requiring such consent is expressly prohibited by local law.

(i) Microchip and its Foreign Subsidiaries hold certain personal information about the Participant, including, but not limited to, name, home address and telephone number, date of birth, social insurance number, salary, nationality, job title, any Shares of Common Stock or directorships held in Microchip, details of all participation in the Plan or other entitlement to Shares, for the purpose of managing and administering the Plan (“Data”).

(ii) Microchip and/or its Foreign Subsidiaries will transfer Data among themselves as necessary for the purposes of implementation, administration, and management of Participant’s participation in the Plan, and that Microchip and/or its Foreign Subsidiaries may each further transfer Data to identified third parties assisting them in the implementation, administration, and management of the Plan (“Data Recipients”).

(iii) These Data Recipients may be located in Participant’s country of residence or elsewhere, such as the United States. By participating under this Plan, the Participant authorizes the Data Recipients to receive, possess, use, retain, and transfer Data in electronic or other form, for the purposes of implementing, administering, and managing Participant’s participation in the Plan, including any transfer of such Data, as may be required for Plan administration and/or the subsequent holding of Shares on Participant’s behalf, to a broker or third party with whom the Shares acquired on purchase may be deposited.

Participant may, at any time, review the Data, request that any necessary amendments be made to it, or withdraw Participant's consent herein in writing by contacting Microchip. Withdrawing consent may affect Participant's ability to participate in the Plan.

SCHEDULE A

SUBSIDIARIES PARTICIPATING IN THE INTERNATIONAL EMPLOYEE STOCK PURCHASE PLAN Updated May 6, 2019

Foreign Subsidiaries below are approved for participation in the Plan, however participation of employees of Foreign Subsidiaries is subject to separate approval by the Microchip Board of Directors, or the Employee Committee of the Board of Directors.

Australia – Microchip Technology Australia PTY Ltd.

Australia – Hi-Tech Software PTY Ltd

Austria – Microchip Technology Austria GmbH

Belgium – Eqcologic NV

Canada – Microchip Technology Canada Inc.

Canada – Microsemi Semiconductor ULC

Canada – Microsemi Storage Solutions Ltd.

China – Microchip Technology Trading (Shanghai) Co., Ltd.

China – SST China Ltd.

Denmark – Microchip Technology Nordic ApS

Denmark – Microsemi Semiconductor Corporation A/S

Finland – Microchip Technology Finland OY

France – Microchip Technology Nantes

France – Microchip Technology Rousset.

France – Microchip Technology Sarl

France – Microsemi Europe SARL

France – Microsemi Power Module Products, SAS

Germany – K2L GmbH & Co. KG

Germany – Microchip Technology GmbH

Germany – Microchip Technology Germany II GmbH & Co. KG

Germany – Microchip Technology Germany GmbH

Germany – Microchip Automotive GmbH & Co. KG

Germany – Microchip Technology Munich GmbH

Germany – Microsemi Frequency and Time GmbH

Germany – Microsemi Semiconductor GmbH

Germany – Vectron International GmbH
Hong Kong – Microchip Technology Hong Kong Ltd.
Hong Kong - Microsemi (Hong Kong) Limited
Hong Kong – Supertex, Limited
Hungary – Microchip Technology Hungary Kft.
India – Microchip Technology (India) Private Limited
India – Microsemi Communications India Private Limited “Vitesse/ENT”
India – Microsemi India Private Limited
India – Microsemi Storage Solutions India Private Ltd
Ireland – Microchip Technology Ireland Limited
Ireland – Atmel Technologies Ireland Limited
Israel – Microchip Technology Israel Ltd.
Israel – Microsemi Israel Storage Solutions Ltd.
Israel – Microsemi P.O.E. Ltd
Israel – Wintegra Ltd.
Italy – Microchip Technology SRL
Italy – Microsemi Europe SRL
Italy – Microsemi Storage Solutions Europe Ltd.
Japan – Microchip Technology Japan K.K.
Japan – Microsemi Storage Solutions Japan K.K.
Korea – Microchip Technology Korea Ltd.
Korea – Microsemi (Hong Kong) Limited (Branch Office)
Korea – Microsemi Storage Solutions Korea Ltd
Macau – Microsemi Macau Commercial Offshore Limited
Malaysia – Arizona Microchip Technology (Malaysia) Sdn Bhd
Malaysia – Microchip Operations (Malaysia) Sdn. Bhd
Malaysia – Microsemi Semiconductor (Asia) Pte., Ltd. (Malaysian Branch)
Malaysia – Microsemi Solutions Sdn. Bhd.
México – Microchip Technology Mexico, S.DE R.L. DE C.V.
Netherlands – Microchip Technology (Netherlands) Europe B.V.
Netherlands – Microsemi Semiconductor XIC B.V.
Norway – Microchip Technology Norway AS
Philippines – MTI Advanced Test Development Corporation

Philippines – Microchip Technology Operations (Philippines) Corporation

Philippines – Microsemi Semiconductors – Manila (Philippines), Inc.

Poland – Microchip Technology Sp. z o.o.

Romania – Microchip Technology SRL

Romania – Microchip Sales SRL

Singapore – Microchip Technology Singapore Pte Ltd.

Singapore – Microsemi Semiconductor (Asia) Pte., Ltd.

Spain – Microchip Technology S.L.

Spain – Microchip Technology Zaragoza S.L.U.

Sweden – Microchip Technology Sweden AB

Sweden – Microsemi Europe Limited Filial

Sweden – SMSC Sweden AB

Switzerland – Microchip Technology Switzerland SA

Taiwan – Microchip Technology (Barbados) II, Inc. Taiwan Branch

Taiwan – Microsemi Storage Solutions Hong Kong Ltd (Taiwan Branch)

Taiwan – SST Taiwan Ltd.

Thailand – Arizona Microchip Technology (Thailand) Ltd.

Thailand – Microchip Technology (Thailand) Co. Ltd.

United Kingdom – Microchip Limited

United Kingdom – Microchip Touch Solutions Limited

United Kingdom – Microsemi Europe Ltd.

United Kingdom – Microsemi Semiconductor Limited

United Kingdom – Microsemi Storage Solutions Europe, Ltd

United Kingdom – Silicon Storage Technology Ltd

EXHIBIT 21.1
MICROCHIP TECHNOLOGY INCORPORATED
LIST OF SIGNIFICANT SUBSIDIARIES

Atmel Corporation
2355 W. Chandler Boulevard
Chandler, AZ 85224

Microchip Technology Malta Limited
Ground Floor, Block W
East Point Business Park
Dublin 3 Ireland

Atmel Dutch Corp
Naritaweg 165 Telestone 8
Amsterdam 1043 BW
The Netherlands

Microchip Technology Rousset SAS
Zone Industrielle
Rousset Cedex
France 13106

EuroFranco LLC
2355 W. Chandler Boulevard
Chandler, AZ 85224

Silicon Storage Technology, Ltd
720 Wharfedale Road, Winnersh Triangle,
Wokingham, Berkshire
United Kingdom RG41 5TP

Microchip Holding Corporation
2355 W. Chandler Boulevard
Chandler, AZ 85224

Microsemi (Hong Kong) Limited
Level 12, 28 Hennessy Road,
Wanchai
Hong Kong

Microchip Malta BMD Limited
Gort Road, Ennis Co.,
Clare Ireland

Microsemi Corp. – International
4th Floor, Century Yard, Cricket Square,
Elgin Avenue
Grand Cayman
Cayman Islands KY1-1209

Microchip Technology (Thailand) Co., Ltd.
14 Moo 1, T. Wangtakien
A. Muang Chacherngsao
Chacherngsao 24000
Thailand

Microsemi Corp. – Holding
4th Floor, Century Yard, Cricket Square,
Elgin Avenue
Grand Cayman
Cayman Islands KY1-1209

Microchip Technology (Barbados) II Incorporated
190 Elgin Avenue
George Town
Grand Cayman
Cayman Islands KY1-9005

Microsemi Corporation
2355 W. Chandler Boulevard
Chandler, AZ 85224

Microchip Technology (Netherlands) Europe B.V.
Rapenburgerstraat 179 G
Amsterdam 1001 VM
The Netherlands

Microsemi Israel, Ltd.
1 Hanagar Street,
Neve Ne-eman Industrial Zone,
Hod Hasharon 45421
Israel

Microchip Technology Ireland Limited
Ground Floor, Block W
East Point Business Park
Dublin 3 Ireland

Microsemi SoC Corp.
2355 W. Chandler Boulevard
Chandler, AZ 85224

Microchip Technology LLC
2355 W. Chandler Boulevard
Chandler, AZ 85224

Microsemi Storage Solutions, Inc.
2355 W. Chandler Boulevard
Chandler, AZ 85224

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Form S-3 No. 333-149999,
- (2) Form S-8 No. 33-59686,
- (3) Form S-8 No. 33-80072,
- (4) Form S-8 No. 33-81690,
- (5) Form S-8 No. 33-83196,
- (6) Form S-8 No. 333-872,
- (7) Form S-8 No. 333-40791,
- (8) Form S-8 No. 333-67215,
- (9) Form S-8 No. 333-93571,
- (10) Form S-8 No. 333-51322,
- (11) Form S-8 No. 333-73506,
- (12) Form S-8 No. 333-99655,
- (13) Form S-8 No. 333-101696,
- (14) Form S-8 No. 333-103764,
- (15) Form S-8 No. 333-109486,
- (16) Form S-8 No. 333-119939,
- (17) Form S-8 No. 333-140773,
- (18) Form S-8 No. 333-149460,
- (19) Form S-8 No. 333-177889,
- (20) Form S-8 No. 333-183074,
- (21) Form S-8 No. 333-192273,
- (22) Form S-8 No. 333-197233,
- (23) Form S-8 No. 333-201865,
- (24) Form S-8 No. 333-206210,

- (25) Form S-8 No. 333-210580,
- (26) Form S-8 No. 333-213062,
- (27) Form S-8 No. 333-221420, and
- (28) Form S-8 No. 333-225257,

of our reports dated May 30, 2019 with respect to the consolidated financial statements of Microchip Technology Incorporated, and the effectiveness of internal control over financial reporting of Microchip Technology Incorporated, included in this Annual Report (Form 10-K) of Microchip Technology Incorporated for the year ended March 31, 2019.

/s/ Ernst & Young LLP

Phoenix, Arizona

May 30, 2019

CERTIFICATION

I, Steve Sanghi, certify that:

1. I have reviewed this Form 10-K of Microchip Technology Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 30, 2019

/s/ Steve Sanghi

Steve Sanghi

Chief Executive Officer and Chairman of the Board

CERTIFICATION

I, J. Eric Bjornholt, certify that:

1. I have reviewed this Form 10-K of Microchip Technology Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 30, 2019

/s/ J. Eric Bjornholt

J. Eric Bjornholt

Senior Vice President and Chief Financial Officer

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Steve Sanghi, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Microchip Technology Incorporated on Form 10-K for the period ended March 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Microchip Technology Incorporated.

By: /s/ Steve Sanghi
Name: Steve Sanghi
Title: Chief Executive Officer and Chairman of the Board
Date: May 30, 2019

I, J. Eric Bjornholt, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Microchip Technology Incorporated on Form 10-K for the period ended March 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Microchip Technology Incorporated.

By: /s/ J. Eric Bjornholt
Name: J. Eric Bjornholt
Title: Senior Vice President and Chief Financial Officer
Date: May 30, 2019