

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
 Washington, D.C. 20549  
**Form 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended: December 31, 2018

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 001-33299

**MELLANOX TECHNOLOGIES, LTD.**

(Exact name of registrant as specified in its charter)

**Israel**  
 (State or other jurisdiction of  
 incorporation or organization)

**98-0233400**  
 (I.R.S. Employer  
 Identification Number)

**Mellanox Technologies, Ltd.**  
**Beit Mellanox, Yokneam, Israel 20692**  
 (Address of principal executive offices, including zip code)  
**+972-4-909-7200**  
 (Registrant's telephone number, including area code)

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

Title of Each Class:	Name of Each Exchange on Which Registered:
Ordinary shares, nominal value NIS0.0175 per share	The Nasdaq Stock Market, Inc.

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

(Title of Class)

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 check mark 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 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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 the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company" and "emerging growth company" in rule 12b-2 of the Exchange Act. (Check one):

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 Exchange Act Rule 12b-2). Yes  No

The aggregate market value of the registrant's ordinary shares, nominal value NIS0.0175 per share, held by non-affiliates of the registrant on June 30, 2018, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$4.5 billion (based on the closing sales price of the registrant's ordinary shares on that date). Ordinary shares held by each director and executive officer of the registrant, as well as shares held by each holder of more than 10% of the ordinary shares known to the registrant, have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not a determination for other purposes.

The total number of shares outstanding of the registrant's ordinary shares, nominal value NIS0.0175 per share, as of February 15, 2019, was 54,225,264.

MELLANOX TECHNOLOGIES, LTD.

	<u>Page No.</u>
<b>PART I</b>	
ITEM 1. Business	4
ITEM 1A. Risk Factors	16
ITEM 1B. Unresolved Staff Comments	33
ITEM 2. Properties	33
ITEM 3. Legal Proceedings	33
ITEM 4. Mine Safety Disclosures	33
<b>PART II</b>	
ITEM 5. Market For Registrant's Ordinary Shares, Related Shareholder Matters and Issuer Purchases of Equity Securities	33
ITEM 6. Selected Financial Data	35
ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	35
ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk	48
ITEM 8. Financial Statements and Supplementary Data	49
ITEM 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	49
ITEM 9A. Controls and Procedures	49
ITEM 9B. Other Information	50
<b>PART III</b>	
ITEM 10. Directors, Executive Officers and Corporate Governance	51
ITEM 11. Executive Compensation	56
ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters	79
ITEM 13. Certain Relationships and Related Transactions, and Director Independence	81
ITEM 14. Principal Accountant Fees and Services	83
<b>PART IV</b>	
ITEM 15. Exhibits and Financial Statement Schedules	84
ITEM 16. Form 10-K Summary	130
Signatures	131

## PART I

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made and/or management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- the impact of worldwide economic conditions on us, our customers and our vendors;
- market adoption of our Ethernet and InfiniBand solutions;
- competition and competitive factors;
- our ability to accurately forecast customer demand;
- our dependence on a relatively small number of customers;
- our ability to successfully introduce new products and enhance existing products;
- our dependence on third-party subcontractors;
- our ability to maintain adequate revenue growth;
- our ability to carefully manage the use of "open source" software in our products;
- the impact of any acquisitions or investments in other companies; and
- other risk factors included under "Risk Factors" in this report.

In addition, in this report, the words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "predict," "potential" and similar expressions, as they relate to us, our business and our management, are intended to identify forward-looking statements. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, except to the extent required by applicable laws. If we update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

When used in this report, "Mellanox," the "Company," "we," "our" or "us" refers to Mellanox Technologies, Ltd. and its consolidated subsidiaries unless the context requires otherwise.

## ITEM 1—BUSINESS

We are a fabless semiconductor company that designs, manufactures (through subcontractors) and sells high-performance interconnect products and solutions primarily based on the Ethernet and InfiniBand standards. Our products facilitate efficient data transmission between servers, storage systems, communications infrastructure equipment and other embedded systems. We operate our business globally and offer products to customers at various levels of integration. The products we offer include integrated circuits ("ICs"), adapter cards, switch systems, cables, modules, software, services and accessories. Together these products form a total end-to-end integrated networking solution focused on computing, storage and communication applications used in multiple markets, including cloud, Web 2.0, High Performance Computing ("HPC"), Big Data, machine learning, storage, telecommunications, financial services, and enterprise data centers ("EDC"). These solutions increase performance, application efficiency and improve return on investment. Through the successful development and implementation of multiple generations of our products, we have established significant expertise and competitive advantages.

As a leader in developing multiple generations of high-speed interconnect solutions, we have established strong relationships with our customers. Our products are incorporated in servers and associated networking solutions produced by the largest server vendors. We supply our products to leading storage and communications infrastructure equipment vendors. Additionally, our products are used in embedded solutions.

We are a leader in high performance Ethernet interconnects, including adapters, switches, and optical and copper cables and transceivers. We have gained significant market share in the 25Gb/s and greater market segment and are the leading provider of adapters at these speeds. We work closely with key cloud, Web 2.0, server, storage, machine learning and telco customers to develop hardware and software that accelerate workloads and make data centers more efficient. This deep engagement with our customers enables us to deliver unique acceleration capabilities and thereby differentiate our products from our competitors. This provides us with the opportunity to gain share in the Ethernet market as users upgrade from 1Gb/s or 10Gb/s directly to 25/40/50 or 100Gb/s.

We are one of the pioneers of InfiniBand, an industry-standard architecture for high-performance interconnects. We believe InfiniBand interconnect solutions deliver industry-leading performance, efficiency and scalability for clustered computing and storage systems that incorporate our products. We are the leader in the HPC and machine learning markets and provide the most efficient, highest bandwidth, and lowest latency end to end interconnect solutions for scientific, data intensive, big data, and analytics applications.

We have been shipping our InfiniBand products since 2001 and our Ethernet products since 2007. During 2008, we introduced Virtual Protocol Interconnect, ("VPI"), into our ConnectX family of adapter ICs and cards. VPI provides the ability for an adapter to automatically sense whether a communications port is connected to Ethernet or InfiniBand. We also offer the Spectrum family Ethernet switches and smart InfiniBand switches at speeds from 10 to 400 Gb/s.

In order to accelerate adoption of our high-performance interconnect solutions and our products, we work with leading vendors across related industries, including:

- processor and accelerator vendors such as AMD, ARM, IBM, Intel, Nvidia, Oracle, and Qualcomm;
- operating system vendors such as Microsoft and Red Hat; and
- software applications vendors such as Oracle, IBM and VMware.

We are a Steering Committee member of the InfiniBand Trade Association, ("IBTA"), and the OpenFabrics Alliance, ("OFA"), both of which are industry trade organizations that maintain and promote InfiniBand and RoCE (RDMA over Converged Ethernet) technology. We are a founding member of the 25 Gigabit Ethernet consortium. We also participate in the Institute of Electrical and Electronic Engineers ("IEEE"), an organization that facilitates the advancement of the Ethernet standard, Storage Networking Industry Alliance and other industry organizations advancing various networking and storage related standards.

Our business headquarters are in Sunnyvale, California, and our engineering and manufacturing headquarters are in Yokneam, Israel. Our total assets as of December 31, 2018 and 2017 were approximately \$1,587.2 million and \$1,401.9 million, respectively. During the years ended December 31, 2018, 2017 and 2016, we generated approximately \$1,088.7 million, \$863.9 million and \$857.5 million in revenues, respectively, and approximately \$134.3 million, \$(19.4) million and \$18.5 million in net income (loss), respectively.

We manage our business based on one reportable segment: the development, manufacturing, marketing and sales of interconnect products. Additional information required by this item is incorporated herein by reference to our consolidated financial statements and Note 2, "Revenue" in the notes to consolidated financial statements, included in Part IV, Item 15 of this report.

## Industry Background

### *High-Performance Interconnect Market Overview and Trends*

Computing and storage systems such as servers, supercomputers and storage arrays in today's data centers face a critical challenge of handling exponentially expanding volumes of transactions and data while delivering improved application performance, high scalability and reliability within economic and power constraints. High-performance interconnect solutions remove bottlenecks in communications between compute and storage resources through fast transfer of data, latency reduction, improved application processing by central processing unit ("CPU") utilization and efficient sharing of resources. The result is higher efficiency and better resource utilization, thereby delivering higher application performance with lower capital expenditures and operating expenses. Leading companies in HPC, cloud, Web 2.0, Big Data, machine learning, storage, telecommunications, financial services, and EDCs utilize these technologies to develop distributed applications and services which are able to scale to serve millions of end customers.

Demand for computing power and data storage capacity continue to rise, fueled by the increasing reliance by enterprises on information technology ("IT") for everyday operations. Due to greater amounts of information to be processed, stored and retrieved, data centers rely on high-performance computing and high-capacity storage systems to optimize price/performance, minimize total cost of ownership, utilize power efficiently and simplify management. We believe that several IT trends impact the demand for interconnect solutions and the performance required from these solutions. These trends include:

- Transition to clustered computing and storage using connections among multiple standard components;
- Transition to multiple and multi-core processors in servers;
- Use of solid state Flash memory drives for data storage;
- Increasing deployments of software defined scale out storage;
- EDC infrastructure consolidation;
- Increasing deployments of mission critical, latency, or response time sensitive applications;
- Increasing deployments of converged and hyperconverged infrastructure;
- Increasing deployment of virtualized computing and virtualized networking resources to improve server utilization;
- Requirements by cloud providers to perform system provisioning, workload migrations and support multiple users' requests faster and more efficiently;
- Requirements by Web 2.0 data centers to increase their hardware utilization and to instantly scale up to large capacities;
- Big Data Analytics requirements for faster data access and processing to analyze increasingly large datasets and to provide real-time analysis; and
- Increasing deployment of artificial intelligence and machine learning applications that utilize massive amounts of data and compute resources and often require generating real-time results.

A number of semiconductor-based interconnect solutions have been developed to address different application requirements. These solutions include proprietary technologies as well as standard technologies, including Fibre Channel, Ethernet and InfiniBand, which was specifically created for high-performance computing, storage and embedded applications.

### *Challenges Addressed by High-Performance Interconnect*

The trends described above indicate that high-performance interconnect solutions will play an increasingly important role in IT infrastructures and will drive strong growth in unit demand. Performance requirements for interconnect solutions, however, continue to evolve and lead to high demand for solutions that are capable of resolving the following challenges to facilitate broad adoption:

- *Performance limitations.* In clustered computing, cloud computing and storage environments, high bandwidth and low latency are key requirements to capture the full performance capabilities of a cluster. With the usage of multiple multi-core processors in server, storage and embedded systems, I/O bandwidth has not been able to keep pace with processor advances, creating performance bottlenecks. Fast data access has become a critical requirement to take advantage of the increased compute power of microprocessors. In addition, interconnect latency has become a limiting factor in a cluster's overall performance.

- *Increasing complexity.* The increasing usage of clustered servers and storage systems as a critical IT tool has led to an increase in complexity of interconnect configurations. The number of configurations and connections has also proliferated in EDC, making systems increasingly complicated to manage and expensive to operate. Additionally, managing multiple software applications utilizing disparate interconnect infrastructures has become increasingly complex.
- *Interconnect inefficiency.* The deployment of clustered computing and storage has created additional interconnect implementation challenges. As additional computing and storage systems, or nodes, are added to a cluster, the interconnect must be able to scale in order to provide the expected increase in cluster performance. Additionally, increased attention on data center energy efficiency is causing IT managers to look for ways to adopt more energy-efficient implementations.
- *Limited reliability and stability of connections.* Most interconnect solutions are not designed to provide reliable connections when utilized in a large clustered environment, causing data transmission interruption. As more applications in EDCs share the same interconnect, advanced traffic management and application partitioning become necessary to maintain stability and reduce system down time. Such capabilities are not offered by most interconnect solutions.
- *Poor price/performance economics.* In order to provide the required system bandwidth and efficiency, most high-performance interconnects are implemented with complex, multi-chip semiconductor solutions. These implementations have traditionally been extremely expensive.

In addition to Ethernet and InfiniBand, proprietary and other standards-based interconnect solutions, including Fibre Channel, are currently used in EDC, HPC and embedded markets. Performance and usage requirements, however, continue to evolve and are now challenging the capabilities of these interconnect solutions.

- Proprietary interconnect solutions have been designed for use in supercomputer applications by supporting low latency and increased reliability. These solutions are only supported by a single vendor for product and software support, and there is no standard organization maintaining and facilitating improvements and changes to the technology. The number of supercomputers that use proprietary interconnect solutions has been declining largely due to the required use of proprietary software solutions, a lack of compatible storage systems and the availability of industry standards-based interconnects that offer superior price/performance.
- Fibre Channel is an industry standard interconnect solution limited to storage applications. The majority of Fibre Channel deployments support 2, 4, 8 and 16Gb/s. Fibre Channel lacks a standard software interface, does not provide server cluster capabilities and remains more expensive relative to other standards-based interconnects. There have been industry efforts to support the Fibre Channel data transmission protocol over interconnect technologies including Ethernet (Fibre Channel over Ethernet) and InfiniBand (Fibre Channel over InfiniBand). The Fibre Channel market is declining as legacy storage area network moves to more modern Web 2.0 and cloud architectures based on converged, software defined, and scale out storage.
- Ethernet is an industry-standard interconnect solution that was initially designed to enable basic connectivity between a local area network of computers or over a wide area network, where latency, connection reliability and performance limitations due to communication processing are non-critical. While Ethernet has a broad installed base at 1/10Gb/s and lower data rates, its overall efficiency, scalability and reliability have been less optimal than other interconnect solutions in high-performance computing, storage and communication applications. An increase to 25/40/50/100Gb/s bandwidth, a significant reduction in application latency and more efficient software solutions have improved Ethernet's capabilities to address specific high-performance applications that do not demand the highest performance or scalability.

In the HPC, cloud, Web 2.0 and storage markets the predominant interconnects today are Ethernet and InfiniBand. In the EDC and embedded markets, the predominant interconnects today are Ethernet, Fibre Channel and InfiniBand. Based on our knowledge of the industry, we believe there is significant demand for interconnect products that provide high bandwidth and better overall performance in these markets.

#### ***Advantages of InfiniBand***

We believe that InfiniBand-based solutions have advantages compared to solutions based on alternative interconnect architectures. InfiniBand addresses the significant challenges within IT infrastructures by providing solutions for more demanding requirements of the high-performance interconnect market. More specifically, we believe that InfiniBand has the following advantages:

- *Superior performance.* Compared to other interconnect technologies that were architected to have a heavy reliance on communication processing, InfiniBand was designed for implementation in an IC that relieves the CPU of communication processing functions. InfiniBand is able to provide superior bandwidth and latency relative to other existing interconnect technologies and has maintained this advantage with each successive generation of products. For example, our current InfiniBand adapters and switches provide bandwidth up to 100Gb/s, with end-to-end latency lower than a microsecond. In addition, InfiniBand fully leverages the I/O capabilities of PCI Express, a high-speed system bus interface standard.

The following table provides a bandwidth comparison of the various high-performance interconnect solutions:

	Proprietary	Fibre Channel	Ethernet	InfiniBand
Supported bandwidth of available solutions	2Gb/s - 100Gb/s	2Gb/s - 32Gb/s	1Gb/s - 100Gb/s	10Gb/s - 200Gb/s

Performance in terms of latency varies depending on system configurations and applications. Typical benchmark testing reports show latency of InfiniBand solutions is less than half that of Ethernet solutions. Fibre Channel, which is used only as a storage interconnect, is typically not benchmarked on latency performance. HPC typically demands low latency interconnect solutions. In addition, there are increasing numbers of latency-sensitive applications in the cloud, Web 2.0, storage, machine learning and embedded markets, and, therefore, there is a trend towards using industry-standard Ethernet and InfiniBand solutions of 10Gb/s and faster, which are able to deliver lower latency than 1Gb/s Ethernet.

- *Reduced complexity.* While other interconnects require use of separate cables to connect servers, storage and communications infrastructure equipment, InfiniBand allows for the consolidation of multiple I/Os on a single cable or backplane interconnect, which is critical for blade servers and embedded systems. InfiniBand also consolidates the transmission of clustering, communications, storage and management data types over a single connection.
- *Highest interconnect efficiency.* InfiniBand was developed to provide efficient scalability of multiple systems. InfiniBand provides communication processing functions in hardware, relieving the CPU of this task, and enables the full resource utilization of each node added to the cluster.
- *Reliable and stable connections.* InfiniBand is one of the only industry standard high-performance interconnect solutions which provides reliable end-to-end data connections within the silicon hardware. In addition, InfiniBand facilitates the deployment of virtualization solutions, which allow multiple applications to run on the same interconnect with dedicated application partitions. As a result, multiple applications run concurrently over stable connections, thereby minimizing down time.
- *Superior price/performance economics.* In addition to providing superior performance and capabilities, standards-based InfiniBand solutions are generally available at a lower cost than other high-performance interconnects.

#### Our InfiniBand Solutions

We provide comprehensive end-to-end 40/56/100Gb/s InfiniBand solutions, including switch and gateway ICs, adapter cards, switch, gateway and long-haul systems, cables, modules and software. We introduced our 200Gb/s solutions in 2018. InfiniBand enables us to provide products that we believe offer superior performance and meet the needs of the most demanding applications, while also offering significant improvements in total cost of ownership compared to alternative interconnect technologies. As part of our comprehensive solution, we perform validation and interoperability testing from the physical interface to the applications software. Our expertise in performing validation and testing reduces time to market for our customers and improves the reliability of the fabric solution.

#### Our Ethernet Solutions

Advances in server virtualization, network storage and compute clusters have driven the need for faster network throughput to address application latency and availability problems in the Enterprise. To service this need, we provide a complete industry leading, end-to-end 10/25/40/50/100/200 Gb/s Ethernet product portfolio for use in EDC, HPC, embedded environments, hyperscale, Web 2.0, and cloud data centers. Our portfolio of advanced Ethernet switch products supports the latest generation of Ethernet speeds and deliver wire speed forwarding for telco and data center environments. In addition, we provide a full range of Ethernet adapters at these speeds which incorporate the latest in Ethernet technology, including support for virtualization and RDMA over Converged Ethernet (RoCE). These solutions remove I/O bottlenecks in mainstream servers that limit application performance and support hardware-based I/O virtualization, providing dedicated adapter resources and guaranteed isolation and protection for virtual machines within the server.

## VPI: Providing Connectivity to Ethernet and InfiniBand

Our VPI technology enables us to offer fabric-flexible products that concurrently support both Ethernet and InfiniBand with network ports having the ability to auto sense the type of switch to which it is connected and then take on the characteristics of that fabric. In addition, these products extend certain InfiniBand advantages to Ethernet fabrics, such as reduced complexity and superior price/performance, by utilizing existing, field-proven InfiniBand software solutions.

### Our Strengths

We apply our strengths to enhance our position as a leading supplier of semiconductor-based, high-performance interconnect products. We consider our key strengths to include the following:

- *We have expertise in developing high-performance interconnect solutions.* We were founded by a team with an extensive background in designing and marketing semiconductor solutions. Since our founding, we have been focused on high-performance interconnect and have successfully launched several generations of Ethernet and InfiniBand products. We believe we have developed strong competencies in integrating mixed-signal design and developing complex ICs. We also consider our software development capability as a key strength, and we believe that our software allows us to offer complete solutions. We have developed a significant portfolio of intellectual property ("IP"), and have 560 issued patents, 10 registered designs, and 278 pending patent applications. We believe our experience, competencies and IP will enable us to remain a leading supplier of high-performance interconnect solutions.
- *We have expertise in developing high speed analog and optical components.* We have unique design expertise and manufacturing capabilities required to build state of the art optical components, modules, and cable assemblies. We have developed significant know-how related to building advanced electrical and electro-optical components and sub-assemblies which combine electrical and optical components. In addition, we have design expertise to enable advanced transceiver chipsets for driving and receiving multimode optical signals and interfacing to low cost lasers and optical sensor technologies. We have developed significant manufacturing know how and automated assembly techniques to combine these optical and electrical components and build complete optical module and cables that are high performance, cost effective, high quality, and offer high reliability.
- *We believe we are the leading merchant supplier of InfiniBand ICs.* We have gained in-depth knowledge of the InfiniBand standard through active participation in its development. We were first to market with InfiniBand products (in 2001) and InfiniBand products that support the latest version of the PCI Express interface standard. We have sustained our leadership position through the introduction of several generations of products. Because of our market leadership, vendors have developed and continue to optimize their software products based on our semiconductor solutions. We believe that this places us in an advantageous position to benefit from continuing market adoption of our InfiniBand products.
- *We believe we are a leading merchant supplier of end to end Ethernet solutions and the leading merchant supplier of high performance Ethernet Adapters.* We have gained significant expertise in Ethernet adapters and are the leading supplier of adapters with speeds of 25Gb/s and above with over 60% market share of adapters with speeds greater than 10Gb/s. We have developed significant expertise in Ethernet switches hardware and software and are gaining market share with our top of rack switch products and optical and copper cables and transceivers. Nine out of the top ten hyperscale, cloud and Web 2.0 data centers are using our products. Our engagement with these customers through several generations of designs has allowed us to understand the challenges faced by large scale deployments, and to develop features that solve these problems. We are the first to market with a complete end-to-end product portfolio of adapters, switches, and cables for the latest 25, 50, 100, and 200 Gb/s speeds of Ethernet. Our leading time to market, customer engagements, advanced feature set, and rapid development cadence provides a significant competitive advantage over other vendors. We believe that this places us in an advantageous position to benefit from continuing market adoption of our Ethernet products.
- *We have a comprehensive set of technical capabilities to deliver innovative and reliable products.* In addition to designing our ICs, we design standard and customized adapter card products, switch products, and optical cables and transceivers - providing us a deep understanding of the associated circuitry and component characteristics. We believe this knowledge enables us to develop solutions that are innovative and can be efficiently implemented in target applications. We have devoted significant resources to develop our in-house test development capabilities, which enables us to rapidly finalize our mass production test programs, thus reducing time to market. We have synchronized our test platform with our outsourced testing provider and are able to conduct quality control tests with minimal disruption. We believe that because our capabilities extend from product definition, through IC design, and ultimately management of our high-volume manufacturing partners, we have better control over our production cycle and are able to improve the quality, availability and reliability of our products.



- *We have extensive relationships with our key original equipment manufacturers ("OEM") and hyperscale customers and many end users. Since our inception we have worked closely with major hyperscale customers and OEMs, including leading server, storage, communications infrastructure equipment and embedded systems vendors, to develop products that accelerate market adoption of our Ethernet and InfiniBand products. During this process, we have obtained valuable insight into the challenges and objectives of our customers, and gained visibility into their product development plans. We also have established end-user relationships with influential IT executives who allow us access to firsthand information about evolving market trends. We believe that our OEM customer and end-user relationships allow us to stay at the forefront of developments and improve our ability to provide compelling solutions to address their needs.*

## **Our Strategy**

Our goal is to be the leading supplier of end-to-end interconnect solutions for servers and storage that optimize data center performance for computing, storage and communications applications. To accomplish this goal, we intend to:

- *Continue to develop leading, high-performance interconnect products.* We will continue to expand our technical expertise and customer relationships to develop leading interconnect products. We are focused on extending our leadership position in high-performance interconnect technology and pursuing a product development plan that addresses emerging customer and end-user demands and industry standards. Our unified software strategy is to use a single software stack to support connectivity to Ethernet and InfiniBand with the same VPI enabled hardware adapter device.
- *Capture Ethernet market share with our adapter, switch, and cable products.* We believe we are the market leader in Ethernet adapters with performance greater than 10Gb/s and the only provider of end-to-end solutions of adapters, switches, and cables at the latest 25, 40, 50, 100, and 200 Gb/s speeds. We plan to capture Ethernet market share as data centers transition from 10Gb/s to 25/40/50/100/200/400 Gb/s. We believe we will be able to leverage our strength in the Ethernet adapter business to grow our Ethernet switch and cable business during the market transition to these advanced speeds.
- *Facilitate and increase the continued adoption of InfiniBand.* We will facilitate and increase the continued adoption of InfiniBand in the high-performance interconnect marketplace by expanding our partnerships with key vendors that drive high-performance interconnect adoption, such as suppliers of processors, operating systems and other associated software. In conjunction with our OEM customers, we will expand our efforts to promote the benefits of InfiniBand and VPI directly to end users to increase demand for high-performance interconnect solutions.
- *Expand our presence with existing server OEM customers.* We believe the leading server vendors are influential drivers of high-performance interconnect technologies to end users. We plan to continue working with and expanding our relationships with server OEMs to increase our presence in their current and future product platforms.
- *Broaden our customer base with storage, communications infrastructure and embedded systems OEMs.* We believe there is a significant opportunity to expand our global customer base with storage, communications infrastructure and embedded systems OEMs. In storage solutions specifically, we believe our products are well suited to replace existing technologies such as Fibre Channel. We believe our adapter, SOC, and switch products are the basis of superior interconnect fabrics for unifying disparate storage interconnects, including back-end, clustering and front-end connections, primarily due to their ability to be a unified fabric and superior price/performance economics.
- *Leverage our fabless business model to deliver strong financial performance.* We intend to continue operating as a fabless semiconductor company and consider outsourced manufacturing of our ICs, adapter cards, switches and cables to be a key element of our strategy. Our fabless business model offers flexibility to meet market demand and allows us to focus on delivering innovative solutions to our customers. We plan to continue to leverage the flexibility and efficiency offered by our business.

## **Our Products**

We provide complete solutions which are based on and meet the specifications of the Ethernet and InfiniBand standards. Our products include adapter ICs and cards (ConnectX® and Connect-IB™ product family) and switch ICs (InfiniScale®, SwitchX®, SwitchX®-2, Spectrum®, Switch-IB™ and Quantum® product families) and systems, gateway ICs (BridgeX® product family) and gateway systems, long-haul systems (MetroX®), Bluefield family SOC multicore and SmartNIC processors, software, and LinkX® cables and transceivers. Our ConnectX® family of adapters and cards support both the Ethernet and InfiniBand interconnect standards. Our SwitchX and SwitchX-2 family of silicon and systems supports both Ethernet and InfiniBand, and includes gateways that support bridging from InfiniBand to Ethernet. Our Spectrum switches support Ethernet standard and our Switch-IB and Quantum switches support InfiniBand standard. Our long-haul systems expand the reach of InfiniBand and lossless Ethernet up to 80 kilometers.

We have registered "Mellanox" and its logo, "Bluefield", "BridgeX", "Connect-IB", "ConnectX", "CoolBox", "CORE-Direct", "GPUDirect", "InfiniBridge", "InfiniHost", "InfiniScale", "Kotura" and its logo, "Mellanox Federal Systems", "Mellanox Hostdirect", "Mellanox Open Ethernet", "Mellanox Peerdirect", "Mellanox ScalableHPC", "Mellanox Technologies Connect. Accelerate. Outperform", "Mellanox Virtual Modular Switch", "MetroDX", "MetroX", "MLNX-OS", "Open Ethernet" logo, "PhyX", "SwitchX", "TestX", "The Generation of Open Ethernet" and its logo, "UFM", "Virtual Protocol Interconnect", "Quantum", "EZchip", "Tilera", and "Voltaire" and its logo as trademarks in the United States.

We have trademark applications pending to register in the United States "25G is the New 10G", "Accelio", "CloudX" logo, "CompustorX", "CYP", "FPGA Direct", "HPC-X", "LinkX", "Mellanox Care", "Mellanox CloudX" and its logo, "Mellanox Multi-host", "Mellanox NEO", "Mellanox Opencloud" and its logo, "Mellanox OpenHPC", "Mellanox Socket Direct", "Mellanox Spectrum", "Mellanox StorageX", "Mellanox TuneX", "NVME Direct", "One Switch. A world of options" slogan, "PlatformX", "PSiPHY", "SiPhy", "Spectrum", "StoreX", "STPU", "Switch-EN", "Switch-IB", "TuneX", "UCX", "UCX Unified Communication X" and "Unbreakable-Link".

We provide adapters to server, storage, communications infrastructure and embedded systems OEMs as ICs or standard card form factors with PCI Express interfaces. Adapter ICs or cards are incorporated into OEMs' server and storage systems to provide Ethernet and/or InfiniBand connectivity. All of our adapter products interoperate with standard programming interfaces and are compatible with previous generations, providing broad industry support. We support server operating systems including Linux, Windows, VMware, AIX, HP-UX, Solaris and VxWorks.

We provide our switch ICs and systems to server, storage, communications infrastructure and embedded systems OEMs to create switching equipment. To deploy an Ethernet or InfiniBand fabric, any number of server or storage systems that contain an adapter can be connected to a communications infrastructure system such as an Ethernet or InfiniBand switch. Our Spectrum Ethernet switch IC supports 10, 25, 40, 50, and 100Gb/s Ethernet throughput while Spectrum-2 is designed to support 200 and 400Gb/s Ethernet throughput. Our Quantum-2 InfiniBand switch IC supports up to 200Gb/s InfiniBand throughput. We have introduced switch systems that include 8-port, 12-port, 18-port, 36-port, 48-port, 64-port, 108-port, 216-port, 324-port and 648-port. Our family of multicore processors and the new Bluefield SOC device combine multiple processing cores together with advanced networking connectivity and accelerators for security, storage, and other intelligent networking applications.

Our products generally vary by the number and performance of Ethernet or InfiniBand ports, and the number of processor cores supported.

We also offer custom products that incorporate our ICs to select server and storage OEMs that meet their special system requirements. Through these custom product engagements we gain insight into the OEMs' technologies and product strategies.

We also provide our OEM customers software and tools that facilitate the use and management of our products. Our Linux, Windows, and VMware-based software enables applications to efficiently utilize the features of the interconnect. We have expertise in optimizing the performance of software that spans the entire range of upper layer protocols down through the lower level drivers that interface to our products. We provide a suite of software tools and a comprehensive management software solution, Unified Fabric Manager ("UFM"), Network Orchestration ("NEO"), and ONYX and MLNX-OS network operating systems, for managing, optimizing, testing and verifying the operation of Ethernet and InfiniBand switch fabrics. In addition, we provide a full suite of acceleration software (Messaging Accelerator ("VMA"), Fabric Collective Accelerator ("FCA"), and Unstructured Data Accelerator ("UDA")) that further reduce latency, increase throughput, and offload CPU cycles, enhancing the performance of applications in multiple markets while eliminating the need for large investments in hardware infrastructure.

We provide an extensive selection of passive and active copper and optical cables and modules to enable Ethernet and InfiniBand connectivity at speeds up to 400Gb/s.

## **Technology**

We have technological core competencies in the design of high-performance interconnect ICs that enable us to provide a high level of integration, efficiency, flexibility and performance for our adapter and switch ICs. Our products integrate multiple complex components onto a single IC, including high-performance mixed-signal design, specialized communication processing functions and advanced interfaces.

### ***High-performance mixed-signal design***

One of the key technology differentiators of our ICs is our mixed-signal data transmission SerDes technology. SerDes I/O directly drives the interconnect interface, which provides signaling and transmission of data over copper cables or fiber optic interfaces for longer distance connections. Additionally, we are able to integrate several of these high-performance SerDes onto

a single, low-power IC, enabling us to provide the highest bandwidth, merchant switch ICs based on an industry-standard specification. We have developed a 25Gb/s SerDes I/O that is used in our ConnectX-4 adapter and Switch-IB and Spectrum switch silicon. Our 25Gb/s SerDes enables our ConnectX adapters to support 100Gb/s bandwidth (four 25Gb/s SerDes operating in parallel) in addition to providing a direct 10Gb/s connection to standard XFP and SFP+ fiber modules to provide long range Ethernet connectivity without the requirement of additional components, which saves power, cost and board space. We have extended our SerDes with PAM-4 technology to operate at 50G/s per lane in our ConnectX-6 adapters, Quantum-2 switches, and Spectrum-2 switches. This enables us to scale these platforms to 200 and 400 Gb/s links.

### ***Specialized communication processing and switching functions***

We specialize in high-performance, low-latency design architectures that incorporate significant memory and logic areas requiring proficient synthesis and verification. Our adapter ICs are specifically designed to perform communication processing, effectively offloading this very intensive task from server and storage processors in a cost-effective manner. Our switch ICs are specifically designed to switch cluster interconnect data transmissions from one port to another with high bandwidth and low latency, and we have developed a packet switching engine and non-blocking crossbar switch fabric to address this.

We have developed a custom embedded Reduced Instruction Set Computer processor called InfiniRISC® that specializes in offloading network processing from the host server or storage system and adds flexibility, product differentiation and customization. We integrate a different number of these processors in a device depending on the application and feature targets of the particular product. Integration of these processors also shortens development cycles as additional features can be added by providing new programming packages after the ICs are manufactured, and even after they are deployed in the field.

### ***Advanced interfaces***

In addition to Ethernet and InfiniBand interfaces, we also support other industry-standard, high-performance advanced interfaces, such as PCI Express, which also utilize our mixed-signal SerDes I/O technology. PCI Express is a high-speed, chip-to-chip interface which provides a high-performance interface between the adapter and processor in server and storage systems. PCI Express and our high-performance interconnect interfaces are complementary technologies that facilitate optimal bandwidth for data transmissions along the entire connection starting from a processor of one system in the cluster to another processor in a different system.

### ***System hardware technology***

In addition to silicon technology, we also provide system hardware technology that enables us to build high-density high-performance network adapters and switch systems. Our technology delivers end-to-end solutions that maximize data throughput through a given media at minimal hardware or power cost at very low Bit Error Rate.

### ***Software technology***

In addition to hardware products, we develop and provide software stacks to expose standard I/O interfaces to the consumer applications on the host and to network management applications within the network. We also provide advanced interfaces and capabilities to enable application acceleration, efficient resource management and utilization in data centers, factoring cost, power and performance into the efficiency equation.

### **Customers**

HPC, cloud, Web 2.0 and embedded end-user markets for systems utilizing our products are mainly served by leading server, storage and communications infrastructure OEMs and original design manufacturer ("ODMs"). In addition, our customer base includes leading embedded systems OEMs that integrate computing, storage and communication functions that use high-performance interconnect solutions contained in a chassis which has been optimized for a particular environment.

Our products have broad adoption with multiple end customers across HPC, Web 2.0, cloud, EDC, financial services and storage markets; however, these markets are mainly served by leading server, storage, communications infrastructure and embedded system OEMs and ODMs. Therefore, we have derived a substantial portion of our revenues from a relatively small number of OEM and ODM customers. In the years ended December 31, 2018 and 2017, sales to Dell Technologies ("Dell") accounted for 12% and 11%, respectively, of our total revenues. In the years ended December 31, 2018, 2017 and 2016 sales to Hewlett Packard Enterprise ("HPE") accounted for 12%, 13% and 16%, respectively, of our total revenues.

### **Backlog**

Our sales are primarily made through standard purchase orders for delivery of products. Our manufacturing production is based on estimates and advance non-binding commitments from customers as to future purchases. We follow industry practice

that allows customers to cancel, change or defer orders with limited advance notice prior to shipment. Given this practice, we do not believe that backlog is a reliable indicator of future revenue levels.

## **Sales and Marketing**

We sell our products worldwide through multiple channels, including our direct sales force, our network of domestic and international sales representatives and independent distributors. We have strategically located marketing and sales personnel in the United States, Europe, China, Japan, India, Singapore, Taiwan and Australia. Our sales directors focus their efforts on leading OEMs and target key decision makers. We are also in frequent communication with our customers' and partners' sales organizations to jointly promote our products and partner solutions into end-user markets. We have expanded our sales and business development teams to engage directly with end users promoting the benefits of our products which we believe creates additional demand for our customers' products that incorporate our products.

Our sales support organization is responsible for supporting our sales channels and managing the logistics from order entry to the delivery of products to our customers. In addition, our sales support organization is responsible for customer and revenue forecasts, customer agreements and program management for our large, multi-national customers.

To accelerate design and qualification of our products into our OEM customers' systems, and ultimately the deployment of our technology by our customers to end users, we have a field applications engineering ("FAE") team and a sales engineering team that provide direct technical assistance during the design-in process. In certain situations, our OEM customers will utilize our expertise to support their end-user customers jointly. Our technical support personnel have expertise in hardware and software, and have access to our development team to ensure proper technical expertise is provided to our OEM customers. Our FAE team provides OEM customers with design reviews of their systems in addition to technical training on the technology we have implemented in our products.

Our marketing team is responsible for creating and growing the brand of our company, product strategy and management, competitive analysis, marketing communications and raising the overall visibility of our company. The marketing team works closely with both the sales and research and development organizations to properly align development programs and product launches with market demands.

Our marketing team leads our efforts to promote our interconnect technology and our products to the entire industry by:

- assuming leadership roles within IBTA, OFA and other industry trade organizations;
- participating in tradeshows, press and analyst briefings, conference presentations and seminars for end-user education; and
- building and maintaining active partnerships with industry leaders whose products are important in driving Ethernet and InfiniBand adoption, including vendors of processors, operating systems and software applications.

## **Research and Development**

Our research and development team is composed of experienced semiconductor designers, software developers and system designers. Our semiconductor design team has extensive experience in all phases of complex, high-volume design, including product definition and architecture specification, hardware code development, mixed-signal and analog design and verification. Our software team has extensive experience in development, verification, interoperability testing and performance optimization of software for use in computing and storage applications. Our systems design team has extensive experience in all phases of high-volume adapter card, switch, and interconnect designs including product definition and architectural specification, product design, design verification and transfer to production. Our software is driven by an open-source approach which is fundamental for achieving high quality and performance.

We design our products with careful attention to quality, reliability, cost and performance requirements. We utilize a methodology called Customer Owned Tooling ("COT"), where we control and manage a significant portion of timing, layout design and verification in-house, before sending the semiconductor design to our third-party manufacturer. Although COT requires a significant up-front investment in tools and personnel, it provides us with greater control over the quality and reliability of our IC products, better product cost and superior time to market as opposed to relying on third-party verification services.

We choose first-tier technology vendors for our design tools and continue to maintain long-term relationships with our vendors to ensure timely support and updates. We also select a mainstream silicon manufacturing process only after it has proven its production worthiness. We verify that actual silicon characterization and performance measurements strongly correlate to models that were used to simulate the device while in design, and that our products meet frequency, power and thermal targets with good margins. Furthermore, we insert Design-for-Test circuitry into our IC products which increases

product quality, provides expanded debugging capabilities and ultimately enhances system-level testing and characterization capabilities once the device is integrated into our customers' products.

Frequent interaction between our silicon, software and systems design teams gives us a comprehensive view of the requirements necessary to deliver quality, high-performance products to our OEM customers.

## **Manufacturing**

We depend on third-party vendors to manufacture, package, assemble and production test our products as we do not own or operate facilities for semiconductor fabrication, packaging or production testing, or for board, cable or system assembly. By outsourcing manufacturing, we are able to avoid the high cost associated with owning and operating our own facilities while managing flexible capacity. This allows us to focus our efforts on the design and marketing of our products.

We own our test infrastructure in ICs, boards and cables. To keep high utilization and flexibility, most of our equipment is common between product families. For fiber cables, we also own some of the machines in the production line.

*Manufacturing and Testing.* We use Taiwan Semiconductor Manufacturing Company ("TSMC") for our CMOS process ICs and STMicroelectronics for our BiCMOS process ICs. We use Advanced Semiconductor Engineering ("ASE") and Amkor Technology Korea Inc. ("Amkor") to assemble, package and production test our IC products. We use Flextronics International Ltd. ("Flextronics") and Universal Scientific Industrial Co., Ltd. ("USI") to manufacture our standard and custom adapter card products and switch systems. In addition, we also use Comtel Electronics to manufacture some of our switch systems. We use several sub-contractors to manufacture our cables. We maintain close relationships with our suppliers, which improves the efficiency of our supply chain. We focus on mainstream processes, materials, packaging and testing platforms, and have a continuous technology assessment program in place to choose the appropriate technologies to use for future products. We provide all of our suppliers a 6-month rolling forecast, and generally receive their confirmation that they are able to accommodate our needs on a monthly basis. We have access to online production reports that provide up-to-date status information of our products as they flow through the manufacturing process. On a quarterly basis, we generally review lead-time, yield enhancements and pricing with all of our suppliers to obtain the optimal cost for our products.

*Quality Assurance.* We maintain an ongoing review of product manufacturing and testing processes. Our IC products are subjected to extensive testing to assess whether their performance exceeds the design specifications. We own Teradyne IC in-house testers providing immediate test data and the ability to generate characterization reports that are made available to our customers. Our adapter cards, switch system and cable products are subject to similar levels of testing and characterization, and are additionally tested for regulatory agency certifications such as Safety and EMC (radiation test) which are made available to our customers. We only use components on these products that are qualified to be on our approved vendor list.

## **Employees**

As of December 31, 2018, we had 2,330 full-time employees and 116 part-time employees, including 1,608 full-time employees in research and development, 460 in sales and marketing, 275 in general and administrative and 103 in operations. 1,717 of our full-time employees and 109 of the part-time employees are located in Israel.

Certain provisions of the collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordination Bureau of Economic Organizations (including the Industrialists' Associations) are applicable to our employees in Israel by order of the Israeli Ministry of Economy and Industry, which extends such collective bargaining agreements to Israeli employers. These provisions primarily concern the length of the workweek, travel expended, and pension fund benefits for all employees. We generally provide our employees with benefits and working conditions above the required minimums.

We have never experienced any employment-related work stoppages and believe our relationship with our employees is good.

## **Intellectual Property**

One of the key values and drivers for future growth of our high-performance interconnect IC, system hardware and software products is the IP we develop and use to improve them. We believe that the main value proposition of our high-performance interconnect products and success of our future growth will depend on our ability to protect our IP. We rely on a combination of trade secret, patent, trademark, design, copyright and other IP laws, both in the United States and internationally, as well as confidentiality, non-disclosure and inventions assignment agreements with our employees, customers, partners, suppliers and consultants to protect and otherwise seek to control access to, and distribution of, our proprietary information and processes. In addition, we have developed technical knowledge, which, although not patented, we consider to be significant in enabling us to compete. The proprietary nature of such knowledge, however, may be difficult to protect and we may be exposed to competitors who independently develop the same or similar technology or gain access to our knowledge.

The semiconductor industry is characterized by frequent claims of infringement and litigation regarding patent and other IP rights. We, like other companies in the semiconductor industry, believe it is important to aggressively protect and pursue our IP rights. Accordingly, to protect our rights, we may file suit against parties whom we believe are infringing or misappropriating our IP rights. In addition, we may engage in litigation with parties that claim that we infringed their patents or misappropriated or misused their trade secrets. Such litigations could result in substantial cost and may divert management's attention away from day-to-day operations. We may not prevail in these lawsuits. If any party infringes or misappropriates our IP rights, this infringement or misappropriation could materially adversely affect our business and competitive position.

As of December 31, 2018, we had 472 issued patents and six registered designs in the United States, five issued patents in Israel, and 83 issued patents and four registered designs in other countries. We had 214 patent applications pending in the United States, one patent application pending in Israel, and 63 patent applications pending in other countries, which cover aspects of the technology in our products. The term of any issued patent in the United States and Israel is 20 years from its priority date and if our applications are pending for a long time period, we may have a correspondingly shorter term for any patent that may be issued. In addition, the lives of acquired patents may also have a shorter term depending upon their acquisition date and the issue date of respective patent. Our present and future patents may provide only limited protection for our technology and may not be sufficient to provide competitive advantages to us. Furthermore, we cannot assure you that any patents will be issued to us as a result of our patent applications.

The risks associated with patents and intellectual property are more fully discussed under the section entitled "Risk Factors" under Part I, Item 1A of this report.

## Competition

The markets in which we compete are highly competitive and are characterized by rapid technological change, evolving industry standards and new demands on features and performance of interconnect solutions. We compete primarily on the basis of:

- price/performance;
- time to market;
- features and capabilities;
- wide availability of complementary software solutions;
- reliability;
- power consumption and latency;
- customer and application support;
- product roadmap;
- intellectual property; and
- reputation.

We believe that we compete favorably with respect to each of these criteria. Many of our current and potential competitors, however, have longer operating histories, significantly greater resources, greater economies of scale, stronger name recognition and a larger base of customers than we do. This may allow them to respond more quickly to new or emerging technologies or changes in customer requirements. Many of our competitors also have significant influence in the semiconductor industry. They may be able to introduce new technologies or devote greater resources to the development, marketing and sales of their products than we can. Furthermore, in the event of a manufacturing capacity shortage, these competitors may be able to manufacture products when we are unable to do so.

We compete with other providers of semiconductor-based high-performance interconnect products based on InfiniBand, Ethernet, Fibre Channel and proprietary technologies. With respect to InfiniBand products, we compete with Intel Corporation's proprietary Omni-Path interconnect, Cray's SlingShot interconnect, as well as high performance Ethernet interconnects offered by many competitors. The leading Fibre Channel vendors of adapters are Broadcom Limited ("Broadcom"), and Marvell Technology Group ("Marvell"). The leading Fibre Channel switch suppliers are Broadcom and Cisco Systems, Inc ("Cisco"). The leading vendors of Ethernet adapters include Intel Corporation ("Intel"), Broadcom, Cisco, Marvell, Chelsio, and SolarFlare. In the SmartNIC and programmable SOC and NIC market segment we compete with Intel, Broadcom, Xilinx, Netronome, and others. Our primary Ethernet switch silicon competitor is Broadcom, and Barefoot Networks and Innovium as private companies. The leading Ethernet switch system vendors include Cisco Systems, Inc., Juniper Networks, Inc. Arista Networks, Inc, and others. In the module and cable interconnect segment, we compete with Finisar, AOI, Innolight, Lumentum,

and others. Across all of these market segments as well as in embedded markets, we often compete with interconnect technologies that are developed in-house by system vendors and hyperscale service providers that are tailored for their specific applications.

#### **Additional Information**

We were incorporated under the laws of Israel in March 1999. Our ordinary shares began trading on The Nasdaq Global Market as of February 8, 2007 under the symbol "MLNX". Prior to February 8, 2007, our ordinary shares were not traded on any public exchange.

Our principal executive offices in the United States are located at 350 Oakmead Parkway, Suite 100, Sunnyvale, California 94085, and our principal executive offices in Israel are located at Beit Mellanox, Yokneam, Israel 20692. The majority of our assets are located in Israel. Our telephone number in Sunnyvale, California is (408) 970-3400, and our telephone number in Yokneam, Israel is +972-4-909-7200. Doug Ahrens, our Chief Financial Officer, is our agent for service of process in the United States, and is located at our principal executive offices in the United States. Our website address is [www.mellanox.com](http://www.mellanox.com). Information contained on our website is not a part of this report and the inclusion of our website address in this report is an inactive textual reference only.

#### **Available Information**

We file reports with the Securities and Exchange Commission ("SEC"), including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any other filings required by the SEC. We post on the Investor Relations pages of our website, [ir.mellanox.com](http://ir.mellanox.com), links to our filings with the SEC, our Code of Business Conduct and Ethics, our Complaint and Investigation Procedures for Accounting, Internal Accounting Controls, Fraud or Auditing Matters and the charters of our Audit, Compensation, and Nominating and Corporate Governance Committees of our board of directors and the charter of our Disclosure Committee. Our filings with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any other filings required by the SEC, are posted on our website as soon as reasonably practical after they are electronically filed with, or furnished to, the SEC. You can also obtain copies of these documents by writing to us at: Investor Relations, c/o Mellanox Technologies, Inc., 350 Oakmead Parkway, Suite 100, Sunnyvale, California 94085 or by emailing us at: [ir@mellanox.com](mailto:ir@mellanox.com). All these documents and filings are available free of charge. Please note that information contained on our website is not incorporated by reference in, or considered to be a part of, this report. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding our filings at [www.sec.gov](http://www.sec.gov).

## ITEM 1A—RISK FACTORS

*Investing in our ordinary shares involves a high degree of risk. You should carefully consider the following risk factors, in addition to the other information set forth in this report, before purchasing our ordinary shares. Each of these risk factors could harm our business, financial condition and results of operations, as well as decrease the value of an investment in our ordinary shares.*

### **Risks Related to Our Business**

*The semiconductor industry may be adversely impacted by worldwide economic uncertainties which may cause our revenues and profitability to decline.*

We operate primarily in the semiconductor industry, which is cyclical and subject to rapid change and evolving industry standards. From time to time, the semiconductor industry has experienced significant downturns characterized by decreases in product demand and excess customer inventories. Economic volatility can cause extreme difficulties for our customers and vendors to accurately forecast and plan future business activities. This unpredictability could cause our customers to reduce spending on our products and services, which would delay and lengthen sales cycles. Furthermore, during challenging economic times our customers and vendors may face issues gaining timely access to sufficient credit, which could affect their ability to make timely payments to us. As a result, we may experience growth patterns that are different than the end demand for products, particularly during periods of high volatility.

We cannot predict the timing, strength or duration of any economic slowdown or recovery or the impact of such events on our customers, our vendors or us. The combination of our lengthy sales cycle coupled with challenging macroeconomic conditions could have a compound impact on our business. The impact of market volatility is not limited to revenue but may also affect our product gross margins and other financial metrics. Any downturn in the semiconductor industry may be severe and prolonged, and any failure of the industry to fully recover from downturns could seriously impact our revenue and harm our business, financial condition and results of operations.

*The adoption of InfiniBand is largely dependent on third-party vendors and end users and InfiniBand may not be adopted at prior rates or to the extent that we anticipate.*

While the usage of InfiniBand has increased since its first specifications were completed in October 2000, continued adoption of InfiniBand is dependent on continued collaboration and cooperation among IT vendors. In addition, the end users that purchase IT products and services from vendors must find InfiniBand to be a compelling solution to their IT system requirements. We cannot control third-party participation in the development of InfiniBand as an industry standard technology. We rely on server, storage, communications infrastructure equipment and embedded systems vendors to incorporate and deploy InfiniBand ICs in their systems. InfiniBand may fail to effectively compete with other technologies, which may be adopted by vendors and their customers in place of InfiniBand. The adoption of InfiniBand is also affected by the general replacement cycle of IT equipment by end users, which is dependent on factors unrelated to InfiniBand. These factors may reduce the rate at which InfiniBand is incorporated by our current server vendor customers and impede its adoption in the storage, communications infrastructure and embedded systems markets, which in turn would harm our ability to sell our InfiniBand products.

*We face intense competition and may not be able to compete effectively, which could reduce our market share, net revenues and profit margin.*

The markets in which we operate are extremely competitive and are characterized by rapid technological change, continuously evolving customer requirements and fluctuating average selling prices. We may not be able to compete successfully against current or potential competitors.

Some of our customers are also IC and switch suppliers and already have in-house expertise and internal development capabilities similar to ours. Licensing our technology and supporting such customers entails the transfer of intellectual property rights that may enable such customers to develop their own products and solutions to replace those we are currently providing to them. Consequently, these customers may become competitors to us. Further, each new design by a customer presents a competitive situation. In the past, we have lost design wins to divisions within our customers and this may occur again in the future. We cannot predict whether these customers will continue to compete with us, whether they will continue to be our customers or whether they will continue to buy products from us at the same volumes. Competition could increase pressure on us to lower our prices and could negatively affect our profit margins.

Many of our current and potential competitors have longer operating histories, significantly greater resources, greater economies of scale, stronger name recognition and larger customer bases than we have. This may allow them to respond more quickly to new or emerging technologies or changes in customer requirements. In addition, these competitors may have greater



credibility with our existing and potential customers. If we do not compete successfully, our market share, revenues and profit margin may decline, and, as a result, our business may be adversely affected.

There has been a trend toward industry consolidation in our markets for several years, as companies attempt to improve the leverage of growing research and development costs, strengthen or hold their market positions in an evolving industry or are unable to continue operations. Companies that are strategic alliance partners in some areas of our business may acquire or form alliances with our competitors, thereby reducing their business with us. We believe that industry consolidation may result in stronger competitors that are better able to compete as sole-source vendors for customers. This could lead to more variability in our operating results and could have a material adverse effect on our business, financial condition and results of operations.

See Part I, Item 1, "Business-Competition" for more information about our competitors.

***We have limited visibility into customer and end-user demand for our products and generally have short inventory cycles, which introduce uncertainty into our revenue and production forecasts and business planning and could negatively impact our financial results.***

Our sales are made on the basis of purchase orders rather than long-term purchase commitments. In addition, our customers may defer purchase orders. We place orders with the manufacturers of our products according to our estimates of customer demand. This process requires us to make multiple demand forecast assumptions with respect to both our customers' and end users' demands. It is more difficult for us to accurately forecast end-user demand because we do not sell our products directly to end users. In addition, the majority of our adapter card, switch system and cable businesses are conducted on a short order fulfillment basis, introducing more uncertainty into our forecasts. Because of the lead time associated with fabrication of our semiconductors, forecasts of demand for our products must be made in advance of customer orders. In addition, we base business decisions regarding our growth on our forecasts for customer demand. As we grow, anticipating customer demand may become increasingly difficult. If we overestimate customer demand, we may purchase products from our manufacturers that we may not be able to sell and may over-burden our operations. Conversely, if we underestimate customer demand or if sufficient manufacturing capacity were unavailable, we would forego revenue opportunities and could lose market share or damage our customer relationships.

In addition, the majority of our revenues are derived from customer orders received and fulfilled in the same quarterly period. If we overestimate customer demand, we could miss our quarterly revenue targets, which could have a material adverse effect on our financial results.

***We depend on a small number of customers for a significant portion of our sales, and the loss of any one of these customers will adversely affect our revenues.***

A small number of customers account for a significant portion of our revenues. Because the majority of servers, storage, communications infrastructure equipment and embedded systems are sold by a relatively small number of vendors, we expect that we will continue to depend on a small number of customers to account for a significant percentage of our revenues for the foreseeable future. Our customers, including our most significant customers, are not obligated by long-term contracts to purchase our products and may cancel orders with limited potential penalties. If any of our large customers reduces or cancels its purchases from us for any reason, it could have an adverse effect on our revenues and results of operations. See Part I, Item 1, "Business-Customers" for more information about our customers.

***Winning business is subject to lengthy, competitive selection processes that often require us to incur significant expense, from which we may ultimately generate no revenues.***

Our business is dependent on us winning competitive bid selection processes, known as "design wins," to develop semiconductors for use in our customers' products. These selection processes are typically lengthy and can require us to incur significant design and development expenditures and to dedicate scarce engineering resources in pursuit of a single customer opportunity. We may not win the competitive selection process and may never generate any revenue despite incurring such expenditures.

Furthermore, winning a product design does not guarantee sales to a customer. We may experience delays in generating revenue as a result of the lengthy development cycle typically required, or we may not realize as much revenue as anticipated. In addition, a delay or cancellation of a customer's plans could materially and adversely affect our financial results, as we may have incurred significant expense in the design process and generated little or no revenue. Customers could choose at any time to stop using our products or may fail to successfully market and sell their products, which could reduce the demand for our products and cause us to hold excess inventory, thereby materially adversely affecting our business, financial condition and results of operations.

The timing of design wins is unpredictable and implementing production for a major design win, or multiple design wins occurring at or around the same time, may strain our resources and those of our contract manufacturers. In such instances, we may be forced to dedicate significant additional resources and incur additional, unanticipated costs and expenses, which may have a material adverse effect on our results of operations.

Finally, some customers will not purchase any products from us, other than limited numbers of evaluation units, until they qualify the products and/or the manufacturing line for the products. The qualification process can take significant time and resources and we may not always be able to satisfy the qualification requirements of these customers. Delays in qualification or failure to qualify our products may cause a customer to discontinue use of our products and result in a significant loss of revenue.

***If we fail to develop new products or enhance our existing products to react to rapid technological change and market demands in a timely and cost-effective manner, our business will suffer.***

We must develop new products or enhance our existing products with improved technologies to meet rapidly evolving customer requirements. We are currently engaged in the development process for our next generation of products in order to meet the demands of our customers who continually require higher performance and functionality at lower costs. The development process for these advancements is lengthy and will require us to accurately anticipate technological innovations and market trends. Developing and enhancing these products can be time-consuming, costly and complex. Our ability to fund product development and enhancements partially depends on our ability to generate revenues from our existing products.

We may be unable to successfully develop additional next generation products, new products or product enhancements. There is a risk that these developments or enhancements will be late, have technical problems, fail to meet customer or market specifications or otherwise be uncompetitive with other products using alternative technologies that offer comparable performance and functionality. Our next generation products or any new products or product enhancements may not be accepted in new or existing markets. Our business, financial condition and results of operations may be adversely affected if we fail to develop and introduce new products or product enhancements in a timely manner or on a cost-effective basis.

***We rely on a limited number of subcontractors to manufacture, assemble, package and production test our products, and the failure of any of these third-party subcontractors to deliver products or otherwise perform as requested could damage our relationships with our customers, decrease our sales and limit our growth.***

While we design and market our products and conduct test development in-house, we do not manufacture, assemble, package and production test the vast majority of our products, and we must rely on third-party subcontractors to perform these services. If these subcontractors do not provide us with high-quality products, services and production and production test capacity in a timely manner, or if one or more of these subcontractors terminates its relationship with us, we may be unable to obtain satisfactory replacements to fulfill customer orders on a timely basis, our relationships with our customers could suffer, our sales could decrease and our growth could be limited. In particular, there are significant challenges associated with moving our IC production from our existing manufacturer to another manufacturer with whom we do not have a pre-existing relationship.

In addition, the consolidation of foundry subcontractors, as well as the increasing capital intensity and complexity associated with fabrication in smaller process geometries has limited the diversity of our suppliers and increased our risk of a "single point of failure." Specifically, as we move to smaller geometries, we have become increasingly reliant on IC manufacturers. The lack of diversity of suppliers could also drive increased prices and adversely affect our results of operations, including our product gross margins.

We currently do not have long-term supply contracts with any of our third-party subcontractors. Therefore, they are not obligated to perform services or supply products to us for any specific period, in any specific quantities or at any specific price, except as may be provided in a particular purchase order. None of our third-party subcontractors has provided contractual assurances to us that adequate capacity will be available to us to meet future demand for our products. Our subcontractors may allocate capacity to the production of other companies' products while reducing deliveries to us on short notice. Other customers that are larger and better financed than we are or that have long-term agreements with these subcontractors may cause these subcontractors to reallocate capacity to those customers, thereby decreasing the capacity available to us.

Other significant risks associated with relying on these third-party subcontractors include:

- reduced control over product cost, delivery schedules and product quality;
- potential price increases;
- inability to achieve sufficient production, increase production or test capacity and achieve acceptable yields on a timely basis;

- increased exposure to potential misappropriation of our intellectual property;
- shortages of materials used to manufacture products;
- capacity shortages;
- labor shortages or labor strikes;
- political instability in the regions where these subcontractors are located; and
- natural disasters impacting these subcontractors.

See Part I, Item 1, "Business-Manufacturing" for more information about our subcontractors.

***The average selling prices of our products have decreased in the past and may do so in the future, which could harm our financial results.***

The products we develop and sell are subject to declines in average selling prices. We have had to reduce our prices in the past and we may be required to reduce prices in the future. Reductions in our average selling prices to one customer could impact our average selling prices to other customers. If we are unable to reduce our associated manufacturing costs this reduction in average selling prices would cause our gross margin to decline. Our financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing our costs or developing new or enhanced products with higher selling prices or gross margins.

***We expect gross margin to vary over time, and our recent level of product gross margin may not be sustainable.***

Our product gross margins vary from quarter to quarter, and our recent level of gross margins may not be sustainable and may be adversely affected in the future by numerous factors, including product mix shifts, product transitions, increased price competition in one or more of the markets in which we compete, increases in material or labor costs, excess product component or obsolescence charges from our contract manufacturers, warranty related issues, or the introduction of new products or entry into new markets with different pricing and cost structures.

***Fluctuations in our revenues and operating results on a quarterly and annual basis could cause the market price of our ordinary shares to decline.***

Our quarterly and annual revenues and operating results are difficult to predict and have fluctuated in the past, and may fluctuate in the future, from quarter to quarter and year to year. It is possible that our operating results in some quarters and years will be below market expectations. This would likely cause the market price of our ordinary shares to decline. Our quarterly and annual operating results are affected by a number of factors, many of which are outside of our control, including:

- unpredictable volume and timing of customer orders, which are not fixed by contract but vary on a purchase order basis;
- the loss of one or more of our customers, or a significant reduction or postponement of orders from our customers;
- our customers' sales outlooks, purchasing patterns and inventory levels based on end-user demands and general economic conditions;
- seasonal buying trends;
- the timing of new product announcements or introductions by us or by our competitors;
- our ability to successfully develop, introduce and sell new or enhanced products in a timely manner;
- changes in the relative sales mix of our products;
- decreases in the overall average selling prices of our products;
- changes in the cost of our finished goods; and
- the availability, pricing and timeliness of delivery of other components used in our customers' products.

We base our planned operating expenses in part on our expectations of future revenues, and a significant portion of our expenses is relatively fixed in the short-term. We have limited visibility into customer demand from which to predict future sales of our products. As a result, it may be difficult for us to forecast our future revenues and budget our operating expenses accordingly. Our operating results would be adversely affected to the extent customer orders are cancelled or rescheduled. If

revenues for a particular quarter are lower than we expect, we may not be able to proportionately reduce our operating expenses.

***We rely on our ecosystem partners to enhance and drive demand for our product offerings. Our inability to continue to develop or maintain such relationships in the future or our partners' inability to timely deliver technology or product offerings to the market may harm our revenues and ability to remain competitive.***

We have developed relationships with third parties, which we refer to as ecosystem partners. Such partners provide their technology products, operating systems, tool support, reference designs and other elements necessary for the sale of our products into our markets. In addition, introduction of new products into the market by these partners may increase demand for our products. If we are unable to continue to develop or maintain these relationships, or if our ecosystem partners delay or fail to timely deliver their technology or products or other elements to the market, our revenues may be adversely impacted and we might not be able to enhance our customers' ability to commercialize their products in a timely manner and our ability to remain competitive may be harmed.

***We rely primarily upon trade secret, patent, trademark, design and copyright laws and contractual restrictions to protect our proprietary rights, and, if these rights are not sufficiently protected, our ability to compete and generate revenues could suffer.***

We seek to protect our proprietary manufacturing specifications, documentation and other written materials primarily under trade secret, patent, trademark, design and copyright laws. We also typically require employees and consultants with access to our proprietary information to execute confidentiality agreements. The steps taken by us to protect our proprietary information may not be adequate to prevent misappropriation of our technology. In addition, our proprietary rights may not be adequately protected because:

- people may not be deterred from misappropriating our technologies despite the existence of laws or contracts prohibiting it;
- policing unauthorized use of our intellectual property may be difficult, expensive and time-consuming, and we may be unable to determine the extent of any unauthorized use; and
- the laws of other countries in which we market our products, such as some countries in the Asia/Pacific region, may offer little or no protection for our proprietary technologies.

Reverse engineering, unauthorized copying or other misappropriation of our proprietary technologies could enable third parties to benefit from our technologies without paying us for doing so. Any inability to adequately protect our proprietary rights could harm our ability to compete, generate revenues and grow our business.

***We may not obtain sufficient patent protection on the technology embodied in our products, which could harm our competitive position and increase our expenses.***

Our success and ability to compete in the future may depend to a significant degree upon obtaining sufficient patent protection for our proprietary technology. Patents that we currently own do not cover all of the products that we presently sell as we have patent applications pending with respect to certain products, while we have not been able to obtain, or choose not to seek, patent protection for other products. Our patent applications may not result in issued patents, and even if they result in issued patents, the patents may not have claims of the scope we seek. Furthermore, any issued patents may be challenged, invalidated or declared unenforceable. Whether or not these patents are issued, the applications may become publicly available and the proprietary information disclosed in the applications will become available to others. The lives of acquired patents may also be of a shorter term depending upon their acquisition dates and the issue dates. The term of any issued patent in the United States and Israel is typically 20 years from its filing date, and if our applications are pending for a long time period, we may have a correspondingly shorter term for any patent that may be issued. Our present and future patents may provide only limited protection for our technology and may not be sufficient to provide competitive advantages to us. For example, competitors could be successful in challenging any issued patents or, alternatively, could develop similar or more advantageous technologies on their own or design around our patents. Also, patent protection in certain foreign countries may not be available or may be limited in scope and any patents obtained may not be as readily enforceable as in the United States and Israel, making it difficult for us to effectively protect our intellectual property from misuse or infringement by other companies in these countries. Our inability to obtain and enforce our intellectual property rights in some countries may harm our business, financial condition and results of operations. In addition, given the costs of obtaining patent protection, we may choose not to protect certain innovations that later on turn out to be important. In such cases, our lack of intellectual property rights may have a material adverse impact on our business, financial condition and results of operations.

***If we fail to carefully manage the use of "open source" software in our products, we may be required to license key portions of our products on a royalty-free basis or expose key parts of source code.***

Some portion of our software may be derived from "open source" software that is generally made available to the public by its authors and/or other third parties. Such open source software is often made available to us under licenses, such as the GNU General Public License, which impose certain obligations on us in the event we were to create and distribute derivative works of the open source software. These obligations may require us to make source code for the derivative works available to the public and/or license such derivative works under a particular type of license, rather than the forms of licenses customarily used to protect our intellectual property. In the event that we inadvertently use open source software without the correct license form or a copyright holder of any open source software were to successfully establish in court that we had not complied with the terms of a license for a particular work, we could be required to release the source code of that work to the public and/or stop distribution of that work.

***Intellectual property litigation, which is common in our industry, could be costly, harm our reputation, limit our ability to sell our products and divert the attention of management and technical personnel.***

The semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. From time to time, we receive notices from competitors and other third parties that claim we have infringed upon, misappropriated or misused other parties' proprietary rights. We may also be required to indemnify some customers and strategic partners under our agreements if a third party alleges or if a court finds that our products or activities have infringed upon, misappropriated or misused another party's proprietary rights. We have received requests from certain customers and strategic partners to include increasingly broad indemnification provisions in our agreements with them. Additionally, our products may contain technology provided to us by other parties such as contractors, suppliers or customers. We may have little or no ability to determine in advance whether such technology infringes upon the intellectual property rights of a third party. Our contractors, suppliers and licensors may not be required to indemnify us in the event that a claim of infringement is asserted against us, or they may be required to indemnify us only up to a maximum amount, above which we would be responsible for any further costs or damages.

Questions of infringement in the markets we serve involve highly technical and subjective analysis. We are not involved in intellectual property litigation today, but litigation may be necessary in the future to enforce any patents we may receive and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement or invalidity, and we may not prevail in any such future litigation. Litigation, whether or not determined in our favor or settled, could be costly, could harm our reputation and could divert the efforts and attention of our management and technical personnel from normal business operations. In addition, adverse determinations in litigation could result in the loss of our proprietary rights, subject us to significant liabilities, and require us to seek licenses from third parties or prevent us from licensing our technology or selling our products, any of which could seriously harm our business.

In the normal course of business, we enter into agreements with terms and conditions that require us to indemnify the other party against third-party claims alleging that one of our products infringes or misappropriates intellectual property rights, as well as against certain claims relating to property damage, personal injury or acts or omissions relating to supplied products or technologies, or acts or omissions made by us or our agents or representatives. In addition, we are obligated pursuant to indemnification undertakings with our officers and directors to indemnify them to the fullest extent permitted by law and to indemnify venture capital funds that were affiliated with or represented by such officers or directors. If we receive demands for indemnification under these agreements and terms and conditions, they will likely be very expensive to settle or defend, and we may incur substantial legal fees in connection with any indemnity demands. Our indemnification obligations under these agreements and terms and conditions may be unlimited in duration and amount, and could have an adverse effect on our business, financial condition and results of operations.

***We depend on key and highly skilled personnel to operate our business, and if we are unable to retain our current personnel and hire additional personnel, our ability to develop and successfully market our products could be harmed.***

Our business is particularly dependent on the interdisciplinary expertise of our personnel, and we believe our future success will depend in large part upon our ability to attract and retain highly skilled managerial, engineering, finance and sales and marketing personnel. The loss of any key employees or the inability to attract or retain qualified personnel could delay the development and introduction of, and harm our ability to sell our products and harm the market's perception of us. Competition for qualified engineers in the markets in which we operate is intense and accordingly, we may not be able to retain or hire all of the engineers required to meet our ongoing and future business needs. If we are unable to attract and retain the highly skilled professionals we need, we may have to forego projects for lack of resources or be unable to staff projects optimally. We believe that our future success is highly dependent on the contributions of our president and CEO and other senior executives. We do

not have long-term employment contracts with our president and CEO or any other key personnel, and their knowledge of our business and industry would be extremely difficult to replace.

In an effort to retain key employees, we may modify our compensation policies by, for example, increasing cash compensation to certain employees and/or modifying existing share options. These modifications of our compensation policies and the requirement to expense the fair value of share options, restricted share units ("RSUs"), and performance share units awarded to employees and officers may increase our operating expenses and result in the dilution of the holders of our ordinary shares. We cannot be certain that these and any other changes in our compensation policies will or would improve our ability to attract, retain and motivate employees. Our inability to attract and retain additional key employees and the increase in share-based compensation expense could each have an adverse effect on our business, financial condition and results of operations.

***We may pursue acquisitions of other companies or new or complementary products, technologies and businesses, which could harm our operating results, may disrupt our business and could result in unanticipated accounting charges.***

Our growth depends upon market growth, our ability to enhance our existing products, and our ability to introduce new products on a timely basis. We intend to continue to address the need to develop new products and enhance existing products through acquisitions of other companies, product lines, technologies, and personnel.

Acquisitions create additional material risk factors for our business that could cause our results to differ materially and adversely from our expected or projected results. Such risk factors include:

- difficulties in integrating the operations, systems, technologies, products, and personnel of the acquired companies, particularly companies with large and widespread operations and/or complex products;
- the diversion of management's attention from normal daily operations of the business and the challenges of managing larger and more widespread operations resulting from acquisitions;
- possible disruption to the continued expansion of our product lines;
- potential changes in our customer base and changes to the total available market for our products;
- reduced demand for our products;
- potential difficulties in completing projects associated with in-process research and development intangibles;
- the use of a substantial portion of our cash resources and incurrence of significant amounts of debt;
- significantly increase our interest expense, leverage and debt service requirements as a result of incurring debt;
- the impact of any such acquisition on our financial results;
- internal controls may become more complex and may require significantly more resources to ensure they remain effective;
- negative customer reaction to any such acquisition; and
- assuming the liabilities of the acquired company.

Acquisitions present a number of other potential risks and challenges that could disrupt our business operations. For example, we may not be able to successfully negotiate or finance the acquisition on favorable terms. If an acquired company also has inventory that we assume, we will be required to write up the carrying value of that inventory to its fair value. When that inventory is sold, the gross margins for those products are reduced and our gross margins for that period are negatively affected. Furthermore, the purchase price of any acquired businesses may exceed the current fair values of the net tangible assets of such acquired businesses. As a result, we would be required to record material amounts of goodwill, acquired in-process research and development and other intangible assets, which could result in significant impairment and acquired in-process research and development charges and amortization expense in future periods. These charges, in addition to the results of operations of such acquired businesses and potential restructuring costs associated with an acquisition, could have a material adverse effect on our business, financial condition and results of operations. We cannot forecast the number, timing or size of future acquisitions, or the effect that any such acquisitions might have on our operating or financial results. Furthermore, potential acquisitions, whether or not consummated, will divert our management's attention and may require considerable cash outlays at the expense of our existing operations. In addition, to complete future acquisitions, we may issue equity securities, incur debt, assume contingent liabilities or have amortization expenses and write-downs of acquired assets, which could adversely affect our profitability.

***We have made and may in the future pursue investments in other companies, which could harm our operating results.***

We have made, and could make in the future, investments in technology companies, including privately-held companies in the development stage. Many of these private equity investments are inherently risky because these businesses may never develop, and we may incur losses related to these investments. In addition, we have written down the carrying value of these investments in the past and may be required to write down the carrying value of these investments in the future to reflect other-than-temporary declines in their value, which could have a material adverse effect on our business, financial position and results of operations.

***We may not be able to manage our future growth effectively, and we may need to incur significant expenditures to address the additional operational and control requirements of our growth.***

We are experiencing a period of company growth and expansion. This expansion has placed, and any future expansion will continue to place, a significant strain on our management, personnel, systems and financial resources. We plan to hire additional employees to support an increase in research and development and strengthen our sales and marketing and general and administrative efforts. To successfully manage our growth, we believe we must effectively:

- manage and enhance our relationships with customers, distributors, suppliers, end users and other third parties;
- implement additional, and enhance existing, administrative, financial and operations systems, procedures and controls;
- address capacity shortages;
- manage inventory levels;
- expand and upgrade our technological capabilities;
- manage the challenges of having U.S., Israeli and other foreign operations; and
- hire, train, integrate and manage additional qualified engineers for research and development activities as well as additional personnel to strengthen our sales and marketing, financial and IT functions.

Managing our growth may require substantial managerial and financial resources and may increase our operating costs even though these efforts may not be successful. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities, develop new products, satisfy customer requirements, execute our business plan or respond to competitive pressures, in which case our business, financial conditions and results of operations may be adversely affected.

***We are subject to risks associated with our distributors' product inventories.***

We sell many of our products to customers through distributors who maintain their own inventory of our products for sale to dealers and end customers. We allow limited price adjustments on sales to distributors. Prior to January 1, 2018, we recognized revenues for sales to distributors upon sell through by the distributors, net of estimated allowances for price adjustments. Upon the adoption of the new revenue standards effective January 1, 2018, we began recognizing revenue on sales to distributors upon shipment and transfer of control (known as "sell-in" revenue recognition), net of the estimated allowances for price adjustments. We have extended these programs to certain distributors in the United States, Asia and Europe and may extend them on a selective basis to some of our other distributors in these geographies. The allowances for distributor price adjustments are based on judgments and estimates, using historical experience rates, inventory levels in distribution, current trends and other factors, and there could be material differences between actual amounts and our estimates.

If our distributors are unable to sell an adequate amount of their inventory of our products in a given quarter to dealers and end customers or if they decide to decrease their inventories for any reason, such as adverse global economic conditions or a downturn in technology spending, our sales to these distributors and our revenues may decline. We also face the risk that our distributors may purchase, or for other reasons accumulate, inventory levels of our products in any particular quarter in excess of future anticipated sales to end customers. If such sales do not occur in the time frame anticipated by these distributors for any reason, these distributors may substantially decrease the amount of product they order from us in subsequent periods until their inventory levels realign with end-customer demand, which would harm our business and could adversely affect our revenues in such subsequent periods.

We do not always have a direct relationship with the end customers of our products sold through distributors. As a result, our products may be used in applications for which they were not necessarily designed or tested, and they may not perform as anticipated in such applications. In such event, failure of even a small number of parts could result in significant liabilities to us, damage our reputation and harm our business and results of operations.

***Certain of our customers and suppliers require us to comply with their codes of conduct, which may include certain restrictions that may substantially increase our cost of doing business as well as have an adverse effect on our operating efficiencies, operating results and financial condition.***

Certain of our customers and suppliers require us to agree to comply with the Electronic Industry Code of Conduct ("EICC") or their own codes of conduct, which may include detailed provisions on labor, human rights, health and safety, environment, corporate ethics and management systems. Certain of these provisions are not requirements under the laws of the countries in which we operate and may be burdensome to comply with on a regular basis. Moreover, new provisions may be added or material changes may be made to any these codes of conduct, and we may have to promptly implement such new provisions or changes, which may substantially further increase the cost of our business, be burdensome to implement and adversely affect our operational efficiencies and operating results. If we violate any such codes of conduct, we may lose further business with the customer or supplier and, in addition, we may be subject to fines from the customer or supplier. While we believe that we are currently in compliance with our customers and suppliers' codes of conduct, there can be no assurance that, from time to time, if any one of our customers and suppliers audits our compliance with such code of conduct, we would be found to be in full compliance. A loss of business from these customers or suppliers could have a material adverse effect on our business, financial condition and results of operations.

***We may experience defects in our products, unforeseen delays, higher than expected expenses or lower than expected manufacturing yields of our products, which could result in increased customer warranty claims, delays of our product shipments and prevent us from recognizing the benefits of new technologies we develop.***

Our products may contain defects and errors. Product defects and errors could result in additional development costs, diversion of technical resources, delayed product shipments, increased warranty-related returns, including wide-scale product recalls, warranty expenses and product liability claims against us which may not be fully covered by insurance. Our products are complex and our quality control tests and procedures may fail to detect any such defects or errors. Delivery of products with defects or reliability, quality or compatibility problems may damage our reputation and our ability to retain existing customers and attract new customers. As a result, defects in our products could have an adverse effect on our business, financial condition and results of operations.

In addition, our production of existing and development of new products can involve multiple iterations and unforeseen manufacturing difficulties, resulting in reduced manufacturing yields, delays and increased expenses. The evolving nature of our products requires us to modify our manufacturing specifications, which may result in delays in manufacturing output and product deliveries. We rely on a limited number of third parties to manufacture our products. Our ability to offer new products depends on our manufacturers' ability to implement our revised product specifications, which is costly, time-consuming and complex.

***We have significant intangible assets and goodwill. Consequently, the future impairment of our intangible assets and goodwill, if any, may significantly impact our profitability.***

Our intangible assets and goodwill are significant. As of December 31, 2018, we had recorded \$653.2 million of intangible assets, net and goodwill primarily related to our past acquisitions. Intangible assets and goodwill are subject to an impairment analysis whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. Additionally, goodwill and indefinite-lived assets are subject to an impairment test at least annually. The impairment of any goodwill and other intangible assets may have a negative impact on our consolidated results of operations.

***Unanticipated changes in our tax provisions or adverse outcomes resulting from examination of our income tax returns could adversely affect our results of operations.***

We are subject to income taxes in Israel, the United States and various foreign jurisdictions. Our effective income tax rate could be adversely affected by changes in tax laws or interpretations of those tax laws, by changes in the mix of earnings in countries with differing statutory tax rates, or by changes in the valuation of our deferred tax assets and liabilities. In December 2017, the U.S. enacted significant tax reform through the Tax Cuts and Jobs Act ("TCJA"). See Note 13, "Income Taxes" in the notes to the consolidated financial statements for more details about the U.S. tax reform and its effects.

Our effective income tax rates are also affected by intercompany transactions for sales, services, funding and other items. Given the increased global scope of our operations, and the complexity of global tax and transfer pricing rules and regulations, it has become increasingly difficult to estimate earnings within each tax jurisdiction. If actual earnings within a tax jurisdiction differ materially from our estimates or new information is discovered in the course of our tax return preparation process, we may not achieve our expected effective tax rate. Additionally, our effective tax rate may be affected by the tax effects of acquisitions, restructuring activities, newly enacted tax legislation, share-based compensation and uncertain tax positions. Finally, we are subject to the examination of our income tax returns by the Internal Revenue Service and other tax authorities



which may result in the assessment of additional income taxes. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. However, unanticipated outcomes from these examinations could have a material adverse effect on our business, financial condition and results of operations.

***Changes to financial accounting standards may affect our results of operations and cause us to change our business practices.***

We prepare our financial statements to conform to GAAP in the United States. These accounting principles are subject to interpretation by the FASB, the American Institute of Certified Public Accountants, the SEC and various bodies formed to interpret and create appropriate accounting policies. A change in those policies can have a significant effect on our reported results and may affect our reporting of transactions completed before a change is announced. Changes to those rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

***We must comply with a variety of existing and future laws and regulations that could impose substantial costs on us and may adversely affect our business.***

We are subject to various state, federal and international laws and regulations governing the environment, including restricting the presence of certain substances in electronic products and making producers of those products financially responsible for the collection, treatment, recycling and disposal of those products. In addition, we are also subject to various industry requirements restricting the presence of certain substances in electronic products. Although our management systems are designed to maintain compliance, we cannot assure you that we have been or will be at all times in complete compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions.

We and our customers are also subject to various import and export laws and regulations. Government export regulations apply to the encryption or other features contained in some of our products. If we fail to continue to receive licenses or otherwise comply with these regulations, we may be unable to manufacture the affected products or ship these products to certain customers, or we may incur penalties or fines.

We are also subject to regulations concerning the supply of certain minerals coming from the conflict zones in and around the Democratic Republic of Congo ("DRC"). The Dodd-Frank Wall Street Reform and Consumer Protection Act includes disclosure requirements regarding the use of certain minerals mined from the DRC and adjoining countries and procedures regarding a manufacturer's efforts to identify sourcing of such conflict minerals. These requirements could affect the sourcing and availability of minerals used in the manufacture of semiconductor devices.

As a result, this could limit the pool of suppliers who can provide us confirmation that the components and parts we source are considered DRC "conflict free," and we may not be able to confirm that we have obtained products or supplies that can be confirmed as DRC "conflict free" in sufficient quantities for our operations. Also, because our supply chain is complex, we may face reputational challenges with our customers, shareholders and other stakeholders if we are unable to sufficiently verify the origins for the minerals used in our products.

The costs of complying with these laws could adversely affect our current or future business. In addition, future regulations may become more stringent or costly and our compliance costs and potential liabilities could increase, which may harm our current or future business.

***If we fail to maintain an effective system of internal controls, we may not be able to report accurately our financial results or prevent material fraud. As a result, current and potential shareholders could lose confidence in our financial reporting, which could harm our business and the trading price of our ordinary shares.***

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent material fraud. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement. Section 404 of the Sarbanes-Oxley Act of 2002 requires our management to report on, and our independent registered public accounting firm to attest to, the effectiveness of our internal control structure and procedures for financial reporting. We have an ongoing program to perform the system and process evaluation and testing necessary to comply with these requirements. We have incurred, and expect to continue to incur significant expenses and to devote significant management resources to Section 404 compliance. Furthermore, as we grow our business or acquire businesses, our internal controls may become more complex and we may require significantly more resources to ensure they remain effective. Failure to implement required new or improved controls, or difficulties encountered in their implementation, either in our existing business or in businesses that we may acquire could harm our operating results or cause us to fail to meet our reporting obligations. In the event that our CEO, CFO or independent registered public accounting firm determine that our internal controls over financial reporting are

not effective as defined under Section 404, investor perceptions of our company may be adversely affected and may cause a decline in the market price of our ordinary shares.

***We may be subject to disruptions or failures in information technology systems and network infrastructures, including theft, misuse of our electronic data or cyber-attacks that could have a material adverse effect on us.***

We rely on the efficient and uninterrupted operation of complex information technology systems and network infrastructures to operate our business. We also hold large amounts of data in various data center facilities upon which our business depends. A disruption, infiltration or failure of our information technology systems or any of our data centers as a result of software or hardware malfunctions, system implementations or upgrades, computer viruses, third-party security breaches, attempts by others that try to gain unauthorized access through the Internet to our information technology systems, employee error, theft or misuse, malfeasance, power disruptions, natural disasters or accidents could cause breaches of data security, loss of intellectual property and critical data and the release and misappropriation of sensitive competitive information and partner, customer and employee personal data. These attempts may be the result of industrial or other espionage, or actions by hackers seeking to harm us, our products, or our end users. Any of these events could harm our competitive position, result in a loss of customer confidence, cause us to incur significant costs to remedy any damages and ultimately materially adversely affect our business, financial condition and results of operations.

While we have implemented a number of protective measures, including firewalls, antivirus, patches, log monitors, routine back-ups, system audits, routine password modifications and disaster recovery procedures, such measures may not be adequate or implemented properly to prevent or fully address the adverse effect of such events, and in some cases we may be unaware of an incident or its magnitude and effects.

In addition, our third-party subcontractors, including our foundries, test and assembly houses and distributors, have access to certain portions of our sensitive data. In the event that these subcontractors do not properly safeguard our data that they hold, security breaches and loss of our data could result. Any such loss of data by our third-party service providers, or theft, unauthorized use or publication of our trade secrets and other confidential business information as a result of such cyber threats, could adversely affect our competitive position and reduce marketplace acceptance of our products; the value of our investment in research and development and marketing could be reduced; and third parties may assert against us or our customers claims related to resulting losses of confidential or proprietary information or end-user data, or system reliability. Any such event could have a material adverse effect on our business, financial condition and results of operations.

***Our business is subject to the risks of earthquakes, fires, floods and other natural catastrophic events.***

Our operations take place across the globe, including in areas such as the San Francisco Bay Area and Asia Pacific nations that are known for seismic activity. A significant natural disaster, such as an earthquake, fire or flood or tsunami, in any location in which our operations or the operations of our customers or suppliers take place could have a material adverse impact on our business, financial condition and results of operations. To the extent that such disruptions result in delays or cancellations of customer orders, or the deployment of our products, our business, financial condition and results of operations would be adversely affected.

#### **Risks Related to Operations in Israel and Other Foreign Countries**

***Regional instability in Israel may adversely affect business conditions and may disrupt our operations and negatively affect our revenues and profitability.***

We have engineering facilities, corporate and sales support operations located in Israel. A significant number of our employees and a material amount of assets are located in Israel. Accordingly, political, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, as well as incidents of civil unrest. These conflicts negatively affected business conditions in Israel. In addition, Israel and companies doing business with Israel have, in the past, been the subject of an economic boycott. In addition, there has been recent civil unrest in the Middle East and surrounding areas, including Egypt, Jordan, Iraq, Syria and Libya. Any future armed conflicts or political instability in the region may negatively affect business conditions and adversely affect our results of operations. Parties with whom we do business have sometimes declined to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in the agreements.

The security and political conditions may have an impact on our business in the future. Hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could adversely affect our operations and

could make it more difficult for us to raise capital. Our Israeli operations are within range of Hezbollah or Hamas missiles and we or our immediate surroundings may sustain damages in a missile attack, which could adversely affect our operations.

In addition, our business insurance does not cover losses that may occur as a result of events associated with the security situation in the Middle East. Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained. Any losses or damages incurred by us as a result of such events could have a material adverse effect on our business, financial condition and results of operations.

***Our operations may be negatively affected by the obligations of our personnel to perform military service.***

Generally, all non-exempt male adult citizens and permanent residents of Israel under the age of 45 (or older, for citizens with certain occupations), including some of our employees, are obligated to perform military reserve duty for Israel annually, and are subject to being called to active duty at any time under emergency circumstances. In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists, and some of our employees, including those in key positions, have been called upon in connection with armed conflicts. It is possible that there will be additional call-ups in the future. Our operations could be disrupted by the absence for a significant period of one or more of our officers, directors or key employees due to military service. Any such disruption could adversely affect our operations.

***Our operations may be affected by labor unrest in Israel.***

In the past, there have been several general strikes and work stoppages in Israel affecting all banks, airports and ports. These strikes had an adverse effect on the Israeli economy and on business, including our ability to deliver products to our customers and to receive raw materials from our suppliers in a timely manner. From time to time, the Israeli trade unions threaten strikes or work stoppages, which, if carried out, may have a material adverse effect on the Israeli economy and our business.

***We are susceptible to additional risks from our international operations.***

We derived 63%, 62% and 55% of our revenues in the years ended December 31, 2018, 2017 and 2016, respectively, from sales outside of the United States. As a result, we face additional risks from doing business internationally, including:

- reduced protection of intellectual property rights in some countries;
- difficulties in staffing and managing foreign operations;
- longer sales and payment cycles;
- greater difficulties in collecting accounts receivable;
- adverse economic conditions;
- seasonal reductions in business activity;
- potentially adverse tax consequences;
- laws and business practices favoring local competition;
- costs and difficulties of customizing products for foreign countries;
- compliance with a wide variety of complex foreign laws and treaties;
- compliance with the United States' Foreign Corrupt Practices Act and similar anti-bribery laws in other jurisdictions;
- compliance with export control and regulations;
- licenses, tariffs, other trade barriers, transit restrictions and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets, including the tariffs recently enacted and proposed by the U.S. government on various imports from China and by the Chinese government on certain U.S. goods, the scope and duration of which remain uncertain;
- restrictive governmental actions, such as restrictions on the transfer or repatriation of funds and foreign investments;
- foreign currency exchange risks;

- fluctuations in freight rates and transportation disruptions;
- political and economic instability;
- variance and unexpected changes in local laws and regulations;
- natural disasters and public health emergencies; and
- trade and travel restrictions.

We sell our products into many countries and we also source many components and materials for our products from various countries. Such global resourcing enables us to minimize or mitigate the impact of tariffs and other regulatory taxes or duties. Nonetheless, the recently imposed U.S. tariffs could have a negative impact on our business, financial condition or results of operations. Further, an increase in tariffs or the imposition of additional tariffs and the potential escalation of a trade war and retaliatory measures could adversely affect our business, financial condition or results of operations.

A significant legal risk associated with conducting business internationally is compliance with various and differing anti-corruption and anti-bribery laws and regulations of the countries in which we do business, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and similar laws in China. In addition, the anti-corruption laws in various countries are constantly evolving and may, in some cases, conflict with each other. Our Code of Ethics and Business Conduct and other policies prohibit us and our employees from offering or giving anything of value to a government official for the purpose of obtaining or retaining business and from engaging in unethical business practices, including kick-backs to or from purely private parties. However, there can be no assurance that all of our employees or agents will refrain from acting in violation of such laws and our related anti-corruption policies and procedures. Any violations of these anti-corruption or trade control laws, or even allegations of such violations, can lead to an investigation, which could disrupt our operations, involve significant management distraction, and lead to significant costs and expenses, including legal fees. If we, or our employees or agents acting on our behalf, are found to have engaged in practices that violate these laws and regulations, we could suffer severe fines and penalties, profit disgorgement, injunctions on future conduct, securities litigation, and other consequences that may have a material adverse effect on our business, financial condition and results of operations. In addition, our reputation, sales activities or stock price could be adversely affected if we become the subject of any negative publicity related to actual or potential violations of anti-corruption, anti-bribery, or trade control laws and regulations.

Our principal research and development facilities are located in Israel, and our directors, executive officers and other key employees are located primarily in Israel and the United States. In addition, we engage sales representatives in various countries throughout the world to market and sell our products in those countries and surrounding regions. If we encounter any of the above risks in our international operations, we could experience slower than expected revenue growth and our business could be harmed.

***The results of the United Kingdom's referendum on withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business.***

The United Kingdom ("U.K.") held a referendum in June 2016 in which a majority of voters approved an exit from the European Union ("Brexit"). In March 2017, the U.K. began the process to exit the European Union. Negotiations are in progress to determine the future terms of the U.K.'s relationship with the European Union, including, among other things, the terms of trade between the U.K. and the European Union. The effects of Brexit will depend on any agreements the U.K. may reach to retain access to European Union markets either during a transitional period or more permanently. In addition, the exit of the U.K. from the European Union could lead to legal and regulatory uncertainty and potentially divergent treaties, laws and regulations as the U.K. determines which European Union treaties, laws and regulations to replace or replicate, including those governing manufacturing, labor, environmental, data protection/privacy, competition and other matters applicable to the semiconductor industry. The referendum has also given rise to calls for the governments of other European Union member states to consider withdrawal. These developments, or the perception that any of them could occur, may have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could have a material adverse effect on our business, financial condition and results of operations and reduce the price of our ordinary shares.

***Provisions of Israeli law may delay, prevent or make difficult an acquisition of our company, which could prevent a change of control and therefore depress the price of our shares.***

The Israeli Companies Law, 1999 (the "Companies Law") generally requires that a merger be approved by the board of directors and by the general meeting of the shareholders. Upon the request of any creditor of a merging company, a court may delay or prevent the merger if it concludes that there is a reasonable concern that, as a result of the merger, the surviving

company will be unable to satisfy its obligations. In addition, a merger may not be completed unless at least (i) 50 days have passed since the filing of the merger proposal with the Israeli Registrar of Companies and (ii) 30 days have passed since the merger was approved by the shareholders of each of the merging companies.

Also, in certain circumstances, an acquisition of shares in a public company must be made by means of a tender offer if, as a result of the acquisition, the purchaser would hold 25% or more of the voting rights in the company (unless there is already a 25% or greater shareholder of the company) or more than 45% of the voting rights in the company (unless there is already a shareholder that holds more than 45% of the voting rights in the company). If, as a result of an acquisition, the acquirer would hold more than 90% of a company's shares or voting rights, the acquisition must be made by means of a tender offer for all of the shares.

In addition, the Companies Law allows us to create and issue shares having rights different from those attached to our ordinary shares, including rights that may delay or prevent a takeover or otherwise prevent our shareholders from realizing a potential premium over the market value of their ordinary shares. The authorization of a new class of shares would require an amendment to our articles of association, which requires the prior approval of the holders of a majority of our shares at a general meeting.

These provisions could delay, prevent or impede an acquisition of us, even if such an acquisition would be considered beneficial by some of our shareholders.

***Exchange rate fluctuations between the U.S. dollar and the New Israeli Shekels ("NIS") may negatively affect our earnings.***

We derive all of our revenues in U.S. dollars. The U.S. dollar is our functional and reporting currency in all of our foreign locations. However, a significant portion of our liabilities, as well as our operating expenses, consisting principally of salaries and related personnel costs and facilities expenses, are denominated in NIS. This foreign currency exposure gives rise to market risk associated with exchange rate movements of the U.S. dollar against the NIS. To the extent that the value of the NIS increases against the U.S. dollar, our expenses on a U.S. dollar cost basis will increase. We cannot predict any future trends in the rate of appreciation of the NIS against the U.S. dollar. If the U.S. dollar cost of our salaries and related personnel costs and facilities expenses in Israel increases, our dollar-measured results of operations will be adversely affected. Our operations also could be adversely affected if we are unable to hedge against currency fluctuations in the future. Further, because all of our international revenues are denominated in U.S. dollars, a strengthening of the dollar versus other currencies could make our products less competitive in foreign markets and the collection of our receivables more difficult. To help manage this risk we have been engaged in foreign currency hedging activities, comprised of currency derivative instruments and natural hedges.

Our cost in Israel in U.S. dollar terms will also increase if inflation in Israel exceeds the devaluation of the NIS against the U.S. dollar or if the timing of such devaluation lags behind inflation in Israel.

In addition, a material portion of our leases are denominated in currencies other than the U.S. Dollar, mainly in NIS. In accordance with the new lease accounting standard, which became effective on January 1, 2019, the associated lease liabilities will be remeasured using the current exchange rate in the future reporting periods, which may result in material foreign exchange gains or losses. See Note 1, "The Company and Summary of Significant Accounting Policies" in the notes to the consolidated financial statements for more details.

***The government tax benefits that we currently receive require us to meet several conditions and may be terminated or reduced in the future, which would increase our costs.***

According to the Israeli Law for Encouragement of Capital Investments, 1959 ("the Encouragement Law"), the Company's operations in Israel were granted "Approved Enterprise" status by the Investment Center in the Israeli Ministry of Economy and Industry and "Beneficiary Enterprise" status by the Israeli Income Tax Authority. The Company is eligible for tax benefits under the Encouragement Law with respect to its income derived from its Approved and Beneficiary Enterprises. The availability of these tax benefits is subject to certain requirements, including, among other things, making specified investments in fixed assets and equipment, financing a percentage of those investments with our capital contributions, complying with our marketing program which was submitted to the Investment Center, filing of certain reports with the Investment Center, export requirements, limiting manufacturing outside of Israel and complying with Israeli intellectual property laws. If we do not meet these requirements in the future, these tax benefits may be cancelled and we could be required to refund any tax benefits that we have already received plus interest and penalties thereon. The tax benefits that our current "Approved Enterprise" and "Beneficiary Enterprise" program receives may not be continued in the future at their current levels or at all. If these tax benefits were reduced or eliminated, the amount of taxes that we pay would likely increase, which could adversely affect our results of operations. Additionally, if we increase our activities outside of Israel, for example, by acquisitions, our increased activities may not be eligible for inclusion in Israeli tax benefit programs.

On December 29, 2016, the Israeli government legislated new regulations regarding the "Preferred Technological Enterprise" regime, under which a company that complies with the terms may be entitled to certain tax benefits. The Company expects that its operation in Israel will comply with the terms of the Preferred Technological Enterprise regime. Therefore, the Company may utilize the tax benefits under this regime after the end of the benefit period of its Approved and Beneficiary Enterprise statuses (i.e., from fiscal year 2022 onwards). The tax rates under the new regime will be higher than those under our current regime. See Note 13, "Income taxes" for more details.

If we elect to distribute dividends or buy back our shares using exempt income derived from "Approved/Beneficiary Enterprise" income, we will be subject to tax on the gross amount distributed or used in a buyback. The tax rate will be the rate at which the income would have been subject to tax had it not been exempt. This rate is generally between 10% and the corporate tax rate in Israel, depending on the percentage of our shares held by foreign shareholders. The dividend recipient or the shareholder from whom we buy back the shares is subject to withholding tax at the source at the reduced rate applicable to dividends or buybacks from Approved Enterprises, which is 15% if we distribute dividends or buy back shares during the tax exemption period (subject to the applicable double tax treaty) or within 12 years after the period. This 12-year limitation does not apply to foreign investment companies. The Encouragement Law has defined certain actions that are deemed as dividend distributions and would trigger the recapture of tax benefits.

***The Israeli government grants that we received require us to meet various conditions and restrict our ability to manufacture and engineer products and transfer know-how outside of Israel and require us to satisfy specified conditions.***

We have received grants from the Israeli Innovation Authority, formerly known as the Office of the Chief Scientist of Israel's Ministry of Economy and Industry (the "IIA"), for the financing of a portion of our research and development expenditures in Israel. When know-how is developed using or in connection with IIA grants, we are subject to restrictions on transfer of the know-how, including outside of Israel. Transfer of know-how outside of Israel requires pre-approval by the IIA which may at its sole discretion grant such approval and impose certain conditions, and is subject to the payment to IIA of a transfer fee or license fees, calculated according to the formulas provided in the Israeli Law for Encouragement of Research, Development and Technological Innovation in Industry, 1984 (the "R&D Law") which takes into account, inter alia, the consideration for such know-how paid to us in the transaction in which the technology is transferred. In general, transfer fees are no less than the funding received plus interest less the royalties already paid for the transferred know-how and are not higher than six times the amount of the grants received by the company. In addition, any decrease of the percentage of manufacturing performed in Israel, as originally declared in the application to the IIA, requires us to obtain the approval of the IIA and may result in increased amounts to be paid to the IIA as well as in increased royalty rate. Transfer of know-how to another Israeli entity requires the approval of IIA as well as full or partial assumption of the liabilities to IIA by the other entity. These restrictions may impair our ability to enter into agreements for those products or technologies without the approval of the IIA. We cannot be certain that any approval of the IIA will be obtained on terms that are acceptable to us, or at all. Furthermore, in the event that we undertake a transaction involving the transfer to a non-Israeli entity of technology developed with IIA funding pursuant to a merger or similar transaction, the consideration available to our shareholders may be reduced by the amounts we are required to pay to the IIA. Any approval, if given, will generally be subject to additional financial obligations. If we fail to comply with the conditions imposed by the IIA, we may be required to refund any payments previously received, together with interest and penalties as well as tax benefits. Also, failure to meet the restrictions concerning transfer of know-how outside of Israel may trigger criminal liability. The restrictions regarding the use and transfer of know-how (including for the purpose of manufacturing) apply also to any IIA programs that are under a royalty payments agreement and to non-royalty-bearing programs.

***It may be difficult to enforce a U.S. judgment against us, our officers and directors or to assert U.S. securities law claims in Israel.***

We are incorporated in Israel. Two of our executive officers and two of our directors, one of whom is also an executive officer, are non-residents of the United States and are located in Israel, and a significant amount of our assets and the assets of these persons are located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States against us or any of the above persons in Israel.

In addition, it may be difficult for a shareholder to enforce civil liabilities under U.S. securities law claims in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on a violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved in an Israeli court as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law.

***Your rights and responsibilities as a shareholder will be governed by Israeli law and differ in some respects from the rights and responsibilities of shareholders under U.S. law.***

We are incorporated under Israeli law. The rights and responsibilities of holders of our ordinary shares are governed by our amended and restated articles of association and by Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in typical U.S. corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith toward the company and other shareholders and to refrain from abusing his, her or its power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters.

#### **Risks Related to Our Ordinary Shares**

***The price of our ordinary shares may continue to be volatile, and the value of an investment in our ordinary shares may decline.***

Factors that could cause volatility in the market price of our ordinary shares include, but are not limited to:

- quarterly variations in our results of operations or those of our competitors;
- announcements by us, our competitors, our customers or rumors from sources other than our company related to acquisitions, new products, significant contracts, commercial relationships, capital commitments or changes in the competitive landscape;
- our ability to develop and market new and enhanced products on a timely basis;
- disruption to our operations;
- geopolitical instability;
- the emergence of new sales channels in which we are unable to compete effectively;
- any major change in our board of directors or management;
- changes in financial estimates, including our ability to meet our future revenue and operating profit or loss projections;
- changes in governmental regulations or in the status of our regulatory approvals;
- general economic conditions and slow or negative growth of related markets;
- anticompetitive practices of our competitors;
- commencement of, or our involvement in, litigation;
- whether our operating results meet our guidance or the expectations of investors or securities analysts;
- continuing international conflicts and acts of terrorism; and
- changes in accounting rules.

***We may need to raise additional capital, which might not be available or which, if available, may be on terms that are not favorable to us.***

We may need to raise additional funds, and we cannot be certain that we will be able to obtain additional financing on favorable terms, if at all. If we issue equity securities to raise additional funds, the ownership percentage of our shareholders would be diluted, and the new equity securities may have rights, preferences or privileges senior to those of existing holders of our ordinary shares. If we borrow money, we may incur significant interest charges, which could harm our profitability. Holders of debt may also have certain rights, preferences or privileges senior to those of existing holders of our ordinary shares. If we cannot raise needed funds on acceptable terms, we may not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements, which could harm our business, financial condition and results of operations.

***If we sell our ordinary shares in future financings, holders of ordinary shares could experience immediate dilution and, as a result, the market price of our ordinary shares may decline.***

We may from time to time issue additional ordinary shares at a discount from the current trading price of our ordinary shares. As a result, holders of our ordinary shares would experience immediate dilution upon the purchase of any ordinary shares sold at such discount. In addition, as opportunities present themselves, we may enter into equity or debt financings or similar arrangements in the future, including the issuance of convertible debt securities, preferred shares or ordinary shares. If we issue ordinary shares or securities convertible into ordinary shares, holders of our ordinary shares could experience dilution.

***The ownership of our ordinary shares may be concentrated, and certain shareholders may have significant influence over the outcome of corporate actions requiring shareholder approval.***

As of December 31, 2018, based on information filed with the SEC or reported to us, Starboard Value LP and certain of its affiliates ("Starboard") beneficially owned an aggregate of approximately 8.1% of our outstanding ordinary shares. Starboard and any other shareholders acquiring beneficial ownership of a significant amount of our outstanding ordinary shares may have significant influence over the outcome of corporate actions requiring shareholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transaction.

***If securities or industry analysts do not publish research or reports about our business, if they adversely change their recommendations regarding our ordinary shares or if our operating results do not meet their expectations, the market price of our ordinary shares could decline.***

The trading market for our ordinary shares could be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause the price of our ordinary shares or trading volume in our ordinary shares to decline. Moreover, if one or more of the analysts who cover our company downgrades our ordinary shares or if our operating results do not meet their expectations, the market price of our ordinary shares could decline.

***Provisions of our articles of association could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our shareholders, and could make it more difficult for shareholders to change management.***

Provisions of our amended and restated articles of association may discourage, delay or prevent a merger, acquisition or other change in control that shareholders may consider favorable, including transactions in which shareholders might otherwise receive a premium for their shares. In addition, these provisions may frustrate or prevent any attempt by our shareholders to replace or remove our current management by making it more difficult to replace or remove our board of directors. These provisions include:

- no cumulative voting;
- a requirement for the approval of the shareholders of at least a majority of the voting power of the Company for any merger involving the Company;
- a requirement for the approval of at least 75% of the voting power represented at the general meeting of the shareholders for the removal of any director from office, and election of any director instead of the director so removed; and
- an advance notice requirement for shareholder proposals and nominations.

Furthermore, Israeli tax law treats some acquisitions, particularly share-for-share swaps between an Israeli company and a foreign company, less favorably than U.S. tax law. Under certain circumstances and subject to receiving a ruling from the Israeli Income Tax Authority, Israeli tax law generally provides that a shareholder who exchanges our shares for shares that are listed for trading on a securities exchange in a foreign corporation is treated as if the shareholder has sold the shares. In such a case, the shareholder will generally be subject to Israeli taxation on any capital gains from the sale of shares (after two years, with respect to one half of the shares, and after four years, with respect to the balance of the shares, in each case unless the shareholder sells such shares at an earlier date), unless a relevant tax treaty between Israel and the country of the shareholder's residence exempts the shareholder from Israeli tax, resulting in taxation before disposition of the investment in the foreign corporation. For a further discussion of Israeli laws relating to mergers and acquisitions, please see "*Risk Factors - Risks Related to Operations in Israel and Other Foreign Countries - Provisions of Israeli law may delay, prevent or make difficult an acquisition of our company, which could prevent a change of control and therefore depress the price of our shares.*" These provisions in our amended and restated articles of association and other provisions of Israeli law could limit the price that investors are willing to pay in the future for our ordinary shares.

***We have never paid cash dividends on our share capital, and, while the Board regularly reviews our cash position and uses for cash, we do not anticipate paying any cash dividends in the foreseeable future.***

We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our ordinary shares will be your sole source of gain for the foreseeable future.

***We may incur increased costs as a result of changes in laws and regulations relating to corporate governance matters.***



Changes in the laws and regulations affecting public companies, including Israeli laws, rules adopted by the SEC, the Nasdaq Stock Market, the FASB and the Public Company Accounting Oversight Board, may result in increased costs to us as we respond to their requirements. These laws and regulations could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements.

**ITEM 1B—UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2—PROPERTIES**

As of December 31, 2018, our major facilities consisted of:

	Israel	United States	Other	Total
Leased facilities <i>(in thousands of square feet)</i>	1,243	130	64	1,437

Our United States business headquarters are located in Sunnyvale, California, and our engineering headquarters are located in Yokneam, Israel. We believe that our existing facilities will be adequate to meet our current requirements and that suitable additional or substitute space will be available on acceptable terms to accommodate our foreseeable needs.

**ITEM 3—LEGAL PROCEEDINGS**

See Note 10, “Commitments and Contingencies” to the consolidated financial statements for a full description of legal proceedings and related contingencies and their effects on our consolidated financial position, results of operations and cash flows.

We may, from time to time, become a party to various other legal proceedings arising in the ordinary course of business. We may also be indirectly affected by administrative or court proceedings or actions in which we are not involved, but which have general applicability to the semiconductor industry.

**ITEM 4—MINE SAFETY DISCLOSURES**

Not applicable.

**PART II**

**ITEM 5—MARKET FOR REGISTRANT'S ORDINARY SHARES, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

**Market Information**

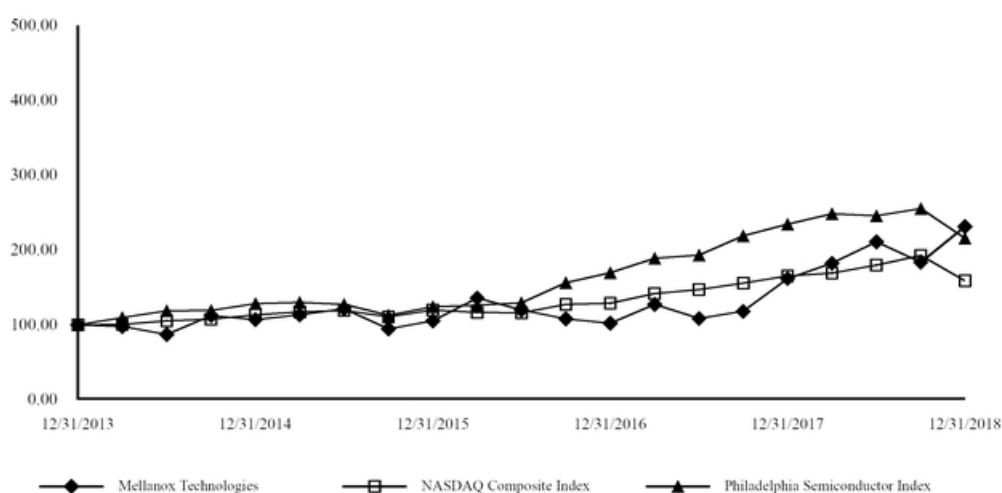
Our ordinary shares began trading on The Nasdaq Global Market on February 8, 2007 under the symbol "MLNX". Prior to that date, our ordinary shares were not traded on any public exchange.

As of February 15, 2019, we had approximately 387 holders of record of our ordinary shares. This number does not include the number of persons whose shares are in nominee or in "street name" accounts through brokers.

**Share Performance Graph**

The graph below compares the five-year cumulative total shareholder return on our ordinary shares with the cumulative total return on The Nasdaq Composite Index and The Philadelphia Semiconductor Index. The period shown commences on December 31, 2013 and ends on December 31, 2018, the end date of our last fiscal year. The graph assumes an investment of \$100 on December 31, 2013, and the reinvestment of any dividends. No cash dividends have been declared or paid on our

ordinary shares during such period. Shareholder returns over the indicated periods should not be considered indicative of future share prices or shareholder returns.



	12/31/2013 *	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Mellanox Technologies	100.00	106.91	105.43	102.33	161.87	231.12
Nasdaq Composite Index	100.00	113.40	119.89	128.89	165.29	158.87
Philadelphia Semiconductor Index	100.00	128.38	124.01	169.42	234.20	215.91

\* \$100 invested on December 31, 2013 in shares or index-including reinvestment of dividends.

#### Dividends

We have not declared or paid any cash dividends on our ordinary shares in the past, and we do not anticipate declaring or paying cash dividends in the foreseeable future. The Companies Law also restricts our ability to declare dividends. We can only distribute dividends from profits (the "Profit Test") (as defined in the Companies Law) and only if there is no reasonable concern that the dividend distribution will prevent us from meeting our existing and foreseeable obligations as they come due (the "Insolvency Test"); provided that, with court approval, we may distribute dividends if we do not meet the Profit Test so long as we meet the Insolvency Test.

If we elect to distribute dividends out of income derived from "Approved Enterprise" operations, we will be subject to tax on the gross amount distributed. The tax rate will be the rate which would have been applicable had we not been granted the beneficial status. These dividend tax rules may also apply to our acquisitions outside Israel if they are made with cash from tax benefited income.

#### Securities Authorized for Issuance under Equity Compensation Plans

Our equity compensation plan information required by this item is incorporated by reference to the information in Part III, Item 12 of this report. For additional information on our share incentive plans and activity, see Note 11, "Share Incentive Plans" to the consolidated financial statements.

#### Recent Sales of Unregistered Securities

None.

## ITEM 6—SELECTED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this report. We derived the consolidated balance sheet data for the years ended December 31, 2016, 2015, and 2014 and our consolidated statements of operations data for the years ended December 31, 2015 and 2014, from our audited consolidated financial statements not included in this report. We derived the consolidated statements of operations data for each of the three years in the period ended December 31, 2018, as well the consolidated balance sheet data as of December 31, 2018 and 2017, from our audited consolidated financial statements included elsewhere in this report. Our historical results are not necessarily indicative of results to be expected in any future period.

	Year ended December 31,				
	2018 (1)	2017	2016 (2)	2015	2014
(In thousands, except per share data)					
<b>Consolidated Statement of Operations Data:</b>					
Total revenues	\$ 1,088,743	\$ 863,893	\$ 857,498	\$ 658,140	\$ 463,649
Income (loss) from operations	\$ 112,074	\$ (17,081)	\$ 30,590	\$ 75,106	\$ (7,191)
Net income (loss)	\$ 134,258	\$ (19,425)	\$ 18,518	\$ 92,894	\$ (24,009)
Net income (loss) per share — basic	\$ 2.54	\$ (0.39)	\$ 0.38	\$ 2.00	\$ (0.54)
Net income (loss) per share — diluted	\$ 2.46	\$ (0.39)	\$ 0.37	\$ 1.94	\$ (0.54)

	December 31,				
	2018 (1)	2017	2016 (2)	2015	2014 (3)
(In thousands)					
<b>Consolidated Balance Sheet Data:</b>					
Working capital	\$ 497,666	\$ 310,286	\$ 340,511	\$ 540,108	\$ 396,591
Total assets	\$ 1,587,198	\$ 1,401,934	\$ 1,473,505	\$ 1,053,382	\$ 863,218
Long-term liabilities	\$ 72,778	\$ 147,853	\$ 285,208	\$ 49,571	\$ 43,821
Total shareholders' equity	\$ 1,301,648	\$ 1,057,448	\$ 975,730	\$ 866,681	\$ 701,752

(1) On January 1, 2018, we adopted the new revenue standards (Topic 606) using a modified retrospective method with the cumulative effect recognized in the beginning retained earnings. The consolidated financial statements for the year ended December 31, 2018 are reported under Topic 606, whereas the consolidated financial statements for 2017 and prior years are reported under Topic 605. See Note 2, "Revenue" to the consolidated financial statements for more details.

(2) On February 23, 2016, we acquired EZchip. EZchip's results of operations and estimated fair value of assets acquired and liabilities assumed were included in our consolidated financial statements beginning February 23, 2016.

(3) In November 2015, the Financial Accounting Standards Board issued guidance requiring current deferred tax assets, current deferred tax liabilities and related current valuation allowances to be reclassified as non-current. As a result of adoption of this guidance, we made the following adjustments to selected consolidated financial data:

	Year ended December 31,	
	2014	
(in thousands)		
Working capital decrease	\$	(2,271)
Long-term assets increase	\$	2,271

## ITEM 7—MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the financial statements and the notes thereto included elsewhere in this report. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, particularly in the section entitled "Risk Factors".*

## **Overview**

### ***General***

We are a fabless semiconductor company that designs, manufactures (through subcontractors) and sells high-performance interconnect products and solutions primarily based on the Ethernet and InfiniBand standards. Our products facilitate efficient data transmission between servers, storage systems, communications infrastructure equipment and other embedded systems. We operate our business globally and offer products to customers at various levels of integration. The products we offer include ICs, adapter cards, switch systems, cables, modules, software, services and accessories. Together these products form a total end-to-end integrated networking solution focused on computing, storage and communication applications used in multiple markets, including HPC, cloud, Web 2.0, Big Data, machine learning, storage, telecommunications, financial services, and EDC. These solutions increase performance, application efficiency and improve return on investment. Through the successful development and implementation of multiple generations of our products, we have established significant expertise and competitive advantages.

As a leader in developing multiple generations of high-speed interconnect solutions, we have established strong relationships with our customers. Our products are incorporated in servers and associated networking solutions produced by the largest server vendors. We supply our products to leading storage and communications infrastructure equipment vendors. Additionally, our products are used in embedded solutions.

We are one of the pioneers of InfiniBand, an industry-standard architecture for high-performance interconnects. We believe InfiniBand interconnect solutions deliver industry-leading performance, efficiency and scalability for clustered computing and storage systems that incorporate our products. In addition to supporting InfiniBand, our products also support industry-standard Ethernet transmission protocols providing unique product differentiation and connectivity flexibility. Our products serve as building blocks for creating reliable and scalable Ethernet and InfiniBand solutions with leading performance. We also believe that we are one of the early suppliers of 25/50/100Gb/s Ethernet adapters, switches, and cables to the market. This provides us with the opportunity to gain share in the Ethernet market as users upgrade from one or 10Gb/s directly to 25/40/50 or 100Gb/s.

Our revenues for the years ended December 31, 2018, 2017 and 2016 were \$1,088.7 million, \$863.9 million, and \$857.5 million, respectively. In order to increase our annual revenues, we must continue to achieve design wins over other Ethernet providers and providers of competing interconnect technologies. We consider a design win to occur when an original equipment manufacturer ("OEM"), or contract manufacturer notifies us that it has selected our products to be incorporated into a product or system under development. Because the life cycles for our customers' products can last for several years if these products have successful commercial introductions, we expect to continue to generate revenues over an extended period of time for each successful design win.

### ***Our Business***

**Revenues.** We derive revenues from sales of our ICs, boards, switch systems, cables, modules, software, accessories and other product groups. Our products have broad adoption with multiple end customers across HPC, machine learning, Web 2.0, cloud, EDC, financial services and storage markets; however, these markets are mainly served by leading server, storage and communications infrastructure OEMs. Therefore, we have derived a substantial portion of our revenues from a relatively small number of OEM customers. Sales to our top ten customers represented 53%, 56% and 55% of our total revenues for the years ended December 31, 2018, 2017 and 2016, respectively. Sales to customers representing 10% or more of revenues accounted for 24%, 24% and 16% of our total revenues for the years ended December 31, 2018, 2017 and 2016, respectively. The loss of one or more of our principal customers, the reduction or deferral of purchases, or changes in the mix of our products ordered by any one of these customers could cause our revenues to decline materially if we are unable to increase our revenues from other customers. Our customers, including our most significant customers, are not obligated by long-term contracts to purchase our products and may cancel orders with limited potential penalties. If any of our large customers reduces or cancels its purchases from us for any reason, it could have an adverse effect on our revenues and results of operations.

**Cost of revenues and gross profit.** The cost of revenues consists primarily of the cost of silicon wafers purchased from our foundry supplier, costs associated with the assembly, packaging and production testing of our ICs, outside processing costs associated with the manufacture of our products, royalties due to third parties, warranty costs, excess and obsolete inventory costs, depreciation and amortization, and costs of personnel associated with production management, quality assurance and services. In addition, after we purchase wafers from our foundries, we also face yield risk related to manufacturing these wafers into semiconductor devices. Manufacturing yield is the percentage of acceptable product resulting from the manufacturing process, as identified when the product is tested as a finished IC. If our manufacturing yields decrease, our cost per unit increases, which could have a significant adverse

impact on our cost of revenues. We do not have long-term pricing agreements with foundry suppliers and contract manufacturers. Accordingly, our costs are subject to price fluctuations based on the overall cyclical demand for semiconductors.

We purchase our inventory pursuant to standard purchase orders. We estimate that lead times for delivery of our finished semiconductors from our foundry supplier and assembly, packaging and production testing subcontractor are approximately three to four months, lead times for delivery from our adapter card manufacturing subcontractor are approximately eight to ten weeks, lead times for delivery from our cable and transceiver manufacturing subcontractor are approximately ten to twelve weeks, and lead times for delivery from our switch systems manufacturing subcontractors are approximately twelve weeks. We build inventory based on forecasts of customer orders rather than the actual orders themselves.

We expect our cost of revenues as a percentage of sales to increase in the future as a result of a reduction in the average sale price of our products and a lower percentage of revenue deriving from sales of ICs and boards, which generally yield higher gross margins than sales of switches and cables. This trend will depend on overall customer demand for our products, our product mix, competitive product offerings and related pricing and our ability to reduce manufacturing costs.

### ***Operational expenses***

*Research and development expenses.* Our research and development expenses consist primarily of salaries, share-based compensation and associated costs for employees engaged in research and development, depreciation, amortization of intangibles, allocable facilities and administrative expenses and tape-out costs. Tape-out costs are expenses related to the manufacture of new ICs, including charges for mask sets, prototype wafers, mask set revisions and testing incurred before releasing new ICs into production. We anticipate research and development expenses will increase in absolute dollars in the upcoming year as our business expands.

*Sales and Marketing Expenses.* Sales and marketing expenses consist primarily of salaries, incentive compensation, share-based compensation and associated costs for employees engaged in sales and marketing, field applications engineering and sales engineering, advertising, trade shows and promotions, travel, amortization of intangibles, and allocable facilities and administrative expenses. We expect these expenses will increase in absolute dollars in the upcoming year as our business expands.

*General and Administrative Expenses.* General and administrative expenses consist primarily of salaries, share-based compensation and associated costs for employees engaged in finance, legal, human resources and administrative activities, professional service expenses for accounting, corporate legal fees and allocable facilities related expenses. We expect these expenses will stay consistent in absolute dollars in the upcoming year.

### **Taxes on Income**

In December 2017, the U.S. enacted significant tax reform through the TCJA. The TCJA enacted significant changes affecting the year ended December 31, 2017, including, but not limited to, (1) reducing the U.S. federal corporate income tax rate to 21% effective 2018, and (2) imposing a one-time Transition Tax on certain unrepatriated earnings of foreign subsidiaries of U.S. companies that had not been previously taxed in the U.S.

The TCJA also established new tax provisions affecting 2018, including, but not limited to, (1) creating a new provision designed to tax global intangible low-tax income ("GILTI"); (2) generally eliminating U.S. federal taxes on dividends from foreign subsidiaries; (3) eliminating the corporate alternative minimum tax ("AMT"); (4) creating the base erosion anti-abuse tax ("BEAT"); (5) establishing a deduction for foreign derived intangible income ("FDII"); (6) repealing the domestic production activity deduction; and (7) establishing new limitations on deductible interest expense and certain executive compensation.

The reduction of the U.S. federal corporate income tax rate required us to remeasure our deferred tax assets and liabilities as of the date of enactment. For the year ended December 31, 2017, we decreased the net deferred tax assets as a result of such remeasurement with a corresponding decrease to the valuation allowance as provisional amounts, resulting in no net effect on the benefit from taxes on income for the year ended December 31, 2017.

As of December 31, 2018, we have completed the accounting for all the impacts of the TCJA with no material adjustments to the provisional amounts recorded as of December 31, 2017. However, in the absence of guidance on various uncertainties and ambiguities in the application of certain provisions of the TCJA, we have used what we believe are reasonable interpretations and assumptions in applying the TCJA, but it is possible that the Internal Revenue Service as well as state tax authorities could issue subsequent guidance or take positions on audit that differ from our interpretations and assumptions, which could have a material adverse effect on our cash tax liabilities, results of operations, and financial condition. In addition, the TCJA could be subject to potential amendments and technical corrections, any of which could materially lessen or increase certain adverse impacts of the legislation on us and our business. We will continue to evaluate the effects of the TCJA on us as federal and state tax authorities issue additional regulations and guidance. If and when amendments and technical corrections are enacted with respect to the TCJA, they could cause changes in our previous estimates and could materially affect our financial positions and results of operations.

Our operations in Israel have been granted "Approved Enterprise" status by the Investment Center of the Israeli Ministry of Economy and Industry (formerly, the Ministry of Industry, Trade and Labor) and "Beneficiary Enterprise" status by the Israeli Income Tax Authority, which makes us eligible for tax benefits under the Encouragement Law. Under the terms of the Approved and Beneficiary Enterprise programs, income that is attributable to our operations in Yokneam, Israel is exempt from income tax commencing fiscal year 2011 through 2021. Income that is attributable to our operations in Tel Aviv, Israel is subject to a reduced income tax rate (generally between 10% and the current corporate tax rate, depending on the percentage of foreign investment in the Company) commencing fiscal year 2013 through 2021.

On January 5, 2016 the Israeli Government legislated a reduction in corporate income tax rates from 26.5% to 25.0%, effective in 2016. On December 29, 2016, the Israeli Government legislated a reduction in corporate income tax rates from 25.0% to 24.0% in 2017 and to 23.0% in 2018 and thereafter.

On December 29, 2016, the Israeli government legislated new regulations regarding the "Preferred Technological Enterprise" regime, under which a company that complies with the terms may be entitled to certain tax benefits. On June 14, 2017, the Israeli government legislated new regulations, stipulating the calculation method of the tax benefits under the Preferred Technological Enterprise regime. We expect that our operations in Israel will comply with the terms of the Preferred Technological Enterprise regime. Therefore, we may utilize the tax benefits under this regime after the end of the benefit period of our Approved and Beneficiary Enterprise statuses (i.e. from fiscal year 2022 onwards). Under the new legislation, the majority of our income from our operations in Yokneam, Israel, will be subject to a corporate rate of 7.5%, while the majority of the income from our operations in Tel-Aviv, Israel, will be subject to a corporate rate of 12%. As a result of the lower tax rates mentioned above, we recorded a decrease of approximately \$0.2 million in deferred tax assets and a corresponding increase in tax expense during the second quarter of 2017.

To prepare our consolidated financial statements, we estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet.

### **Critical Accounting Policies and Estimates**

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

We believe that the assumptions and estimates associated with the following areas would have the greatest potential impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates. For further information on all of our significant accounting policies, please see Note 1, "The Company and Summary of Significant Accounting Policies" to the consolidated financial statements.

#### ***Revenue recognition***

We recognize revenue when (or as) we satisfy performance obligations by transferring promised products or services to our customers in an amount that reflects the consideration we expect to receive. We apply the following five steps: (1) identify the contract with a customer, (2) identify the 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 a performance obligation is satisfied.

We consider customer purchase orders, which in some cases are governed by master sales agreements, to be the contracts with a customer. For each contract, we consider the promise to transfer tangible products, extended warranty and post-contract customer support, each of which are distinct, to be the identified performance obligations. In determining the transaction price, we evaluate whether the price is subject to rebates and adjustments to determine the net consideration which we expect to receive. As our standard payment terms are less than one year, the contracts have no significant financing component. We allocate the transaction price to each distinct performance obligation based on its relative standalone selling price. Revenue from tangible products is recognized when control of the product is transferred to the customer (i.e., when our performance obligation is satisfied), which typically occurs at shipment. The revenues from fixed-price support or maintenance contracts, including extended warranty contracts and post-contract customer support agreements, are recognized ratably over the contract period and the costs associated with these contracts are recognized as incurred. Our standard arrangements with our customers do not allow for rights of return.

We maintain inventory, or hub arrangements with certain customers. Pursuant to these arrangements, we deliver products to a customer or a designated third party warehouse based upon the customer's projected needs, but do not recognize product revenue unless and until the customer reports it has removed our product from the warehouse to be incorporated into its end products.

A portion of our sales are made to distributors under agreements which contain price protection provisions. Revenue from sales to distributors is recognized upon shipment and transfer of control, net of estimated distribution price adjustments ("DPAs"). We calculate the estimated DPAs based on specific earned DPA claims and estimated unearned DPA claims based on an analysis of historical DPA claims, at the distributor level, over a period of time considered adequate to account for current pricing and business trends. The earned DPA claims are recorded as a reduction of revenue and a reduction of gross accounts receivable. We record the estimated unearned DPAs as a reduction of revenue and an increase in the allowance for unearned DPAs.

In addition, we record revenue reserves for rebates as a reduction of revenue and a reduction of gross accounts receivable. The reserves are recorded in the same period that the related revenue is recorded, and are based on the amounts stated in the contracts. We reverse reserves for unclaimed rebates as specific rebate programs contractually end and when we believe unclaimed rebates are no longer subject to payment and will not be paid. As a result, the reversal of unclaimed rebates may have a positive impact on our net revenue and net income in subsequent periods.

Most of our distributors are entitled to a limited right of return related to stock rotation. Distributors have the right to return a limited amount of product not to exceed a percentage of the distributor's prior quarter's net purchases. However, a simultaneous, compensating order of equal or greater value must be placed by the distributor within the same quarter of the return.

### ***Derivatives***

We enter into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks, mainly the exposure to changes in the exchange rate of the NIS against the U.S. dollar that are associated with forecasted future cash flows and existing assets and liabilities. We account for our derivative instruments as either assets or liabilities and carry them at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. For derivative instruments that hedge the exposure to variability in expected future cash flows that are designated as cash flow hedges, the effective portion of the gains or losses on the derivative instruments is reported as a component of accumulated other comprehensive income ("AOCI") in shareholders' equity and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of the gains or losses on the derivative instruments, if any, is recognized in earnings in the current period. Our derivative instruments that hedge the exposure to variability in the fair value of assets or liabilities are not currently designated as hedges for financial reporting purposes, and thus the gains or losses on such derivative instruments are recognized in earnings in the current period.

### ***Inventory valuation***

Inventory includes finished goods, work-in-process and raw materials. Inventory is stated at the lower of cost (principally standard cost which approximates actual cost on a first-in, first-out basis) or net realizable value. Reserves for potentially excess and obsolete inventory are made based on management's analysis of inventory levels, future sales forecasts and market conditions. Once established, the original cost of our inventory less the related inventory reserve represents the new cost basis of such products.

### ***Business combinations***

We account for business combinations using the acquisition method of accounting. We determine the recognition of intangible assets based on the following criteria: (i) the intangible asset arises from contractual or other rights; or (ii) the intangible asset is separable or divisible from the acquired entity and capable of being sold, transferred, licensed, returned or exchanged. We allocate the purchase price of business combinations to the tangible assets, liabilities and intangible assets acquired, including in-process research and development ("IPR&D"), based on their estimated fair values. The excess purchase price over those fair values is recorded as goodwill. The process of estimating the fair values requires significant estimates, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from customer contracts, customer lists and distribution agreements, acquired developed technologies, expected costs to develop IPR&D into commercially viable products, estimated cash flows from projects when completed and discount rates. We estimate fair value based upon assumptions that are believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. Other estimates associated with the accounting for acquisitions may change as additional information becomes available regarding the assets acquired and liabilities assumed.

### ***Goodwill and intangible assets***

Goodwill represents the excess of the cost of acquired businesses over the fair market value of their identifiable net assets. We conduct a goodwill impairment qualitative assessment during the fourth quarter of each fiscal year or more frequently if facts and circumstances indicate that goodwill may be impaired. The goodwill impairment qualitative assessment requires us to perform an assessment to determine if it is more likely than not that the fair value of the business is less than its carrying amount. The qualitative assessment considers various factors, including the macroeconomic environment, industry and market specific conditions, market capitalization, stock price, financial performance, earnings multiples, budgeted-to-actual revenue performance from the prior year, gross margin and cash flow from operating activities and issues or events specific to the business. If adverse qualitative trends are

identified that could negatively impact the fair value of the business, we perform a "two step" goodwill impairment test. "Step one" is the identification of potential impairment. This involves comparing the fair value of each reporting unit, which we have determined to be the entity itself, with its carrying amount including goodwill. If the fair value of a reporting unit exceeds its carrying amount, the goodwill of the reporting unit is considered not impaired and "Step two" of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, "Step two" is performed and it involves comparing the carrying amount of goodwill to its implied fair value, which is determined to be the excess of the reporting unit's fair value over the fair value of its identifiable net assets other than goodwill. If the carrying amount of goodwill exceeds its implied fair value, an impairment exists and is recorded. As of December 31, 2018, our qualitative assessment of goodwill impairment indicated that goodwill was not impaired.

Intangible assets represent acquired intangible assets including developed technology, customer relationships and IPR&D, as well as licensed technology. We amortize the finite lived intangible assets over their useful lives using a method that reflects the pattern in which the economic benefits of the intangible assets are consumed or otherwise used, or, if that pattern cannot be reliably determined, using a straight-line amortization method. We capitalize IPR&D projects acquired as part of a business combination as intangible assets with indefinite lives. On completion of each project, IPR&D assets are reclassified to developed technology and amortized over their estimated useful lives. If any of the IPR&D projects are abandoned, we impair the related IPR&D asset.

Indefinite-lived intangible assets are tested for impairment annually or more frequently when indicators of impairment exist. We first assess qualitative factors to determine if it is more likely than not that an indefinite-lived intangible asset is impaired and whether it is necessary to perform a quantitative impairment test. The qualitative assessment considers various factors, including reductions in demand, the abandonment of IPR&D projects or significant economic slowdowns in the semiconductor industry and macroeconomic environment. If adverse qualitative trends are identified that could negatively impact the fair value of the asset, then quantitative impairment tests are performed to compare the carrying value of the asset to its undiscounted expected future cash flows. If this test indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using: (i) quoted market prices or (ii) discounted expected future cash flows utilizing an appropriate discount rate. Impairment is based on the excess of the carrying amount over the fair value of those assets. As of December 31, 2018, there were no indicators that impairment existed or assets were not recoverable. Intangible assets with finite lives are tested for impairment in accordance with our policy for long-lived assets.

#### ***Equity investments in privately-held companies***

We have made equity investments in privately-held companies. We measure these equity investments at cost, less impairments, adjusted by observable price changes. To determine if an investment is recoverable, we monitor the investments and if facts and circumstances indicate the investment may be impaired, conduct an impairment test. The impairment test considers multiple factors including a review of the privately-held company's revenue and earnings trends relative to pre-defined milestones and overall business prospects, the general market conditions in its industry and other factors related to its ability to remain in business, such as liquidity and receipt of additional funding.

While performing our review for impairment for the fourth quarter of 2018, we noted an observable price change related to one of our investments in a privately-held company. As a result, we recorded an impairment charge of \$1.5 million in the fourth quarter of 2018.

#### ***Impairment of long-lived assets***

Long-lived assets include equipment and furniture and fixtures and finite-lived intangible assets. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable. If the sum of the expected future cash flows (undiscounted and without interest charges) from the long-lived assets is less than the carrying amount of such assets, an impairment loss would be recognized, and the assets would be written down to their estimated fair values. We review for possible impairment on a regular basis.

#### ***Warranty provision***

We typically offer a limited warranty for our products for periods up to three years. We accrue for estimated returns of defective products at the time revenue is recognized based on historical activity. The determination of these accruals requires us to make estimates of the frequency and extent of warranty activity and estimated future costs to either replace or repair the products under warranty. If the actual warranty activity and/or repair and replacement costs differ significantly from these estimates, adjustments to record additional cost of revenues may be required in future periods.

#### ***Income taxes***

To prepare our consolidated financial statements, we estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are



calculated using tax rates expected to be in effect during the period these temporary differences would reverse, and are included within our consolidated balance sheet.

We must also make judgments regarding the realizability of deferred tax assets. The carrying value of our net deferred tax assets is based on our belief that it is more likely than not that we will generate sufficient future taxable income in certain jurisdictions to realize these deferred tax assets. A valuation allowance has been established for deferred tax assets which we do not believe meet the "more likely than not" criteria. Our judgments regarding future taxable income may change due to changes in market conditions, changes in tax laws, tax planning strategies or other factors. If our assumptions and consequently our estimates change in the future, the valuation allowances we have established may be increased or decreased, resulting in a respective increase or decrease in income tax expense. Our effective tax rate is highly dependent upon the geographic distribution of our worldwide earnings or losses, the tax regulations and tax holidays in each geographic region, the availability of tax credits and carryforwards, and the effectiveness of our tax planning strategies.

We use a two-step approach to recognizing and measuring uncertain tax positions accounted for in accordance with the guidance on judgments regarding the realizability of deferred taxes. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes. We recognize potential accrued interest and penalties related to unrecognized tax benefits within the consolidated statements of income as income tax expense.

## Results of Operations

The following table sets forth our consolidated statements of operations as a percentage of revenues for the periods indicated:

	Year ended December 31,					
	2018		2017		2016	
Total revenues	100.0	%	100.0	%	100.0	%
Cost of revenues	35.7		34.8		35.2	
Gross profit	64.3		65.2		64.8	
Operating expenses:						
Research and development	33.1		42.4		37.6	
Sales and marketing	13.6		17.4		15.6	
General and administrative	6.3		6.0		8.0	
Restructuring and impairment charges	1.0		1.4		—	
Total operating expenses	54.0		67.2		61.2	
Income (loss) from operations	10.3		(2.0)		3.6	
Interest expense	(0.2)		(0.9)		(0.9)	
Other income	0.2		0.4		0.1	
Interest and other, net	—		(0.5)		(0.8)	
Income (loss) before taxes on income	10.3		(2.5)		2.8	
Provision for (benefit from) taxes on income	(2.0)		(0.3)		0.6	
Net income (loss)	12.3	%	(2.2)	%	2.2	%

**Comparison of the Year Ended December 31, 2018 to the Year Ended December 31, 2017 and the Year Ended December 31, 2017 to the Year Ended December 31, 2016**

*Revenues.*

The following tables represent our total revenues for the years ended December 31, 2018 and 2017 by product type and interconnect protocol:

	Year Ended December 31,			
	2018	% of Revenues	2017	% of Revenues
	(In thousands)			
ICs	\$ 149,180	13.7%	\$ 161,216	18.7%
Boards	495,753	45.5%	325,845	37.7%
Switch systems	247,478	22.7%	222,836	25.8%
Cables, accessories and other	196,332	18.1%	153,996	17.8%
Total Revenue	\$ 1,088,743	100.0%	\$ 863,893	100.0%

	Year Ended December 31,			
	2018	% of Revenues	2017	% of Revenues
	(In thousands)			
InfiniBand:				
HDR	\$ 10,177	0.9%	\$ —	—%
EDR	234,655	21.6%	194,261	22.5%
FDR	149,168	13.7%	181,465	21.0%
QDR/DDR/SDR	44,359	4.1%	31,599	3.6%
Total	438,359	40.3%	407,325	47.1%
Ethernet	618,471	56.8%	401,005	46.4%
Other	31,913	2.9%	55,563	6.5%
Total revenue	\$ 1,088,743	100.0%	\$ 863,893	100.0%

Revenues were \$1,088.7 million for the year ended December 31, 2018 compared to \$863.9 million for the year ended December 31, 2017, representing an increase of \$224.8 million, or approximately 26.0%. Ethernet product sales increased by \$217.5 million primarily due to the increased adoption of our 25 GB/s and above solutions. Revenues from InfiniBand EDR/HDR products increased as customers continued transitioning from FDR and lower data rate products to the EDR/HDR products. Our 2018 revenues are not necessarily indicative of future results.

The following tables represent our total revenues for the years ended December 31, 2017 and 2016 by product type and interconnect protocol:

	Year Ended December 31,			
	2017	% of Revenues	2016	% of Revenues
	(In thousands)			
ICs	\$ 161,216	18.7%	\$ 170,641	19.9%
Boards	325,845	37.7%	337,304	39.3%
Switch systems	222,836	25.8%	204,083	23.8%
Cables, accessories and other	153,996	17.8%	145,470	17.0%
Total Revenue	\$ 863,893	100.0%	\$ 857,498	100.0%

	Year Ended December 31,			
	2017	% of Revenues	2016	% of Revenues
(In thousands)				
<b>InfiniBand:</b>				
EDR	\$ 194,261	22.5%	\$ 125,249	14.6%
FDR	181,465	21.0%	302,093	35.2%
QDR/DDR/SDR	31,599	3.6%	49,987	5.9%
Total	407,325	47.1%	477,329	55.7%
Ethernet	401,005	46.4%	317,241	37.0%
Other	55,563	6.5%	62,928	7.3%
Total revenue	\$ 863,893	100.0%	\$ 857,498	100.0%

Revenues were \$863.9 million for the year ended December 31, 2017 compared to \$857.5 million for the year ended December 31, 2016, representing an increase of \$6.4 million, or approximately 0.7%. The year-over-year revenue increase in 2017 from 2016 was primarily attributable to increased demand for our 25, 50, and 100Gb/s Ethernet solutions. Revenues from our InfiniBand products decreased primarily due to declines in storage and embedded customers, driven by customer product transitions and customer M&A activity and lower average selling prices as a result of competition in the HPC market. Revenues from InfiniBand EDR products increased as customers continued transitioning from FDR and lower data rate products to the EDR product generation.

*Gross Profit and Margin.* Gross profit was \$700.2 million for the year ended December 31, 2018 compared to \$563.4 million for the year ended December 31, 2017, representing an increase of \$136.8 million, or approximately 24.3%. As a percentage of revenues, gross margin decreased to 64.3% in the year ended December 31, 2018 from approximately 65.2% in the year ended December 31, 2017. The decrease in gross margin was primarily due to a \$9.3 million settlement of a contingent royalty obligation recorded during the second quarter of 2018 and changes in product mix. Gross margin for 2018 is not necessarily indicative of future results.

Gross profit was \$563.4 million for the year ended December 31, 2017 compared to \$555.5 million for the year ended December 31, 2016, representing an increase of \$7.9 million, or approximately 1.4%. As a percentage of revenues, gross margin increased to 65.2% in the year ended December 31, 2017 from approximately 64.8% in the year ended December 31, 2016. The increase in gross margin was primarily due to a decrease in intangible asset amortization costs of \$5.6 million and inventory step-up amortization costs of \$8.3 million, both related to the EZchip acquisition, partially offset by the lower margins due to product mix.

#### *Research and Development.*

The following table presents details of our research and development expenses for the periods indicated:

	Year ended December 31,					
	2018	% of Revenues	2017	% of Revenues	2016	% of Revenues
(In thousands)						
Salaries and benefits	\$ 207,041	19.0%	\$ 200,125	23.2%	\$ 174,462	20.3%
Share-based compensation	38,922	3.6%	40,278	4.7%	40,475	4.7%
Development and tape-out costs	32,968	3.0%	39,001	4.5%	36,091	4.2%
Other	81,413	7.5%	86,474	10.0%	71,592	8.4%
Total Research and development	\$ 360,344	33.1%	\$ 365,878	42.4%	\$ 322,620	37.6%

Research and development expenses were \$360.3 million for the year ended December 31, 2018 compared to \$365.9 million for the year ended December 31, 2017, representing a decrease of \$5.6 million, or approximately 1.5%. The increase in salaries and benefits expenses was primarily attributable to higher bonuses and merit-based salary increases, partially offset by headcount decreases primarily related to the discontinuation of our 1550nm silicon photonics development activities. The decrease in development and tape-out costs was primarily due to lower tape-out costs during the year ended December 31, 2018 and the discontinuation of our 1550nm silicon photonics development activities. The decrease in other expenses was mainly due to lower outsourcing of research and development activities during the year ended December 31, 2018.

Research and development expenses were \$365.9 million for the year ended December 31, 2017 compared to \$322.6 million for the year ended December 31, 2016, representing an increase of \$43.3 million, or approximately 13.4%. The increase in salaries and benefits expenses was primarily attributable to headcount additions and merit-based salary increases. The increase in development and

tape-out costs reflected our continued investments in new products. The increase in other expenses was primarily due to higher depreciation expense and facilities costs.

Please refer to "Share-based Compensation Expense" below for a discussion of its impact on research and development expenses.

*Sales and Marketing.*

The following table presents details of our sales and marketing expenses for the periods indicated:

	Year ended December 31,					
	2018	% of Revenues	2017	% of Revenues	2016	% of Revenues
(In thousands)						
Salaries and benefits	\$ 92,163	8.5%	\$ 90,419	10.5%	\$ 76,774	9.0%
Share-based compensation	17,042	1.6%	15,693	1.8%	15,183	1.8%
Trade shows and promotions	16,230	1.5%	19,593	2.3%	19,893	2.3%
Other	23,118	2.0%	24,752	2.8%	21,930	2.5%
<b>Total Sales and marketing</b>	<b>\$ 148,553</b>	<b>13.6%</b>	<b>\$ 150,457</b>	<b>17.4%</b>	<b>\$ 133,780</b>	<b>15.6%</b>

Sales and marketing expenses were \$148.6 million for the year ended December 31, 2018 compared to \$150.5 million for the year ended December 31, 2017, representing a decrease of \$1.9 million, or approximately 1.3%. The increase in salaries and benefits expenses was primarily related to merit-based salary increases, higher bonuses and sales commissions, partially offset by headcount decreases. The decrease in trade shows and promotions was primarily due to lower trade show activities.

Sales and marketing expenses were \$150.5 million for the year ended December 31, 2017 compared to \$133.8 million for the year ended December 31, 2016, representing an increase of \$16.7 million, or approximately 12.5%. The increase in salaries and benefits expenses was primarily related to headcount additions and merit increases. The increase in other expenses primarily reflects higher depreciation expense, amortization costs related to acquired intangible assets associated with the EZchip acquisition and facilities costs.

Please refer to "Share-based Compensation Expense" below for a discussion of its impact on sales and marketing expenses.

*General and Administrative.*

The following table presents details of our general and administrative expenses for the periods indicated:

	Year Ended December 31,					
	2018	% of Revenues	2017	% of Revenues	2016	% of Revenues
(In thousands)						
Salaries and benefits	\$ 22,948	2.1%	\$ 21,476	2.5%	\$ 20,976	2.4%
Share-based compensation	13,428	1.2%	10,893	1.3%	13,085	1.5%
Professional services	25,308	2.3%	13,179	1.5%	26,602	3.1%
Other	7,186	0.7%	6,622	0.7%	7,859	1.0%
<b>Total General and administrative</b>	<b>\$ 68,870</b>	<b>6.3%</b>	<b>\$ 52,170</b>	<b>6.0%</b>	<b>\$ 68,522</b>	<b>8.0%</b>

General and administrative expenses were \$68.9 million for the year ended December 31, 2018 compared to \$52.2 million for the year ended December 31, 2017, representing an increase of \$16.7 million, or approximately 32.0%. The increase in salaries and benefits expenses was primarily related to merit-based salary increases and higher bonuses, partially offset by headcount decreases. The increase in professional services was primarily due to \$13.5 million of expenses related to the proxy contest during the year ended December 31, 2018.

General and administrative expenses were \$52.2 million for the year ended December 31, 2017 compared to \$68.5 million for the year ended December 31, 2016, representing a decrease of \$16.3 million, or approximately 23.9%. The decrease in professional services expenses was primarily due to the fact that during 2016 we incurred \$8.3 million of investment banking, consulting and other professional fees related to the EZchip acquisition, and \$5.1 million of litigation settlement costs and legal fees.

Please refer to "Share-based Compensation Expense" below for a discussion of its impact on general and administrative expenses.

### Share-based Compensation Expense.

The following table presents details of our share-based compensation expense that is included in each functional line item in our consolidated statements of operations:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
Cost of goods sold	\$ 1,950	\$ 2,000	\$ 2,375
Research and development	38,922	40,278	40,475
Sales and marketing	17,042	15,693	15,183
General and administrative	13,428	10,893	13,085
	<u>\$ 71,342</u>	<u>\$ 68,864</u>	<u>\$ 71,118</u>

Share-based compensation expenses were \$71.3 million for the year ended December 31, 2018, compared to \$68.9 million for the year ended December 31, 2017, representing an increase of \$2.4 million, or approximately 4%. The increase was primarily due to additional expense related to the 2018 focal grants, partially offset by the headcount decreases.

Share-based compensation expenses were \$68.9 million for the year ended December 31, 2017, compared to \$71.1 million for the year ended December 31, 2016, representing a decrease of \$2.2 million, or approximately 3%. The decrease was primarily related to \$4.8 million of cash payments made during 2016 related to accelerated RSUs that were paid to individuals who were terminated on the closing date of the EZchip acquisition, partially offset by the additional expense due to new hires and focal grants.

*Restructuring and impairment charges* for the year ended December 31, 2018 primarily consisted of employee termination and severance costs of \$3.5 million, contract exit costs with vendors of \$3.4 million, and impairment charges and a net loss on disposal of assets of \$2.4 million primarily related to the discontinuation of our 1550nm silicon photonics development activities. There was also a \$0.9 million impairment charge on fixed assets not related to the 1550nm silicon photonics development activities recorded during the year ended December 31, 2018.

*Impairment charges* for the year ended December 31, 2017 primarily consisted of the impairment charge of \$12.0 million related to the discontinuation of the 1550nm silicon photonics line of business, of which \$7.7 million was related to property and equipment and \$4.3 million was related to intangible assets.

*Interest and other, net.* Interest and other, net was an income of \$0.1 million for the year ended December 31, 2018 compared to an expense of \$4.8 million for the year ended December 31, 2017. The change was primarily attributable to a decrease in interest expense of \$5.8 million related to paying down the Term Debt, partially offset by an impairment charge of \$1.5 million related to one of our investments in a privately-held company.

Interest and other, net was an expense of \$4.8 million for the year ended December 31, 2017 compared to \$6.3 million for the year ended December 31, 2016. The change was primarily attributable to a \$1.5 million increase in interest income and gains on short-term investments.

*Provision for or Benefit from Taxes on Income.* Our benefit from taxes on income was \$22.0 million for the year ended December 31, 2018 compared to \$2.5 million for the year ended December 31, 2017. Our effective tax rate was (19.6)% and 11.3% for 2018 and 2017, respectively. For the year ended December 31, 2018, the difference between the (19.6)% effective tax rate and the 21% federal statutory rate resulted primarily from the release of a valuation allowance of \$32.1 million against the deferred tax assets related to our U.S. subsidiaries. The effective tax rate was also affected by foreign earnings taxed at rates lower than the federal statutory rates which resulted in a reduction of approximately \$16.0 million, partially offset by the accrual of unrecognized tax positions, and interest and penalties associated with unrecognized tax positions in the amount of \$4.5 million.

Our benefit from taxes on income was \$2.5 million for the year ended December 31, 2017 compared to a provision for taxes on income of \$5.8 million for the year ended December 31, 2016. Our effective tax rate was 11.3% and 23.9% for 2017 and 2016, respectively. For the year ended December 31, 2017, the difference between the 11.3% effective tax rate and the 35% federal statutory rate resulted primarily from a decrease of \$15.7 million in deferred tax assets due to the effects of the recently enacted U.S. tax reform, partially offset by a \$10.4 million decrease in the valuation allowance primarily due to the same effects.

## Liquidity and Capital Resources

On February 23, 2016, we completed the acquisition of EZchip and acquired its cash of approximately \$87.5 million and short term investments of \$108.9 million. We financed the acquisition purchase price of approximately \$782.2 million and related transaction expenses with cash on hand, and with \$280.0 million in term debt. On April 30, 2018, we paid off all outstanding principal and interest related to the Term Debt.

Historically, we have financed our operations through a combination of sales of equity securities and cash generated by operations. As of December 31, 2018, our principal source of liquidity consisted of cash and cash equivalents of \$56.8 million and short-term investments of \$381.7 million. After taking into consideration our forecasted operating expenses, and capital expenditures to support our infrastructure and growth, we expect our current cash and cash equivalents, short-term investments, and our cash flows from operating activities will be sufficient to fund our operations.

We are an Israeli company and as of December 31, 2018 our subsidiaries outside of Israel held approximately \$22.7 million in cash and cash equivalents and short term investments.

Our cash and cash equivalents, short-term investments, and working capital at December 31, 2018 and December 31, 2017 were as follows:

	Year ended December 31,	
	2018	2017
	(in thousands)	
Cash and cash equivalents	\$ 56,766	\$ 62,473
Short-term investments	381,724	211,281
Total	\$ 438,490	\$ 273,754
Working capital	\$ 497,666	\$ 310,286

Our ratio of current assets to current liabilities was 3.3:1 at December 31, 2018 and 2.6:1 at December 31, 2017.

### Operating Activities

Net cash provided by our operating activities amounted to \$264.9 million in the year ended December 31, 2018. Net cash provided by operating activities was attributable to net income of \$134.3 million adjusted by net non-cash items of \$151.0 million, gain on short-term investments of \$5.3 million, and changes in assets and liabilities of \$15.1 million. Non-cash expenses consisted primarily of \$101.6 million of depreciation and amortization, \$71.3 million of share-based compensation, and \$4.8 million of impairment charges and loss on disposal of property and equipment, partially offset by an increase in deferred income taxes of \$26.7 million. The \$15.1 million net cash outflow from changes in assets and liabilities resulted from increases in inventories of \$43.3 million primarily due to higher demand for our products, and increases in prepaid expenses and other assets of \$2.7 million, partially offset by increases in accrued liabilities and other liabilities of \$16.8 million, primarily due to higher focal bonuses and payroll related liabilities as well as increases in deferred revenue, increases in accounts payable of \$10.5 million, primarily due to the timing of purchases and payments, and a decrease in accounts receivable of \$3.6 million primarily due to the timing of sales and collections.

Net cash provided by our operating activities amounted to \$161.3 million in the year ended December 31, 2017. Net cash provided by operating activities was attributable to net loss of \$19.4 million adjusted by net non-cash items of \$182.6 million, gain on short-term investments of \$3.5 million, and changes in assets and liabilities of \$1.6 million. Non-cash expenses consisted primarily of \$103.8 million of depreciation and amortization, \$68.9 million of share-based compensation, and \$12.0 million of impairment charges, partially offset by an increase in deferred income taxes of \$2.2 million. The \$1.6 million cash inflow from changes in assets and liabilities resulted from increases in accrued liabilities and other liabilities of \$15.2 million, primarily due to higher accrued salaries, benefits and severance liabilities, partially offset by, among other things, an increase in accounts receivable of \$12.2 million primarily due to the timing of sales.

### Investing Activities

Net cash used in investing activities was \$225.6 million in the year ended December 31, 2018. Cash used in investing activities was primarily attributable to net purchases of short-term investments of \$164.9 million, \$36.3 million for purchases of property and equipment, \$12.5 million for purchases of investments in privately-held companies, \$7.4 million of cash used for acquisitions, \$6.5 million for purchases of intangible assets, and \$1.2 million for purchases of severance-related insurance policies, partially offset by \$3.2 million of proceeds from sales of property and equipment.

Net cash provided by investing activities was \$2.0 million in the year ended December 31, 2017. Cash provided by investing activities was primarily attributable to net proceeds from sales, maturities and purchases of short-term investments of \$63.5 million,

partially offset by \$41.4 million for purchases of property and equipment, \$15.0 million for purchases of investments in privately-held companies, \$2.8 million for purchases of intangible assets, \$1.3 million for purchases of severance-related insurance policies, and \$0.9 million of cash used for acquisitions.

### ***Financing Activities***

Net cash used in financing activities was \$45.1 million in the year ended December 31, 2018. Cash used in financing activities was primarily due to \$74.0 million of principal payments on the Term Debt and \$8.4 million of payments on intangible asset obligations, partially offset by \$37.4 million of proceeds from issuances of ordinary shares through our employee equity incentive plans.

Net cash used in financing activities was \$149.6 million in the year ended December 31, 2017. Cash used in financing activities was primarily due to \$172.0 million of principal payments on the Term Debt and \$7.4 million of payments on intangible asset obligations, partially offset by \$29.7 million of proceeds from issuances of ordinary shares through our employee equity incentive plans.

### **Contractual Obligations**

The following table summarizes our contractual obligations at December 31, 2018 and the effect those obligations are expected to have on our liquidity and cash flow in future periods:

	<b>Contractual Obligations</b>		
	<b>Total</b>	<b>Non-cancelable operating lease commitments</b>	<b>Purchase commitments</b>
	(in thousands)		
2019	\$ 217,303	\$ 21,585	\$ 195,718
2020	20,098	18,361	1,737
2021	15,830	15,245	585
2022	10,562	10,301	261
2023	10,349	10,349	—
Thereafter	46,042	46,042	—
<b>Total</b>	<b>\$ 320,184</b>	<b>\$ 121,883</b>	<b>\$ 198,301</b>

For purposes of this table, purchase commitments are defined as agreements that are enforceable and legally binding 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 within relatively short time horizons. In addition, we have purchase orders that represent authorizations to purchase rather than binding agreements. 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.

### ***Other Commitments***

For additional information about other commitments, see Note 10, "Commitments and Contingencies" in the notes to the consolidated financial statements.

### ***Recent accounting pronouncements***

See Note 1, "The Company and Summary of Significant Accounting Policies" in the notes to the consolidated financial statements for a full description of recent accounting standards, including the respective dates of adoption and effects on our consolidated financial statements.

### **Off-Balance Sheet Arrangements**

As of December 31, 2018, we did not have any off-balance sheet arrangements.

### **Impact of Currency Exchange Rates**

Exchange rate fluctuations could have a material adverse effect on our business, financial condition and results of operations. Our most significant foreign currency exposure is the NIS. We do not enter into derivative transactions for speculative or trading purposes. We use foreign currency derivative contracts to hedge assets, liabilities and a significant portion of our operating expenses denominated in NIS. Our derivative instruments are recorded at fair value in assets or liabilities. For the effective portion of

derivatives designated as cash flow hedges, the gains or losses are recorded as a component of accumulated other comprehensive income and subsequently reclassified into operating expenses in the same period in which the hedged operating expenses are recognized. For the ineffective portion of derivatives designated as cash flow hedges, if any, as well as derivatives not designated as hedging instruments, the change in fair value is immediately recognized in other income (loss), net. See Note 8, "Derivatives and Hedging Activities" to the consolidated financial statements.

## **ITEM 7A—QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### ***Interest rate fluctuation risk***

Our investments consist of cash, money market funds, certificates of deposit, and interest bearing investments in government debt securities, commercial paper, corporate bonds, municipal bonds and foreign government bonds with an average maturity of 0.7 years. The primary objective of our investment activities is to preserve principal and ensure liquidity while maximizing income without significantly increasing risk. By policy, we limit the amount of our credit exposure through diversification and restricting our investments to highly rated securities. At the time of purchase, we do not invest more than 4% of the total investment portfolio in individual securities, except U.S. Treasury or agency securities. Highly rated long-term securities are defined as having a minimum Moody's, Standard & Poor's or Fitch rating of A2 or A, respectively. Highly rated short-term securities are defined as having a minimum Moody's, Standard & Poor's or Fitch rating of P-1, A-1 or F-1, respectively. We have not experienced any significant losses on our cash equivalents or short-term investments. We do not enter into investments for trading or speculative purposes. Our investments are exposed to market risk due to a fluctuation in interest rates, which may affect our interest income and the fair market value of our investments. An immediate 100 basis points change in interest rates would have a \$2.2 million effect on the fair market value of our portfolio.

### ***Foreign currency exchange risk***

We derive all of our revenues in U.S. dollars. The U.S. dollar is our functional and reporting currency in all of our foreign locations. However, a significant portion of our liabilities and operating expenses, consisting principally of salaries and related personnel costs, are denominated in NIS. This foreign currency exposure gives rise to market risk associated with exchange rate movements of the U.S. dollar against the NIS. Furthermore, we anticipate that a material portion of our expenses will continue to be denominated in NIS. To the extent the U.S. dollar weakens against the NIS, we will experience a negative impact on our net income.

To reduce the impact of foreign exchange risks associated with forecasted future cash flows and existing assets and liabilities, we have established a balance sheet and anticipated transaction risk management program in order to reduce the volatility in our consolidated statement of operations. Currency derivative instruments and natural hedges are generally utilized in this hedging program. We do not enter into derivative instruments for trading or speculative purposes. We account for our derivative instruments as either assets or liabilities and carry them at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

Our hedging program reduces, but does not eliminate the impact of currency exchange rate movements (see Part I, Item 1A, "Risk Factors"). If we were to experience a strengthening of NIS against USD of 10%, the impact on assets and liabilities denominated in NIS, after taking into account hedges and offsetting positions, would result in a loss before taxes of approximately \$0.5 million at December 31, 2018. There would also be an impact on future operating expenses denominated in NIS. For the month ending December 31, 2018, approximately \$21.9 million of our monthly expenses were denominated in NIS. As of December 31, 2018, we had derivative contracts designated as cash flow hedges in the notional amount of approximately 348.4 million NIS, or approximately \$93.0 million based upon the exchange rate on that day. In addition, as of December 31, 2018, we had derivative contracts hedging against NIS denominated assets and liabilities in the notional amount of approximately 216.8 million NIS, or approximately \$57.8 million based upon the exchange rate on that day.

Our derivatives expose us to credit risk to the extent that the counterparties may be unable to meet the terms of the agreement. We seek to mitigate such risk by limiting our counterparties to major financial institutions and by spreading the risk across a number of major financial institutions. However, failure of one or more of these financial institutions is possible and could result in incurred losses.

In addition, a material portion of our leases are denominated in currencies other than the U.S. Dollar, mainly in NIS. In accordance with the new lease accounting standard, which became effective on January 1, 2019, the associated lease liabilities will be remeasured using the current exchange rate in the future reporting periods, which may result in material foreign exchange gains or losses. See Note 1, "The Company and Summary of Significant Accounting Policies" in the notes to the consolidated financial statements for more details.



### *Inflation related risk*

We believe that the rate of inflation in Israel has not had a material impact on our business to date. Our cost in Israel in U.S. dollar terms will increase if inflation in Israel exceeds the devaluation of the NIS against the U.S. dollar or if the timing of such devaluation lags behind inflation in Israel.

### **ITEM 8—FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The financial statements required by Item 8 are submitted as a separate section of this report and are incorporated by reference into this Item 8. See Item 15, "Exhibits and Financial Statement Schedules."

#### **Summary Quarterly Data—Unaudited**

	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
	2018	2018	2018	2018	2017	2017	2017	2017
	(in thousands, except per share data)							
Total revenues	\$ 290,070	\$ 279,211	\$ 268,462	\$ 251,000	\$ 237,581	\$ 225,699	\$ 211,962	\$ 188,651
Cost of revenues	100,345	95,562	103,668	88,998	85,238	77,335	73,427	64,450
Gross profit	189,725	183,649	164,794	162,002	152,343	148,364	138,535	124,201
Operating expenses:								
Research and development	93,836	92,930	87,152	86,426	94,123	90,916	92,348	88,491
Sales and marketing	37,042	36,344	35,673	39,494	38,761	37,829	38,110	35,757
General and administrative	14,824	13,895	23,635	16,516	14,136	13,039	12,476	12,519
Restructuring and impairment charges	21	947	1,774	7,587	12,019	—	—	—
Total operating expenses	145,723	144,116	148,234	150,023	159,039	141,784	142,934	136,767
Income (loss) from operations	44,002	39,533	16,560	11,979	(6,696)	6,580	(4,399)	(12,566)
Interest expense	(77)	(66)	(871)	(1,171)	(1,932)	(2,016)	(1,996)	(1,993)
Other income	39	1,112	533	638	649	956	827	683
Interest and other, net	(38)	1,046	(338)	(533)	(1,283)	(1,060)	(1,169)	(1,310)
Income (loss) before taxes on income	43,964	40,579	16,222	11,446	(7,979)	5,520	(5,568)	(13,876)
Provision for (benefit from) taxes on income	1,132	3,522	(304)	(26,397)	(5,386)	2,117	2,423	(1,632)
Net income (loss)	\$ 42,832	\$ 37,057	\$ 16,526	\$ 37,843	\$ (2,593)	\$ 3,403	\$ (7,991)	\$ (12,244)
Net income (loss) per share — basic	\$ 0.80	\$ 0.70	\$ 0.31	\$ 0.73	\$ (0.05)	\$ 0.07	\$ (0.16)	\$ (0.25)
Net income (loss) per share — diluted	\$ 0.78	\$ 0.68	\$ 0.30	\$ 0.71	\$ (0.05)	\$ 0.07	\$ (0.16)	\$ (0.25)

### **ITEM 9—CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

The information required by this Item 9 was previously reported in the Company's Current Report on Form 8-K that was filed with the Securities and Exchange Commission on February 24, 2017.

### **ITEM 9A—CONTROLS AND PROCEDURES**

#### ***Disclosure Controls and Procedures***

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our CEO (principal executive officer) and CFO (principal financial officer), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our CEO and CFO, of the effectiveness of our disclosure controls and procedures as of December 31, 2018. Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2018 to provide the reasonable assurance described above.

***Changes in Internal Control over Financial Reporting***

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

***Management's Annual Report on Internal Control over Financial Reporting***

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including the CEO and the CFO, we carried out an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2018 using the criteria established in "Internal Control-Integrated Framework" (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

Kost, Forer, Gabbay and Kasierer, a member of EY Global, our independent registered public accounting firm, audited our consolidated financial statements and has issued a report on the effectiveness of our internal control over financial reporting as of December 31, 2018, as stated in their report which appears under Item 8.

**ITEM 9B—OTHER INFORMATION**

None.

### PART III

#### ITEM 10—DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

##### Directors of the Registrant

The names of each member of our board of directors (our “**Board**”), the year in which each director was first elected to the board, the age of each director as of February 21, 2019 and the principal occupation of each director are as follows:

Name	Year Director First Elected	Age	Principal Occupation
Irwin Federman	1999	83	Chairman of the Board of Directors, Mellanox Technologies, Ltd.; Senior Advisor, U.S. Venture Partners
Eyal Waldman	1999	58	President and Chief Executive Officer, Mellanox Technologies, Ltd.
Glenda Dorchak	2009	64	Advisor to and board member of technology companies
Amal M. Johnson	2006	66	Advisor to and board member of technology companies
Jack Lazar	2018	53	Advisor to and board member of technology companies
Jon A. Olson	2018	65	Advisor to and board member of HomeUnion, Inc.
Umesh Padval	2018	61	Partner, Thomvest Ventures
David Perlmutter	2014	65	Managing General Partner of Eucalyptus Growth Capital
Steve Sanghi	2018	63	President, Chief Executive Officer and Chairman of the Board of Directors of Microchip Technology Incorporated
Gregory Waters	2018	58	President, Chief Executive Officer and member of the Board of Directors of Integrated Device Technology, Inc.
Thomas Weatherford	2005	72	Advisor to technology companies and former financial executive

*Irwin Federman* has served as a member of our Board since June 1999 and as chairman of our Board since June 2013. He has also served as our lead independent director since March 2010. Mr. Federman was a general partner of U.S. Venture Partners (“**USVP**”), a venture capital firm, from April 1990 to October 2015. He is now a Senior Advisor to USVP. Mr. Federman was president and chief executive officer (“**CEO**”) of Monolithic Memories, Inc., a semiconductor company, from 1978 to 1987. Mr. Federman serves on the boards of directors of Intermolecular, Inc., a materials analysis and discovery company, Check Point Software Technologies Ltd., a security software company, and a number of private companies and charitable trusts. Mr. Federman previously served on the board of directors of SanDisk Corporation. Mr. Federman holds a Bachelor of Science in Economics from Brooklyn College and was awarded an Honorary Doctorate of Engineering from Santa Clara University. Mr. Federman has received Lifetime Achievement awards from the International Business Forum, Silicon Valley Bank and Deloitte and Touche. Mr. Federman is located in the United States.

Mr. Federman’s intimate knowledge of the business, financial and operational aspects of technology companies in all stages of development over the past forty plus years uniquely qualifies him to serve as chairman of our Board and, in that capacity as a non-executive director, to serve as our lead independent director.

*Eyal Waldman* is a co-founder of Mellanox, and has served as our president and CEO and as a member of our Board since March 1999. From March 1999 until June 2013, he also served as the chairman of our Board. From March 1993 to February 1999, Mr. Waldman served as vice president of engineering and was a co-founder of Galileo Technology, Ltd., a semiconductor company, which was acquired by Marvell Technology Group, Ltd. in January 2001. From August 1989 to March 1993, Mr. Waldman held a number of design and architecture related positions at Intel Corporation (“**Intel**”), a manufacturer of computer, networking and communications products. Mr. Waldman also serves and previously served on the boards of directors of a number of private companies. Mr. Waldman holds a Bachelor of Science in Electrical Engineering and a Master of Science in Electrical Engineering from the Technion—Israel Institute of Technology (“**Technion**”). Mr. Waldman is located in Israel.

Mr. Waldman's qualifications to serve on our Board include his decades-long experience in the semiconductor industry, his role as a co-founder of Mellanox, eighteen years of service as our president and CEO, service as our chairman of our Board between March 1999 and June 2013, and his design, engineering and architecture expertise. Our Board particularly values Mr. Waldman's extensive experience in the semiconductor industry and as our CEO, which gives him unique insights into the Company's challenges, opportunities and operations.

*Glenda Dorchak* has served as a member of our Board since July 2009 and a member of our nominating and corporate governance committee. Since July 2018, Ms. Dorchak has served on the board of Quantenna Communications, a wireless technology provider, since June 2018, where she chairs the compensation committee; and the board of Ansys Inc., a pervasive engineering simulation software provider, since July 2018, where she serves on the compensation committee. She served on the board of Energy Focus from July 2015 to February 2019. She is also an operating advisor to OMERS Private Equity, a private equity investment fund for a Canadian pension plan. Ms. Dorchak was executive vice president and general manager of Global Business for Spansion, Inc., a Sunnyvale, California based flash memory provider, from April 2012 to June 2013. From January 2009 until September 2010, when it was acquired by Red Bend Software, Ms. Dorchak was the CEO and vice chairman of VirtualLogix, Inc., a Sunnyvale, California based provider of virtualization software for wireless and embedded devices. Prior to VirtualLogix, Inc., she served as chairman and CEO of Intrinsic Software International, Inc., a product development company of hardware, software, engineering and production services, from August 2006 to November 2008 where she had also served as an independent director from September 2003 to December 2004. Ms. Dorchak was an executive at Intel from 2001 to 2006, including serving as vice president and chief operating officer of Intel's Communications Group; vice president and general manager of Intel's Consumer Electronics Group; and vice president and general manager of the Broadband Products Group. Prior to her tenure at Intel, she served as chairman and CEO of Value America, Inc., an online retailer, from September 1999 to November 2000 and president from September 1998 to August 1999. From 1974 to 1998, Ms. Dorchak worked for IBM Corporation ("IBM"), a global technology provider, both in Canada and later in Raleigh, North Carolina, where she held executive positions with the IBM's Personal Systems Group, including directorships with the Ambra Systems Group and IBM PC North America. Ms. Dorchak is located in the United States.

Ms. Dorchak's qualifications to serve on our Board include her executive and director experience in the software and technology industries. Our Board particularly values Ms. Dorchak's deep knowledge, experience and understanding of global markets gained from over 30 years in the technology industry.

*Amal M. Johnson* has served as a member of our Board since October 2006 and is a member of our compensation committee. Ms. Johnson is the former executive chairperson of the board of Author-it Software Corporation, a Software-as-a-Service private company that provides a platform for creating, maintaining, and distributing single-sourced technical content. Prior to joining Author-it, Ms. Johnson served as the chairman of MarketTools, Inc., an Internet-based market research company, from August 2008 through January of 2012, and as its CEO from March 2005 through August 2008. Prior to joining MarketTools, Ms. Johnson was a general partner at ComVentures L.P., an investment fund, from April 2004 to March 2005 and, from March 1999 to March 2004, a general partner at Lightspeed Venture Partners, a venture capital firm, focusing on enterprise software and infrastructure. Ms. Johnson was president of Baan Supply Chain Solutions, an enterprise resource planning software company, from January 1998 to December 1998, president of Baan Affiliates from January 1997 to December 1997, and president of Baan Americas from October 1994 to December 1996. Prior to that, Ms. Johnson served as president of ASK Manufacturing Systems, a defense and space company, from August 1993 to July 1994 and held executive positions at IBM from 1977 to June 1993. Ms. Johnson also serves on the board of directors of Intuitive Surgical Inc., a medical device company, CalAmp, a wireless networking company, and Essex Property Trust, Inc. Ms. Johnson holds a Bachelor of Arts in Mathematics from Montclair State University, and studied computer science at Stevens Institute of Technology graduate school of engineering. Ms. Johnson is located in the United States.

Ms. Johnson's qualifications to serve on our Board include her extensive executive and public company director experience in the software and technology industries. Our Board particularly values Ms. Johnson's significant enterprise infrastructure knowledge acquired from executive leadership roles at software and market research focused companies.

*Jack Lazar* has served as a member of our Board since June 2018. He is currently an independent business consultant and has served on the board of directors at Silicon Laboratories, Inc. since April 2013, Quantenna Communications since July 2016 and Resideo Technologies, Inc. since October 2018. Mr. Lazar also served on the board of directors of TubeMogul, Inc., an enterprise software company for digital branding, from October 2013 to December 2016 when it was acquired by Adobe Systems Incorporated. From January 2014 until March 2016, he served as chief financial officer and principal financial and accounting officer at GoPro, Inc., a provider of wearable and mountable capture devices, where he completed its 2014 IPO. From January 2013 to January 2014, he served as an independent business consultant. From May 2011 to January 2013, Mr. Lazar was senior vice president, corporate development and general manager at Qualcomm Atheros, a developer of communications semiconductor solutions. Mr. Lazar served in a variety of positions at Atheros Communications, Inc. from September 2003 until it was acquired by Qualcomm in May 2011. Most recently, he served as Atheros' chief financial officer

and senior vice president of corporate development. During his tenure at Atheros, the company completed its IPO. Mr. Lazar is a certified public accountant and holds a B.S. in commerce with an emphasis in accounting from Santa Clara University.

Mr. Lazar's qualifications to serve on our Board include his strong financial, technological and operational expertise gained from his experience as a technology company executive and consultant.

*Jon A. Olson* has served as a member of our Board since June 2018. Mr. Olson also serves on the board of directors of HomeUnion, Inc., a leading online investment management platform dedicated to the residential real estate market, a position he has held since November 2018. From August 2016 to November 2018, he was an advisor to the board of HomeUnion, Inc. Mr. Olson previously served as the chief financial officer of Xilinx, Inc., a leading provider of programmable semiconductor platforms ("**Xilinx**"), from June 2005 until his retirement in May 2016. While serving as chief financial officer, he also held a variety of other senior management positions at Xilinx, including most recently as executive vice president from May 2014 to July 2016 and prior to that, as senior vice president of finance from August 2006 to May 2014 and vice president of finance from June 2005 to August 2006. Prior to joining Xilinx, Mr. Olson spent more than 25 years at Intel, serving in a variety of positions from 1979 to 2005, including as vice president of finance and enterprise services, and director of finance. Mr. Olson also previously served as a member of the board of directors of InvenSense, Inc., a leading provider of MEMS sensor platforms, from October 2011 until it was acquired by TDK Corporation in May 2017. Mr. Olson holds a B.S. in Accounting from Indiana University Bloomington and an M.B.A. in Finance from Santa Clara University.

Mr. Olson's qualifications to serve on our Board include his more than 30 years of experience in senior roles of financial responsibility in the semiconductor industry, including as chief financial officer of Xilinx, together with his track record of growing profitable businesses and his experience at various semiconductor and technology companies.

*Umesh Padval* has served as a member of our Board since February 2018. He has also served as a venture partner at Thomvest Ventures since 2016. Previously, Mr. Padval served as a partner at Bessemer Ventures Partners from 2007 to 2016 and as vice president of LSI Corporation from 2001 to 2007. From 1998 to 2001, Mr. Padval served as President and then CEO of C-Cube Microsystems, Inc. ("**C-Cube**") from 1993 to 1998, Mr. Padval served as vice president and general manager at VLSI Technology, Inc ("**VLSI**"). From 1987 to 1993, Mr. Padval held various management positions at VLSI related to marketing and sales. Prior to joining VLSI, Mr. Padval served in various engineering and product marketing roles at Advanced Micro Devices, Inc. from 1984 to 1987. Since 2008, Mr. Padval has served on the board of directors of Integrated Device Technology, Inc. Mr. Padval also previously served on the board of directors of Silicon Image, Inc., Monolithic Power Systems, Inc., Elantec Semiconductor, Inc., C-Cube and Entropic Communications, Inc. Mr. Padval holds Master of Science degrees from Stanford University and Pennsylvania State University and a Bachelors of Technology from Indian Institute of Technology, Bombay. Mr. Padval is located in the United States.

Mr. Padval's qualifications to serve on our Board include his over 30 years of senior leadership experience in the semiconductor industry. Our Board particularly values Mr. Padval's strong engineering, marketing and operating expertise based on extensive public and private board experience.

*David Perlmutter* has served as a member of our Board since May 2014 and chairs our technology, strategy and M&A committee. Since March 2016, Mr. Perlmutter has also served as a managing general partner of Eucalyptus Growth Capital, focusing on investing in Israeli Hi Tech growth start-ups. Mr. Perlmutter previously served, since 2009 and until February 2014, as an executive vice president, general manager of Intel's Architecture Group and chief product officer of Intel. During this period, Mr. Perlmutter was responsible for the business and development of Intel's platform solutions for all computing and communication segments including datacenters, desktops, laptops, handhelds, embedded devices, and computer electronics. Prior to that period, Mr. Perlmutter served at Intel for 29 years, during which he held various management positions and was instrumental in developing several major products at Intel. Since April 2014, Mr. Perlmutter has served as a board member of several private technology companies, including Stratoscale Ltd., a virtualization technology company, OptimaTest Ltd., a security and investigations company, and Kili Technology Corporation, a silicon, electronic and software design company. He also currently chairs two nonprofit organizations, The Israel Innovation Institute, and Mishelanu—Strengthening Jewish and Israeli Identity of 2nd Generation Israelis in the US, and has been a member of the Board of Governors of Technion since January 2005. Mr. Perlmutter holds patents on branch target buffers and multiprocessing cache coherency protocols. In addition, he received an award for innovation in industrial development from the Israeli president in 1987 for the development of the i387 math coprocessor and was elected as a Fellow of the Institute of Electronics and Electrical Engineers in 2008 for his contributions to the mobile computer industry. Mr. Perlmutter graduated from the Technion, with a B.Sc. in Electrical Engineering. Mr. Perlmutter is located in Israel.

Mr. Perlmutter's qualifications to serve on our Board include his executive experience in the software and technology industries. Our Board particularly values the significant knowledge he has acquired from executive leadership roles at Intel.

*Steve Sanghi* has served as a member of our Board since February 2018. He has also served as the President of Microchip Technology Inc. (“**Microchip**”) since August 1990, the CEO of Microchip since October 1991 and the chairman of the board of directors of Microchip since October 1993. Prior to joining Microchip, Mr. Sanghi served as vice president of operations at Waferscale Integration, Inc., a semiconductor company, from 1988 to 1990. Mr. Sanghi served at Intel Corporation from 1978 to 1988, where he held various positions in management and engineering, including serving as general manager of programmable memory operations. Mr. Sanghi currently serves on the board of directors of Myomo, Inc., a biotechnology company. Mr. Sanghi previously served on the boards of directors of Hittite Microwave Corporation from 2013 until its sale in 2014 and Xyratex, Ltd. from 2004 until its sale in 2014. Mr. Sanghi was also a member of the board of FIRST® (For Inspiration and Recognition of Science and Technology) Robotics, a non-profit company formed to inspire young students in the vital areas of Science, Technology, Engineering and Math from 2007 to 2016. Mr. Sanghi has won numerous industry awards, including “Executive of the Year” by Electronic Engineering Times in 2010 and 2016. He also won the “Arizona Entrepreneur of the Year” award by Ernst and Young in 1994. Mr. Sanghi holds a Master of Science degree in Electrical and Computer Engineering from the University of Massachusetts, and a Bachelor of Science degree in Electronics and Communication from Punjab University, India. Mr. Sanghi is located in the United States.

Mr. Sanghi’s qualifications to serve on our Board include over 30 years of operations and senior management experience, leading large-scale organizations and teams in the semiconductor industry. Our Board particularly values Mr. Sanghi’s decades of experience as the president, CEO and chairman of the board of directors of Microchip.

*Gregory Waters* has served as a member of our Board since June 2018. He has also served as the president and CEO and a member of the board of directors of Integrated Device Technology, Inc., a company that designs, manufactures, and markets low-power, high-performance analog mixed-signal semiconductor solutions for the advanced communications, computing, and consumer industries, since January 2014. Prior to that, he served as executive vice president and general manager of front-end solutions at Skyworks Solutions, Inc., a manufacturer of semiconductors for use in radio frequency and mobile communications systems (“**Skyworks**”), from 2003 to December 2012, where he led the company’s wireless businesses to a decisive industry leadership position. Before Skyworks, Mr. Waters served as senior vice president of strategy and business development at Agere Systems Inc., an integrated circuit components company (“**Agere**”), where his responsibilities included M&A and IP licensing and where he played a key role in the company’s IPO. Mr. Waters joined Agere in 1998, having served in various other capacities, including as vice president of the wireless communications business and vice president of the broadband communications business. Mr. Waters began his career at Texas Instruments Inc., a technology company that designs and manufactures semiconductors and various integrated circuits, and served in a variety of management positions in sales, customer design centers, and product line management. Mr. Waters currently serves on the board of directors of Semiconductor Industry Association (“**SIA**”), a trade association and lobbying group that represents the United States semiconductor industry. Mr. Waters has a B.S. in Engineering from the University of Vermont and an M.S. in Computer Science from Northeastern University, with a specialization in Artificial Intelligence.

Mr. Water’s qualifications to serve on our Board include his technological expertise and extensive senior management experience in the semiconductor industry, including as the CEO, president and a director at Integrated Device Technology, Inc.

*Thomas Weatherford* has served as a member of our Board since November 2005. From August 1997 until his retirement in January 2003, Mr. Weatherford served as executive vice president and chief financial officer of Business Objects SA, a provider of business intelligence software. Mr. Weatherford also serves on the board of directors of Guidewire Software, Inc., an insurance technology company. Mr. Weatherford also previously served on the board of directors of Spanion Inc., a provider of flash memory products from May 2010 until its merger with Cypress Semiconductor Corporation in March 2015, Tesco Corporation, a global provider of technology-based solutions to the upstream energy industry, from May 2004 to May 2013 and several privately held companies. Mr. Weatherford has also served on a Securities and Exchange Commission (“**SEC**”) advisory committee on accounting standards. Mr. Weatherford holds a Bachelor of Business Administration from the University of Houston. Mr. Weatherford is located in the United States.

Mr. Weatherford’s qualifications to serve on our Board include his accounting and financial expertise, experience in the semiconductor and technology industries and service on the boards of directors of several companies. Our Board particularly values Mr. Weatherford’s experience on public company audit committees and overseeing the preparation of financial statements, as well as his familiarity with accounting standards.

#### **Executive Officers of the Registrant**

Set forth below is certain information regarding each of our executive officers as of February 21, 2019.

<b>Name</b>	<b>Age</b>	<b>Position(s)</b>
Eyal Waldman	58	President and Chief Executive Officer
Doug Ahrens	52	Chief Financial Officer
Michael Kagan	61	Chief Technology Officer
Marc Sultzbaugh	55	Sr. Vice President of Worldwide Sales
Amir Prescher	50	Sr. Vice President of End-User Sales & Business Development

*Eyal Waldman* is a co-founder of Mellanox, and has served as our president and CEO and as a member of our Board since March 1999. From March 1999 until June 2013, he also served as the chairman of our Board. From March 1993 to February 1999, Mr. Waldman served as vice president of engineering and was a co-founder of Galileo Technology, Ltd., a semiconductor company, which was acquired by Marvell Technology Group, Ltd. in January 2001. From August 1989 to March 1993, Mr. Waldman held a number of design and architecture related positions at Intel, a manufacturer of computer, networking and communications products. Mr. Waldman also serves and previously served on the boards of directors of a number of private companies. Mr. Waldman holds a Bachelor of Science in Electrical Engineering and a Master of Science in Electrical Engineering from the Technion. Mr. Waldman is located in Israel.

*Doug Ahrens* has served as our chief financial officer since January 2019. Mr. Ahrens has over 20 years of operational and strategic finance experience from multinational companies. Previously, from September 2015 to December 2018, Mr. Ahrens served as chief financial officer of GlobalLogic Inc., a private software engineering firm. From October 2013 to September 2015, Mr. Ahrens served as chief financial officer of Applied Micro Circuits Corporation, a then-publicly traded fabless semiconductor manufacturer, from October 2013 to September 2015. Prior to October 2013, Mr. Ahrens held various finance roles at Maxim Integrated Products, Inc. and Intel. Mr. Ahrens holds a Bachelor of Science in Mechanical Engineering from the University of California, San Diego and a Masters of Business Administration from Harvard Business School. Mr. Ahrens is located in the United States.

*Michael Kagan* is a co-founder of Mellanox and has served as our chief technology officer since January 2009. Previously, Mr. Kagan served as our vice president of architecture from May 1999 to December 2008. From August 1983 to April 1999, Mr. Kagan held a number of architecture and design positions at Intel. While at Intel, between March 1993 and June 1996, Mr. Kagan managed Pentium MMX design, and from July 1996 to April 1999, he managed the architecture team of the Basic PC product group. Mr. Kagan holds a Bachelor of Science in Electrical Engineering from Technion. Mr. Kagan is located in Israel.

*Marc Sultzbaugh* has served as our senior vice president of worldwide sales since December 2012. Previously Mr. Sultzbaugh served as vice president of worldwide sales from April 2007 until December 2012. Mr. Sultzbaugh joined Mellanox in 2001 as director of high performance computing and director of central area sales and was later promoted to senior director of sales in October 2005. Prior to joining Mellanox, he held various executive sales and marketing positions with Brooktree Semiconductor, a semiconductor company. From 1985 to 1989, Mr. Sultzbaugh was an engineer at AT&T Microelectronics, a microchip and fiber-optic component manufacturing company. He holds a Bachelor of Science degree in Electrical Engineering from The University of Missouri-Rolla and a Masters of Business Administration from The University of California, Irvine. Mr. Sultzbaugh is located in the United States.

*Amir Prescher* has served as our senior vice president of end-user sales and business development since December 2018. Previously, Mr. Prescher served as senior vice president of business development from February 2013 to December 2018 and as vice president of business development from February 2011 to January 2013. Prior to joining Mellanox, Mr. Prescher was a founder of Voltaire Ltd. where he served in various capacities, including executive vice president of business development from 2008 to 2011, vice president of business development from 2001 to 2008, vice president of marketing from 1999 to 2008, and from 1997 to 1999, as vice president of research and development. Prior to Voltaire Ltd., Mr. Prescher served as an officer in Israel's Defense Forces Technical Intelligence Unit. Mr. Prescher studied at Tel-Aviv University with a focus in electricity and electronics engineering.

#### **Family Relationships**

There are no family relationships among any of our directors or executive officers.

## Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires directors, executive officers and persons who own more than 10% of a registered class of our equity securities to file initial reports of ownership and reports of changes in ownership with the SEC and The Nasdaq Stock Market (“Nasdaq”). Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. On February 14, 2019, Mr. Johnson filed a Form 5 to report two transactions that were not timely reported on two separate Forms 4 during 2018.

Other than as discussed above, based solely on a review of copies of such forms received with respect to the fiscal year 2018, we believe that all directors, executive officers and persons who own more than 10% of our ordinary shares have complied with the reporting requirements of Section 16(a).

### Audit Committee

Our Board has a standing audit committee, the members of which are Thomas Weatherford, chair, Jack Lazar and Jon A. Olson. Our board has determined that all three members of the audit committee are financial experts as defined by the SEC rules and has the requisite financial sophistication as defined by Nasdaq rules and regulations. Our board has determined that Mr. Weatherford is independent within the meaning of the independent director standards of Nasdaq and the SEC.

### Code of Ethics

Our written Code of Business Conduct and Ethics applies to all of our directors and employees, including our executive officers. The Code of Business Conduct and Ethics is available on our website at <http://www.mellanox.com>. Any changes to or waivers of the Code of Business Conduct and Ethics will be disclosed on the same website.

## ITEM 11—EXECUTIVE COMPENSATION

### COMPENSATION DISCUSSION AND ANALYSIS

We invest our resources to grow our business in a manner that we believe will increase shareholder value. To further this objective, our compensation committee oversees our compensation program to support and reward the achievement of our financial goals and to promote the attainment of other key business objectives. In order to conduct our business effectively, we must attract, motivate and retain highly qualified employees. Our compensation program, the principles of which are included in our Compensation Philosophy, is designed to reward high performance and innovation, to promote accountability and to ensure that executive interests are aligned with the interests of our shareholders.

In this Compensation Discussion and Analysis section, we discuss the material elements of our compensation programs and policies, including program objectives and reasons for payment of each element of our executives’ compensation. Following this discussion, you will find a series of tables containing more specific details about the compensation earned by, or awarded to, our named executive officers. This discussion focuses principally on compensation and practices relating to the named executive officers for 2018.

Our named executive officers for 2018 were: Eyal Waldman, president and CEO; Jacob Shulman, chief financial officer until his resignation, effective May 4, 2018; Eric Johnson, interim principal financial and accounting officer, effective as of July 9, 2018; Marc Sultzbaugh, senior vice president of worldwide sales; and Michael Kagan, chief technology officer.

### Executive Summary—2018 Performance and Link to Pay Decisions

#### *Company Financial Performance.*

- Our revenue for 2018 was \$1088.7 million, an increase of 26 percent from revenue in 2017 of \$863.9 million and a new record high for the Company.
- GAAP net income in 2018 was \$134.3 million, or \$2.46 per diluted share, compared to net loss of \$19.4 million, or \$0.39 per diluted share, in 2017.
- Non-GAAP\* net income in 2018 was \$266.5 million, or \$5.01 per diluted share, compared to a net income of \$116.6 million, or \$2.28 per diluted share, in 2017. 2018 non-GAAP net income excludes \$71.3 million of share-based compensation expense, amortization expense of acquired intangible assets of \$51.1 million, restructuring and impairment charges of \$11.8 million, acquisition and other charges of \$16.2 million, settlement costs of \$9.2 million, and income tax effects and adjustments of (\$27.4) million. 2017 non-GAAP net income excludes \$68.9 million of share-based compensation expense, amortization expense of acquired intangible assets of \$52.2



million, restructuring and impairment charges of \$12.0 million, acquisition and other charges of \$2.7 million, and income tax effects and adjustments of \$0.3 million.

- We generated cash from operating activities of \$264.9 million for 2018, compared to \$161.3 million in 2017.

---

\* Please see “Reconciliation of GAAP Net Income (Loss) to Non-GAAP Net Income” on page 70 of this Form 10-K for a reconciliation of GAAP net income (loss) to non-GAAP net income.

*Base Salaries.* Other than in the case of reorganizations and increases in responsibilities, the 2018 base salaries of our other named executive officers remained at their 2017 levels to reflect the modest performance of the Company in 2017. The 2018 base salary for Mr. Sultzbaugh was increased 8.1% to \$400,000 over his 2017 base salary of \$370,000 in recognition of an increase in his responsibilities as the result of an internal reorganization. Mr. Johnson was paid a base salary of \$267,000 in 2018, an increase of 2.7% over his 2017 base salary of \$260,000. Based on benchmarking against our peer group in October 2018, the base salaries of our then-employed named executive officers (other than our interim principal financial and accounting officer), were between the 50<sup>th</sup>-75<sup>th</sup> percentile, with total cash compensation (comprised of salary and actual bonuses paid for 2017 performance in 2018) at or below the median peer group.

*Cash Bonuses Reflected 2018 Company Performance.* As in prior years, approximately ten percent of the Company’s earnings, measured on the basis of our non-GAAP operating income, funded the Company’s annual bonus pool for all eligible employees, including the named executive officers, in accordance with the criteria set forth in our Compensation Philosophy. For 2018, the total profit sharing pool was \$29.5 million, representing approximately 10% of our non-GAAP operating income, which was \$299.8 million, excluding our bonus pool. Bonus awards for our named executive officers are generally based on Company performance and/or individual achievement and require the approval of both the compensation committee and the Board. In addition to such approvals, bonus awards for our CEO require the approval of our shareholders. Our shareholders approved the terms of a cash incentive award for our CEO based on the Company’s achievement of pre-established revenue and earnings per share (“EPS”) targets by our shareholders at our 2018 annual general meeting. In February 2019, the Board and compensation committee determined that our CEO would receive a bonus payout of 121.1% of his annual base salary based on the Company’s achievement of the revenue and EPS goals. The bonus approved for our interim principal financial and accounting officer was 26.2% of his annual base salary, the bonus approved for our chief technology officer was 52.4% of his annual base salary and the bonus approved for our senior vice president of worldwide sales was 37.5% of his annual base salary. Our former chief financial officer did not receive a bonus due to his resignation in May 2018.

*Equity as a Key Component of Compensation.* In 2018, our compensation committee and Board granted each of our named executive officers awards of restricted share units as long-term incentives. The restricted share units are subject to vesting over four years, which encourages retention of our executives and encourages and rewards the executives for creating shareholder value over the long term. Our compensation committee and Board also granted to our CEO an award of performance share units. While we have historically made our annual grants in the form of time-vesting restricted share units only, our compensation committee and our Board determined to add performance share units to our CEO’s annual equity award mix following their review of a competitive analysis performed by Radford in early 2018. The performance share units incentivize our CEO’s performance by tying vesting to operational and market performance goals. Our CEO’s annual grant of 72,000 restricted share units was split 50% restricted share units and 50% performance share units, and was made following shareholder approval at our 2018 annual general meeting of shareholders. The size of the award granted to our CEO in 2018 was intended to result in a total direct compensation level that approximates the 50<sup>th</sup> percentile of companies in Radford’s 2018 Global Technology Survey. Based on benchmarking against our peer group in October 2018, the 2018 equity grants awarded to then-employed named executive officers (other than our interim principal financial and accounting officer), were at approximately the 75<sup>th</sup> percentile.

## Compensation Program Governance

<u>Best Practices We Employ</u>	<u>Practices We Avoid</u>
✓ Executive stock ownership guidelines of 3x salary for all executive officers and holding requirements to help meet ownership	X Incentive program designs do not encourage excessive risk taking
✓ Change in control severance requires a double trigger	X Pledging or hedging of shares by officers and directors is not permitted
✓ Compensation committee is comprised entirely of independent directors	X No repricing of underwater options
✓ Compensation committee engages an independent consultant	X No excise tax gross-ups
✓ Compensation Philosophy allows the clawback of excess payments based on false and restated financial statements	X No uncapped short-term incentive award or variable compensation

## Shareholder Advisory Vote to Approve Executive Compensation

At our 2018 annual general meeting of shareholders, our shareholders voted approximately 79% (reflecting shares represented in person or by proxy at the meeting and entitled to vote) in favor of the non-binding advisory vote to approve the compensation of our named executive officers. Our compensation committee reviewed the result of the shareholders' advisory vote on executive compensation, as well as feedback from shareholders during the 2018 proxy solicitation period and following our annual meeting. In consideration of investor feedback, our compensation committee is exploring extending performance share units to named executive officers with direct revenue responsibilities and setting equity grants for all employees and the Board based on value as opposed to a fixed number of shares, as has historically been the practice. Otherwise, we do not expect to implement significant changes to our executive compensation programs as a result of the shareholders' advisory vote, although the compensation committee continues to evolve its practices in determining compensation to further align with shareholder interests.

## Compensation Philosophy and Objectives

We generally seek to set base salaries near the market median by reference to benchmarking and/or survey data, where available, but the base salary for each individual named executive officer reflects a number of factors, including past performance, scope of responsibility, experience and qualifications. The compensation committee also uses the same criteria for determining bonus awards, with emphasis on the individual's contributions to the prior year's success, except for our CEO, whose bonus for 2018 was determined solely based on corporate performance pursuant to the structure approved by shareholders in 2018. Bonus awards for 2018 were based on performance during 2018 and the criteria set forth in the Compensation Philosophy.

We seek to align the interests of our executives and other employees with the interests of our shareholders by granting our executives and other employees equity awards. In 2018, our compensation committee and Board granted our named executive officers restricted share units, and, additionally, for our CEO, performance share units. Our compensation committee and Board believe that restricted share units can provide value certainty, which is important for talent retention, while continuing to align the interests of our executives and other employees with the interests of our shareholders. For 2018, our compensation committee and Board added performance share units to our CEO's annual equity mix in order to align with market practices and as further incentive to achieve our operational and market performance goals.

In accordance with our Compensation Philosophy, the maximum annual value of variable compensation components (cash bonuses and equity grants) for all office holders of the Company shall not exceed two percent (2%) of the Company's market capitalization. The compensation approved for payment to our office holders for the year 2018 complies with this requirement.

In order to retain the focus of our named executive officers on our business in the event of a potential change in control, in 2018, we were a party to executive severance benefits agreements with each of our named executive officers (other than our interim principal financial and accounting officer) that provide for certain payments and other severance benefits in the event their service is terminated following a change in control of our Company. We believe that these executive severance benefits

agreements help attract and retain talented executives by ensuring their efforts remain focused on our shareholders' long term interests without needing to engage in potential short-term employment planning.

We believe that the total cash compensation (including base salary and annual cash bonus awards) of our named executive officers, the incentive and retention benefit of equity awards in the form of restricted share units and performance share units, and the security provided by executive severance benefits agreements, created a competitive total compensation package for our named executive officers in 2018.

Pursuant to the Companies Law, the compensation of our named executive officers (other than our CEO) and the compensation of other office holders (who are not directors) who report directly to our CEO must also be approved by our Board following the approval by our compensation committee. In accordance with the Companies Law, our CEO's compensation must be approved by our compensation committee, Board and shareholders holding a majority of the voting power represented at the general meeting provided that (i) at least one-half of the shares of non-controlling shareholders or shareholders that do not have a Personal Interest (as defined in the Companies Law) in the approval voted at the meeting are voted in favor (disregarding abstentions) or (ii) the total number of shares of non-controlling shareholders or shareholders that do not have such Personal Interest voted against the terms of service of the CEO does not exceed two percent of the aggregate voting rights in the Company.

#### **Approach for Determining Form and Amount of Compensation**

*Designing a Competitive Compensation Package.* Our executive compensation program is administered by our compensation committee, which is currently comprised of three independent members. Operating under its charter, our compensation committee reviews, in consultation with the management and the Board, and evaluates the Compensation Philosophy, including the compensation plans, policies and programs of the Company. In addition, our compensation committee reviews and recommends to our Board the approval of our CEO's compensation (including base salary, cash bonuses, equity awards, and other forms of individual compensation such as a change in control agreement). Our compensation committee also annually evaluates and approves certain elements of our other named executive officers' compensation, including compensation of other office holders of the Company (as the term "office holder" is defined in the Companies Law and includes our named executive officers). These annual evaluations include, among others: (i) consideration of the current levels and components of compensation paid to our named executive officers and office holders, (ii) consideration of the mix of cash incentives and long-term equity awards, (iii) a review of available survey and/or peer group data for compensation paid to executives in positions comparable to those held by our named executive officers and office holders, (iv) consideration of the ratio between an office holder's compensation and the salary paid to other employees of the Company, including without limitation, the ratios to the median and average salaries of such employees, and whether such variation has an effect on employment relationships within the Company, and (v) consideration of the education, skills, expertise, professional experience and accomplishments of the office holder, his or her role, responsibilities and previous compensation arrangement of the office holders. Mr. Johnson's 2018 base salary was approved by management prior to Mr. Johnson's appointment as interim principal financial and accounting officer, an executive officer role. In addition, Mr. Johnson's 2018 bonus (paid in 2019) was approved by management.

Our executive compensation program has three primary components: (i) base compensation or salary, (ii) annual cash bonuses and (iii) equity awards consisting of restricted share units, and for our CEO, performance share units. Our program is designed to provide incentives and rewards for our short-term, mid-term and long-term performance, and is structured to motivate our named executive officers to meet our strategic objectives, thereby maximizing total return to shareholders. In addition, we provide our named executive officers with benefits that are standard for the local employment market and, therefore, generally make available to all salaried employees in the geographic location where they are based. In Israel, we make contributions on behalf of most of our employees, including our named executive officers, to an education fund and also to a fund known as Managers' Insurance, which provides a combination of retirement plan, insurance and severance pay benefits to Israeli employees, and we permit employees to participate in the company's automobile leasing program, under which we pay for gas, maintenance, insurance and the cost of normal wear and tear of the vehicle over the life of the lease. We make matching 401(k) plan contributions in an amount up to 4% of base salary for all employees based in the United States, including our U.S.-based named executive officers.

Recruitment and retention of our named executive officers and other executive management requires a competitive compensation package. Our compensation committee's approach emphasizes setting the primary elements of total compensation for executives—base salary, annual cash incentive and long-term incentive awards—at approximately the median of the market.

Historically, in making compensation decisions, our compensation committee and Board referenced third-party surveys that provide compensation market data.

For 2018 compensation determinations, our compensation committee and Board referred to data from, respectively, a 2018 Radford U.S. Executive Survey, an independent third-party national compensation survey, and the Israel-based Zviran survey, an independent third-party survey of compensation practices by large high-tech companies in Israel, which, together, we refer to as the “Surveys”. The Radford survey consisted of semiconductor companies and companies in the San Francisco Bay Area. The industry data from the Surveys consist of salaries and other compensation paid by companies to executives in positions comparable to those held by our named executive officers to the extent such position was represented in the survey data. Specifically, we reviewed data on named executive officer positions in the United States from the Radford survey and for positions in Israel from the Zviran survey. The companies covered by the Surveys are not identified in the summary reports presented to the compensation committee.

With the assistance of Radford, an independent consultant retained by the compensation committee for purposes of evaluating our executive compensation program, in September 2018 the compensation committee approved the following peer group consisting of 16 publicly traded companies from the semiconductor industry (the “Peer Group”):

Arista Networks, Inc.	Infinera Corporation
Cirrus Logic Inc.	Marvell Technology Group Ltd
Cray Inc.	Monolithic Power Systems, Inc.
Cree, Inc.	Nice Ltd.
CyberArk Software	Pure Storage, Inc.
Cypress Semiconductor Corporation	Sentech Corporation
Extreme Networks	Silicon Laboratories Inc
Finisar Corporation	Wix.com Ltd.

For companies within the Peer Group, the median revenues for the preceding four quarters as of September 2018 were approximately \$1.08 billion million, and the median 30-day average market capitalization as of September 28, 2018 was approximately \$4.19 billion. The Company’s revenues for the preceding four quarters as of September 2018 were at the 47th percentile of the Peer Group and the Company’s 30-day average market capitalization as of September 28, 2018 was at the 47th percentile of the Peer Group.

In October 2018, Radford performed an executive compensation benchmarking analysis. Radford’s analysis of the compensation of Messrs. Waldman, Sultzbaugh and Kagan as compared to the Peer Group data indicated that each of their actual total cash compensation (comprised of their 2018 salaries and 2017 performance bonuses paid in 2018) were at or below the median total cash compensation of the Peer Group and that their total annual equity awards were approximately at the 75th percentile of Peer Group median. Radford’s analysis did not include Mr. Shulman, as he was not employed at the time of the benchmarking, or Mr. Johnson, as he was an interim executive officer.

We typically engage in a formal executive compensation benchmarking exercise every other year, and expect to do so again in the third quarter of 2020. However, we continue to consider market data from the Surveys every year.

*The Role of the Compensation Committee Consultant.* As noted above, in 2018, our compensation committee engaged Radford (part of Aon Hewitt, a business unit of Aon PLC), an independent third party compensation consulting firm, to assist in discrete projects and report to the compensation committee, including selecting the Peer Group, gathering general industry compensation data, and conducting a review of total compensation of certain named executive officers and members of the Board. In order to determine and confirm independence, before engaging any consultant, each consultant completes an independence questionnaire provided by the Company. In addition, each director and executive officer of the Company completes an annual questionnaire which includes questions which ask about any actual or potential conflicts or relationship between such individual and any relevant consultant.

*The Role of Our Chief Executive Officer.* Our CEO provides our compensation committee with his assessment of the performance levels of the Company and our named executive officers (other than himself) and his recommendations with respect to compensation of our named executive officers (other than himself). Our compensation committee believes it is important to consider and evaluate our CEO’s input on matters concerning compensation of other named executive officers. The compensation committee believes that our CEO’s input regarding our other named executive officers’ individual performances, including the expected contributions and future potential of each of them, is useful because each other named

executive officer reports directly to our CEO, and our CEO interacts with our other named executive officers on an ongoing basis throughout the year.

### **Base Salary**

In February 2018, our CEO completed his review of the 2017 performance of each of our named executive officers reporting to him, and made recommendations to our compensation committee that base salary continue at 2017 levels for each of our other named executive officers for 2018. Our compensation committee evaluated the CEO's recommendations considering any available benchmarking data, any increase in role and responsibilities, and the Company's overall performance during 2017. Our compensation committee and Board each then approved the CEO's 2018 base salary recommendations to continue the base salaries of our named executive officers at their 2017 levels. In April 2018, they approved an increased base salary of \$400,000 for Mr. Sultzbaugh effective July 1, 2018, an 8.1% increase over his 2017 base salary of \$370,000, to reflect an increase in responsibilities due to an internal reorganization. Mr. Shulman's base salary remained \$350,000, and Mr. Kagan's base salary remained \$267,286. In addition, Mr. Johnson's base salary was set prior to his appointment as interim principal financial and accounting officer (an executive officer role) by management following review of his 2017 performance. For 2018, his base salary was \$267,000, reflecting a 2.7% increase over his 2017 base salary.

The base salary for Mr. Kagan is converted from New Israeli Shekels to U.S. dollars using the applicable monthly exchange rate in which his base salary was paid, which corresponds to an overall exchange rate of 3.59 New Israeli Shekels to 1 U.S. dollar.

In February 2018, the compensation committee also reviewed the 2017 performance of the CEO and considered the Board's feedback on the CEO's performance, the Company's overall 2017 performance, feedback from the company's investors, and feedback received during the Company's 2017 proxy solicitation period to enhance its pay for performance practices. Following such review, the compensation committee determined to keep our CEO's annual base salary at its 2017 level of \$610,000.

### **Annual Cash Bonus Program**

We structured our 2018 annual cash bonus award program to reward named executive officers for our Company's successful performance, measured on the basis of our non-GAAP operating income, and for each individual's contribution to that performance.

Under our annual cash bonus award program, our employees in good performance standing, including our named executive officers, are eligible to receive an award, in accordance with the criteria set forth in our Compensation Philosophy from a bonus pool in an amount that is targeted by our compensation committee at generally up to 10% of our non-GAAP operating income, excluding bonus expenses. In accordance with our Compensation Philosophy, the maximum annual value of the cash bonus payable for each of our office holders shall not exceed two times such office holder's annual base salary.

Our compensation committee may adjust the available annual bonus pool based on its assessment of our achievement of our operating plan and company profitability. In January 2019, the compensation committee determined that the total profit sharing pool for the fiscal year ended December 31, 2018 was \$29.5 million and represented approximately 10% of our non-GAAP operating income, which was \$299.8 million, excluding this bonus expense.

In July 2018, our shareholders approved a performance-based cash incentive award structure for our CEO. Our compensation committee and Board have historically approved annual bonuses to Mr. Waldman following overall consideration of the Company's achievement of revenue and EPS, as well as certain other strategic goals for the preceding fiscal year. For 2018, the incentive award was subject to a formula-based payout based on the Company's achievement of a target revenue goal of \$1.02 billion and a target EPS goal of \$3.70 for 2018, each weighted 50%. The award was targeted at 100% of our CEO's base salary, with a maximum payment of 150%. No amount was payable for achievement below target, and any payout was determined linearly based on the amount of achievement over target. Our compensation committee and our Board approved the structure of the CEO's cash incentive award following review of a competitive market analysis performed by Radford in early 2018. According to the analysis, as compared to the companies in Radford's 2018 Global Technology Survey, our CEO's total target cash compensation (based on his salary and annual bonus paid in 2017) was below the 25th percentile. The 2018 cash incentive award was intended to bring the CEO's total cash compensation closer to the market median. In January 2019, the Board and compensation committee approved the Company's achievement of revenue and EPS for 2018, resulting in a payout to our CEO of 121.1% of his annual base salary, or \$738,710. The Company's achievement of the applicable performance goals and their weighted achievement percentage are set forth in the table below.

Performance Goal	Weighting	Target	Actual Achievement	Weighted Achievement Percentage
Revenue	50%	\$1.020 billion	\$1.089 billion	53.4%
EPS*	50%	\$3.70	\$5.01	67.7%
Total				121.1%

\*Non-GAAP measure of EPS is adjusted from results based on GAAP excluding share-based compensation expense, amortization expense of acquired intangible assets, settlement costs, acquisition and other charges, restructuring and impairment charges, and income tax effects and adjustments.

Other than Mr. Johnson, who is no longer an executive officer, the size of each other named executive officer's bonus for 2018 was determined in February 2019 in the discretion of our compensation committee based upon its assessment of a number of factors, including our CEO's recommendations, overall company performance in 2018, each named executive officer's individual performance in 2018 and ability to influence our Company's performance, the relative scope of each named executive officer's responsibilities and internal equity. Approval of Mr. Johnson's 2018 bonus was based on the same factors, in the discretion of our CEO. The following bonuses were approved for our other named executive officers based on their individual contributions to our financial performance for fiscal year 2018: Mr. Johnson was awarded \$70,000, which represents approximately 26.2% of his 2018 annual base salary; Mr. Sultzbaugh was awarded \$150,000, which represents approximately 37.5% of his 2018 annual base salary and Mr. Kagan was awarded \$140,000, which represents approximately 52.4% of his 2018 annual base salary. Mr. Shulman did not receive a bonus for 2018 due to his resignation in May 2018.

#### Equity Compensation Awards

We provide equity awards to our named executive officers in order to align their interests with the interests of our shareholders by tying the value delivered to our named executive officers to the value of our ordinary shares. Annual equity award grants provide our named executive officers with long-term incentives that aid in retaining executive talent and reward executives for creating shareholder value over the long term. We may also make grants of equity awards at the discretion of our Board and the compensation committee in connection with the hiring or promotion of new executive officers.

Our annual awards of service-vesting restricted share units made to existing executive employees effective August 2018, including our named executive officers, vest over four years at the rate of 1/4th of the shares on August 1, 2019, and thereafter at the rate of 1/16th of the original number of shares on the first day of each quarterly period of November, February, May and August commencing November 1, 2019, with the last 1/16th of the original number of shares vesting on August 1, 2022, so long as the restricted share unit holder remains an officer or employee of the applicable employing member. We set these vesting schedules in order to provide an incentive to our employees, including our named executive officers, to continue their employment with us over the long term and generally to provide them the opportunity to sell their vested shares to cover taxes incurred with vesting during a period following the public release of our prior quarter's fiscal operating results.

Beginning in 2018 we also granted an award of performance share units to our CEO. The awards vest as to 25% based on the Company's total shareholder return relative to that of the companies listed on the Philadelphia Semiconductor Index as of the date of grant and as to 75% based on the Company's average net operating margin, in each case, measured over a three-year performance period beginning on January 1, 2018 and ending on December 31, 2020 (or if earlier, upon the occurrence of a

change in control of the Company), subject to continued service. In the event that a performance metric is achieved at (i) the threshold level, 50% of the shares subject to such performance metric will vest, (ii) the target level, 100% of the shares subject to such performance metric will vest, or (iii) the maximum level, 175% of the shares subject to such performance metric will vest. In the event that the event that a performance metric is achieved at below the threshold level, no shares subject to such performance metric will vest. Further, in the event of a change in control, the number of shares earned will be the greater of target and actual achievement during the performance period, and such number of shares will vest at the end of the original performance period if the award is assumed by the successor or upon the consummation of the change in control if the award is not assumed by the successor. The threshold, target and maximum levels of each of the relative total shareholder return and average net operating margin goals are set forth in the table below.

Performance Goal	Weighting	Threshold Level	Target Level	Maximum Level
Relative total shareholder return	25%	25 <sup>th</sup> percentile	50 <sup>th</sup> percentile	75 <sup>th</sup> percentile
Average net operating margin*	75%	22%	24%	27%

\*Average net operating margin is the Company's income from operations divided by the Company's revenue for the applicable fiscal year, averaged across the three-year performance period. Non-GAAP measure of income from operations is adjusted from results based on GAAP excluding share-based compensation expense, amortization expense of acquired intangible assets, settlement costs, acquisition and other charges, and restructuring charges.

As with the other components of our compensation program, we generally determine the size of each equity award to a named executive officer after considering, among other things, the role of each named executive officer within our Company, the criticality of his function within the organization, and the Peer Group data. Since long-term incentive compensation levels fluctuate from year to year across the companies for whom market data are collected, including the Peer Group (depending on each company's granting patterns, valuation assumptions, and stock price), we generally review the market data under both a value approach, which is based on the fair value of long-term incentive awards, and a percentage of common shares outstanding approach, which compares the number of shares subject to each long-term incentive award to the number of shares outstanding for each company. The ability of each executive officer to influence our Company's performance and internal parity are also principal considerations for our compensation committee when determining grant size.

In April 2018, in connection with its annual focal review of executive officers, our Board, following the approval of the compensation committee, approved the grant of 36,000 restricted share units and 36,000 performance share units to Mr. Waldman, 15,500 restricted share units to Mr. Sultzbaugh, and 15,000 restricted share units to Mr. Kagan. The Board determined not to grant any equity awards to Mr. Shulman in light of his resignation in May 2018. Mr. Waldman's equity award grant was subject to the approval of our shareholders, which was obtained at our 2018 annual general meeting of shareholders. Our other named executive officers' grants were subject to shareholder approval of the Third Amended and Restated Global Share Incentive Plan and the registration of shares thereunder, and were therefore made effective August 1, 2018.

In March 2018, in connection with its annual focal review of employees other than the CEO and executive staff, the compensation committee approved the grant to Mr. Johnson of an annual award of 4,000 restricted share units which vest with respect to 1/4th of the original number of ordinary shares subject thereto on August 1, 2019 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of November, February, May and August commencing on November 1, 2019, with the last 1/16th of the original number of shares vesting on August 1, 2022, subject to continued employment with the Company. Such grant was subject to shareholder approval of the Third Amended and Restated Global Share Incentive Plan and the registration of shares thereunder, and was therefore made effective August 1, 2018. In November 2018, at the recommendation of the CEO and in recognition of additional responsibilities assumed by Mr. Johnson during 2018, the Board, following the approval of the compensation committee, approved a special award of 5,000 restricted share units for Mr. Johnson, which vest with respect to 1/4th of the original number of ordinary shares subject thereto on February 1, 2020 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of May, August, November and February, commencing on May 1, 2020, with the last 1/16th of the original number of shares vesting on February 1, 2023, subject to continued employment with the Company.

#### Change in Control Severance Arrangements

In 2018, we were a party to executive severance benefits agreements with each of our named executive officers (other than Mr. Johnson) which provide for certain severance benefits in the event of an executive's separation of service following a change in control (a so-called "double trigger" requirement).

Pursuant to the terms of the executive severance benefits agreements in place at the beginning of 2018 with each of our named executive officers (other than Mr. Johnson), if the executive's employment with our Company is terminated without cause or if the executive is constructively terminated (as defined below), in each case during the 12-month period following a change in control (as defined in the agreements) of our Company (each, a "qualifying termination"), and the executive provides us a general release of all claims, then the executive is entitled to receive the following payments and benefits, in addition to statutory benefits and entitlements of our Israeli named executive officers:

- continuation of the named executive officer's salary for six months at a per annum rate of 120% of the executive's annual base salary as in effect on the termination date;
- in the case of a named executive officer who resides in the United States, if the named executive officer elects COBRA coverage under our group health plan, payment for the cost to continue COBRA coverage for the named executive officer and his eligible dependents for up to 12 months following the termination date; and
- accelerated vesting and immediate exercisability of the named executive officer's outstanding and unvested stock awards as to 50% of the total number of unvested shares subject to such outstanding and unvested stock option awards.

Following a review of the change in control arrangements of our Peer Group, which indicated that our then existing change in control severance benefits were well below market, in April 2018, our compensation committee and Board approved amendments to the executive severance benefits agreements with Messrs. Sultzbaugh and Kagan, which increased the cash severance to 12 months' salary and target bonus (or if no target bonus was established, then the average of the bonuses paid over the three years preceding termination) and provided for full accelerated vesting of outstanding equity awards in the event of a qualifying termination, in addition to statutory benefits and entitlements payable to Mr. Kagan under Israeli law. The compensation committee determined not to amend the executive severance benefits agreements with Messrs. Shulman and Waldman at that time.

For the purposes of the executive severance benefits agreements,

- "*Cause*" means that, in the reasonable determination of the Company (or the Board, in the case of the CEO), the executive: (a) has committed an act of fraud or embezzlement or has intentionally committed some other illegal act that has a material adverse impact on the Company or any successor or parent or subsidiary thereof; (b) has been convicted of, or entered a plea of "guilty" or "no contest" to, a felony which causes or may reasonably be expected to cause substantial economic injury to or substantial injury to the reputation of the Company or any subsidiary or affiliate of the Company; (c) has made any unauthorized use or disclosure of confidential information or trade secrets of the Company or any successor or parent or subsidiary thereof that has a material adverse impact on any such entity; (d) has committed any other intentional misconduct that has a material adverse impact on the Company or any successor or parent or subsidiary thereof; or (e) has intentionally refused or intentionally failed to act in accordance with any lawful and proper direction or order of the Board or the appropriate individual to whom the executive reports, provided such direction is not materially inconsistent with the executive's customary duties and responsibilities.
- "*Constructive termination*" means that the executive voluntarily terminates his employment with the Company after any of the following are undertaken without the executive's express written consent: (a) the removal of or a material reduction in the nature or scope of the executive's responsibilities, or the assignment to the executive of duties that are materially inconsistent with the executive's position other than a change in reporting relationship; (b) a change in the executive's direct reporting relationship so that the executive no longer reports directly to the CEO (or the Board in the case of the CEO); (c) a reduction in the executive's base salary, unless the base salaries of all other executives are similarly reduced; or (d) a relocation of the executive's place of employment by more than thirty (30) miles from such the executive's place of employment on the effective date of the severance benefits agreement. The termination of the executive's employment as a result of the executive's death or disability shall not be deemed to be a Constructive Termination.
- "*Change in Control*" generally includes each of the following:
  - A transaction or series of transactions whereby any person or related group of persons directly or indirectly acquires beneficial ownership of securities of the Company possessing more than 50% of the total combined voting power of the Company's securities outstanding immediately after such acquisition; or
  - During any period of two consecutive years, individuals who, at the beginning of such period, constitute the Board together with any new director(s) whose election by the Board or nomination for election by the Company's shareholders was approved by a vote of at least two thirds of the directors then still in office who



either were directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

- The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company's assets in any single transaction or series of related transactions or (z) the acquisition of assets or shares of another entity, in each case other than a transaction:
  - (i) Which results in the Company's voting securities outstanding immediately before the transaction continuing to directly or indirectly, at least a majority of the combined voting power of the successor entity's outstanding voting securities immediately after the transaction, and
  - (ii) After which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the successor entity; provided, however, that no person or group shall be treated as beneficially owning 50% or more of combined voting power of the successor entity solely as a result of the voting power held in the Company prior to the consummation of the transaction; or
- The Company's shareholders approve a liquidation or dissolution of the Company.

The benefits payable under the executive severance benefits agreements are in addition to payments or other benefits, if any, that any named executive officer who resides in Israel may be entitled to receive under applicable Israeli law. Israeli law generally requires severance pay equal to one month's salary for each year of employment upon the retirement, death or termination without cause (as defined in the Israeli Severance Pay Law) of an employee. To satisfy this requirement, we make contributions on behalf of our Israel-based employees to a fund known as Managers' Insurance or to a pension fund. These funds provide a combination of pension plan, insurance and severance pay benefits to the employee, giving the employee or his or her estate payments upon retirement or death and securing the severance pay, if legally entitled, upon termination of employment. Each full-time Israeli employee and hourly employee as of September 2012, including each of our Israel-based named executive officers, is entitled to participate in the Managers' Insurance and/or pension fund. Each employee who participates contributes an amount equal to 6% (as of January 2018) of his or her salary to the Managers' Insurance and/or pension plan and we contribute up to 6.5% (as of January 2018) to the Managers' Insurance and/or pension plan, 8.33% for severance payments and up to 2.5% for disability insurance).

Within the context of our Compensation Philosophy, the compensation committee believes the terms of our executive severance agreements with our named executive officers will encourage their continued attention and dedication to their assigned duties through and following any change in control of our Company. We believe that the terms of these agreements will further ensure that each of our named executive officers will continue to remain focused on the long-term objective of delivering shareholder value during and following a change in control event if they are assured that their long-term employment interests are reasonably provided for with a competitive market severance arrangement. We believe that these executive severance agreements thus help ensure the best interests of our shareholders.

Additionally, under the Company's Third Amended and Restated Global Share Incentive Plan, in the event of a change in control in the Company, each outstanding award will be assumed or substituted by the successor corporation. If the successor corporation in a change in control refuses to assume or substitute an outstanding award, the award will vest in full. Under the terms of our CEO's performance share unit award, in the event of a change in control, the number of shares earned will be the greater of target and actual achievement during the performance period, and such number of shares will vest at the end of the original performance period if the award is assumed by the successor or upon the consummation of the change in control if the award is not assumed by the successor.

The potential payments under the executive severance benefits agreements as of December 31, 2018 are set forth below under the heading "—Potential Payments Upon Termination Following a Change in Control."

#### **Perquisites and Other Benefits**

Historically, from time to time, our compensation committee and Board have provided certain of our named executive officers with perquisites that we believe are reasonable. We do not view perquisites as a significant element of our comprehensive compensation structure, but do believe that these additional benefits may assist our executive officers in neutralizing personal costs associated with performing their duties as expected by the Company and provide time efficiencies for our executive officers in appropriate circumstances, particularly when we require frequent or lengthy travel. In 2018, our CEO received housing and housing-related expense reimbursements, as well as related tax reimbursements, which our compensation committee determined were appropriate in order to facilitate his efforts on behalf of our Company while at our California headquarters.

In addition, automobile-related expense reimbursement, insurance reimbursement, retirement fund contributions, severance fund contributions and education fund contributions are provided to all of our Israel-based employees on a non-discriminatory basis including our named executive officers based in Israel.

In the future, we may provide additional perquisites to our named executive officers as an element of their overall compensation structure. We do not expect these perquisites to be a significant element of our compensation structure. All future practices regarding perquisites will be approved and subject to periodic review by our compensation committee and/or Board.

In addition to the termination-related benefits provided to our Israeli employees under Israeli law, each full-time Israeli employee, including each of our Israel-based named executive officers, is entitled to participate in an education fund plan, pursuant to which each employee who participates in the plan contributes an amount equal to 2.5% of his or her salary to the education fund and we contribute 7.5% of his or her salary up to the maximum amount exempted from tax (currently contribution from a monthly salary of NIS 15,712). In addition, the Company pays directly to the employee via his or her salary or as additional contribution to the education fund, per the employee's choice, 7.5% of the portion of the employee's salary which exceeds the aforesaid maximum salary exempt from tax.

### **Shareholder-approved Compensation Philosophy**

At our 2016 annual general meeting held on May 9, 2016, our shareholders re-approved our Compensation Philosophy for our office holders, which addresses certain items prescribed by the Companies Law. Our compensation committee reviews its Compensation Philosophy annually and reserves the discretion to amend it from time to time. Regardless of whether the compensation committee amends the Compensation Philosophy or not, pursuant to the Companies Law, our Compensation Philosophy must generally be approved by the Board (after considering the recommendations of the compensation committee) and the shareholders every three years.

### **Tax Considerations**

Section 162(m) of the U.S. Internal Revenue Code establishes a limitation on the deductibility of compensation payable in any particular tax year to our named executive officers. Section 162(m) provides that publicly-held companies cannot deduct compensation paid to certain named executive officers (other than, prior to the Tax Cuts and Jobs Act of 2017, our CFO) to the extent that such compensation exceeds \$1 million per officer. Prior to the Tax Cuts and Jobs Act of 2017, compensation that is "performance-based" compensation within the meaning of Section 162(m) did not count toward the \$1 million limit. As part of the Tax Cuts and Jobs Act of 2017, the ability to rely on this "qualified performance-based compensation" exception was eliminated and the limitation on deductibility was generally expanded to include all NEOs. Historically, the deductibility of compensation under Section 162(m) has not been a factor in the compensation committee's compensation determination process and as a result of the Tax Cuts and Jobs Act of 2017, subject to the Act's grandfathering rules, the Company may no longer take a deduction for any compensation paid to its NEOs in excess of \$1 million.

### **Other Policies**

*Share Ownership and Holding Policy.* Effective as of our 2015 annual general meeting of shareholders, each of our executive officers became subject to a policy that he or she hold shares of the Company with an aggregate value of at least three times his or her annual salary by the fifth anniversary that he or she became subject to the policy. Our named executive officers have until February 24, 2020 to comply with this policy. On January 31, 2017, the compensation committee and Board adopted amendments to the share ownership policy that adopted holding requirements: executive officers and directors who are subject to share ownership requirements and who have not attained the minimum ownership level in the allotted period, shall retain the lesser of (i) twenty five percent (25%) of the gross number of shares acquired upon an exercise, vesting or settlement or (ii) fifty percent (50%) of the number of shares remaining after satisfying the exercise price, if any, and tax withholding requirements.

*Clawback Policy.* In addition, pursuant to our Compensation Philosophy, our executives are required to repay to us any excess payments, including cash and equity, made to them that were based on the Company's performance if such payments were paid based on false and restated financial statements of the Company.

*Non-GAAP measures.* To supplement our consolidated financial statements presented in accordance with generally accepted accounting principles (GAAP), the Company uses non-GAAP measures of net income, income from operations, and diluted net income per share. These measures should be considered in addition to results prepared in accordance with GAAP, but should not be considered a substitute for or superior to GAAP results. These non-GAAP measures may be different than the non-GAAP measures used by other companies. The non-GAAP measures are adjusted from results based on GAAP to exclude items such as share-based compensation expense, amortization expense of acquired intangible assets, settlement costs, acquisition and other charges, restructuring and impairment charges, and income tax effects and adjustments. Settlement costs represent the charges related to the settlement of a contingent royalty obligation. Acquisition and other charges include

expenses related to acquisitions of other companies and expenses related to the proxy contest. Restructuring and impairment charges include impairment charges related to our investment in privately-held companies, as well as costs that are the result of restructuring, consisting of employee termination and severance costs, facilities related costs, contract cancellation charges, and impairment of long-lived assets. The purpose of income tax effects and adjustments is to exclude tax consequences associated with the above excluded expense items, the non-cash impact on the tax provision pertaining to changes in deferred tax assets associated with carryforward losses of group entities subject to tax holiday in Israel, and reversals of valuation allowances. The company believes the non-GAAP results provide useful information to both management and investors, as these non-GAAP results exclude expenses that are not indicative of our core operating results. Management believes it is useful to exclude share-based compensation expense, amortization expense of acquired intangible assets, settlement costs, acquisition and other charges, restructuring and impairment charges, and income tax effects and adjustments because it enhances investors' ability to understand our business from the same perspective as management, which believes that such items are not directly attributable to nor reflect the underlying performance of the company's business operations. Further, management believes certain non-cash charges such as share-based compensation, amortization of acquired intangible assets, impairment charges, changes related to recognition of deferred taxes and the net impact on the company's tax provision for non-GAAP adjustments do not reflect the cash operating results of the business.

**Reconciliation of GAAP Net Income (Loss) to Non-GAAP Net Income**

	Year ended December 31,	
	2018	2017
GAAP net income (loss)	\$ 134,258	\$ (19,425)
Adjustments:		
Share-based compensation expense:		
Cost of revenues	1,950	2,000
Research and development	38,922	40,278
Sales and marketing	17,042	15,693
General and administrative	13,428	10,893
Total share-based compensation expense	71,342	68,864
Amortization of acquired intangibles:		
Cost of revenues	41,978	42,482
Research and development	778	779
Sales and marketing	8,330	8,919
Total amortization of acquired intangibles	51,086	52,180
Settlement costs:		
Cost of revenues	9,161	—
Total settlement costs	9,161	—
Acquisition and other charges:		
Research and development	558	734
Sales and marketing	268	141
General and administrative	15,423	1,794
Total acquisition and other charges	16,249	2,669
Restructuring and impairment charges:		
Operating expense	10,329	12,019
Other loss	1,494	—
Total restructuring and impairment charges	11,823	12,019
Tax effects and adjustments	(27,442)	250
Non-GAAP net income	\$ 266,477	\$ 116,557

**Reconciliation of GAAP Income (Loss) from Operations to Non-GAAP Income from Operations**

	Year ended December 31,	
	2018	2017
GAAP income (loss) from operations	\$ 112,074	\$ (17,081)
GAAP income (loss) from operations %	10.3%	(2.0)%
Share-based compensation expense	71,342	68,864
Amortization of acquired intangibles	51,086	52,180
Settlement costs	9,161	—
Acquisition and other charges	16,249	2,669
Restructuring charges	10,329	12,019
Non-GAAP income from operations	<u>\$ 270,241</u>	<u>\$ 118,651</u>
Non-GAAP income from operations %	24.8%	13.7%

**Reconciliation of GAAP Diluted Net Income (Loss) Per Share to Non-GAAP Diluted Net Income Per Share**

	Year ended December 31,	
	2018	2017
GAAP diluted net income (loss) per share	\$ 2.46	\$ (0.39)
Adjustments:		
Share-based compensation expense	1.30	1.38
Amortization of acquired intangibles	0.93	1.04
Settlement costs	0.17	—
Acquisition and other charges	0.30	0.05
Restructuring and impairment charges	0.22	0.24
Tax effects and adjustments	(0.50)	—
Effect of dilutive securities under GAAP	0.16	—
Total options vested and exercisable	(0.03)	(0.04)
Non-GAAP diluted net income per share	<u>\$ 5.01</u>	<u>\$ 2.28</u>

## REPORT OF THE COMPENSATION COMMITTEE

Our compensation committee reviews and recommends our programs, policies and practices relating to the compensation and benefits of our officers and employees. Our compensation committee, in consultation with our CEO (other than with respect to his own compensation) and our Board, decides how much cash compensation should be part of each of our officer's total compensation by obtaining global market survey data and, for most named executive officers, benchmarking to a peer group of companies, and considering the relative importance of short-term incentives. In addition, our compensation committee, in consultation with our CEO (other than with respect to his own compensation), makes recommendations to our Board regarding equity-based compensation to align the interests of our management with shareholders, considering each named executive officer's equity holdings. Our compensation committee also manages approvals and processes equity awards under our equity incentive plans. Under the Companies Law and subject to its provisions, compensation for officers (other than directors and our CEO) is required to be approved by the compensation committee and the board of directors. Compensation for our CEO and our director compensation program are required to be approved by the shareholders, following the approval by the compensation committee and the board of directors. Our compensation committee annually reviews and evaluates our incentive compensation plans. All members of our compensation committee are independent under the applicable rules and regulations of the SEC, Nasdaq and the U.S. Internal Revenue Service.

Our compensation committee has reviewed and discussed the Compensation Discussion and Analysis, for the year ended December 31, 2018 with management. In reliance on the reviews and discussion referred to above, our compensation committee recommended to our Board that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K, for the year ended December 31, 2018.

The foregoing report is provided by the undersigned members of our compensation committee.

Umesh Padval, Chair  
Amal M. Johnson  
Jack R. Lazar

*The Report of the Compensation Committee is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.*

## EXECUTIVE COMPENSATION TABLES

### 2018 Summary Compensation Table

The following table summarizes the compensation awarded to, earned by, or paid to each named executive officer for the years ended December 31, 2018, 2017 and 2016.

Name and Principal Position	Year	Salary (\$)	Bonus \$(1)	Stock Awards \$(2)	Non-equity Incentive Plan Compensation (\$) (3)	All Other Compensation (\$)	Total \$(1)
<b>Eyal Waldman(9)</b>	2018	608,668	—	6,315,168	738,710	235,312 (4)	7,897,858
President & Chief	2017	604,072	—	4,585,500	—	234,988	5,424,560
Executive Officer	2016	557,819	270,000	4,149,000	—	221,325	5,198,144
<b>Jacob Shulman</b>	2018	171,645	—	—	—	6,866 (5)	178,511
Chief Financial Officer	2017	337,500	—	764,250	—	11,348	1,113,098
	2016	293,750	100,000	696,000	—	10,759	1,100,509
<b>Eric Johnson</b>	2018	263,500	70,000	788,950	—	10,950 (6)	1,133,400
Interim Principal Financial and Accounting Officer							
<b>Marc Sultzbaugh</b>	2018	385,000	150,000	1,242,325	—	11,440 (7)	1,788,765
Senior Vice President of Worldwide Sales	2017	365,000	30,000	866,150	—	43,055	1,304,205
	2016	337,500	100,000	928,000	—	78,145	1,443,645
<b>Michael Kagan(9)</b>	2018	267,286	140,000	1,202,250	—	57,072 (8)	1,666,608
Chief Technology Officer	2017	264,680	50,000	866,150	—	58,670	1,239,500
	2016	229,375	100,000	742,400	—	56,224	1,127,999

- (1) These amounts reflect bonuses earned in each fiscal year and paid in the subsequent fiscal year as approved by the compensation committee and the Board.
- (2) Amounts shown in this column represent the aggregate grant date fair value of restricted share units and performance share units granted, as calculated under FASB ASC Topic 718. For performance share units, the amount shown is based on the probable outcome of the average net operating margin goal and the estimated outcome of the relative total shareholder return goal determined under a Monte Carlo simulation, in each case, as of the grant date, in accordance with FASB ASC Topic 718. The value of the performance share units at grant date assuming the average net operating margin goal will be achieved at maximum is \$5,001,618. The valuation methodology used in determining the value of the restricted share units is described in Note 1 to our consolidated financial statements included in this Annual Report on Form 10-K.
- (3) Represents the amount earned by our CEO under his 2018 cash incentive award based on the Company's achievement of pre-established revenue and EPS targets, the terms of which were approved by our compensation committee and Board and, subsequently, our shareholders at our 2018 annual general meeting.
- (4) Includes \$50,686 contributed to a severance fund, which is mandated by Israeli law, \$46,510 in tax related reimbursements, \$47,058 in housing and housing-related expense reimbursements, \$38,787 contributed to an employee education fund on behalf of Mr. Waldman, \$38,186 contributed to a retirement fund on behalf of Mr. Waldman, \$8,890 for automobile related expenses pursuant to the company's automobile leasing program, \$3,660 for 401(k) plan matching contribution, \$905 for a recuperation fund, which is required under Israeli law, \$518 for Company events and Company cell phone, and \$111 in the value of the cash cards given to all Israeli employees for the holidays.
- (5) Includes 401(k) plan matching contribution of \$6,866.
- (6) Includes 401(k) plan matching contribution of \$10,540 and \$410 in the value of the cash card given to all US employees for the holidays.

- (7) Includes 401(k) plan matching contribution of \$11,000 and \$440 in the value of the cash card given to all US employees for the holidays.
- (8) Includes \$21,405 contributed to a severance fund, which is mandated by Israeli law, \$19,272 contributed to an employee education fund on behalf of Mr. Kagan, \$15,073 contributed to a retirement fund on behalf of Mr. Kagan, \$1,049 for a recuperation fund, which is mandated by Israeli law, \$161 for Company events and Company cell phone, and \$113 in the value of the cash cards given to all Israeli employees for the holidays.
- (9) Amounts reported for Messrs. Waldman and Kagan in 2018, other than bonuses, are converted from New Israeli Shekels to U.S. dollars using the 2018 average exchange rate of 3.64 New Israeli Shekels to 1 U.S. dollar. Amounts reported for Messrs. Waldman and Kagan in 2017, other than bonuses, are converted from New Israeli Shekels to U.S. dollars using the 2017 average exchange rate of 3.57 New Israeli Shekels to 1 U.S. dollar. Amounts reported for Messrs. Waldman and Kagan in 2016, other than bonuses, are converted from New Israeli Shekels to U.S. dollars using the 2016 average exchange rate of 3.83 New Israeli Shekels to 1 U.S. dollar.

## 2018 Grants of Plan-Based Awards

The table below sets forth information regarding grants of plan-based awards made to our named executive officers during the year ended December 31, 2018.

Name	Grant Date	Board/Committee Action Date	Estimated Future Payouts Under Non-Equity Incentive Awards (1)			Estimate Future Payouts Under Equity Incentive Plan Awards (2)			All Other Stock Awards: Number of Shares of Stock or Units (#)	Grant Date Fair Value of Stock and Option Awards \$(5)
			Threshold (\$)	Target (\$)	Maximum(\$)	Threshold (#)	Target (#)	Maximum(#)		
Eyal Waldman				610,000	915,000					
	7/25/2018	(6)	4/16/2018			4,500	36,000	63,000	3,312,768	
	7/25/2018	(6)	4/16/2018					36,000 (3)	3,002,400	
Jacob Shulman	—							—	—	
Eric Johnson	8/1/2018	(7)	7/16/2018					4,000 (3)	320,600	
	11/15/2018		11/15/2018					5,000 (4)	468,350	
Marc Sultzbaugh	8/1/2018	(7)	4/16/2018					15,500 (3)	1,242,325	
Michael Kagan	8/1/2018	(7)	4/16/2018					15,000 (3)	1,202,250	

- (1) Represents the threshold, target and maximum amounts payable to Mr. Waldman pursuant to his 2018 cash incentive award, which is earned 50% based on 2018 revenue goals and 50% based on 2018 EPS goals. The target and maximum amounts of his award were 100% and 150%, respectively, of his annual base salary. The cash incentive award does not provide for any payout unless target goals are attained.
- (2) Represents performance share units which vest as to twenty-five percent (25%) based on total shareholder return relative to that of the companies listed on the Philadelphia Semiconductor Index as of the date of grant and as to seventy-five percent (75%) based on the Company's average net operating margin, in each case measured over a three-year performance period beginning on January 1, 2018 and ending on December 31, 2020 (or if earlier, upon the occurrence of a change in control of the Company), subject to continued service. Upon achievement of each performance metric at (i) the threshold level, 50% of the shares subject to such performance metric will vest, (ii) the target level, 100% of the shares subject to such performance metric will vest, or (iii) the maximum level, 175% of the shares subject to such performance metric will vest. No shares subject to a performance metric will vest if the applicable performance metric is achieved at below the threshold level. The threshold amount shown above represents the number of shares earned assuming threshold achievement of the total shareholder return metric and below-threshold achievement of the average net operating margin goal.
- (3) Represents restricted share units which vest with respect to 1/4th of the original number of ordinary shares subject thereto on August 1, 2019 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of November, February, May and August commencing on November 1, 2019, with the last 1/16th of the original number of shares vesting on August 1, 2022, subject to continued employment with the Company.
- (4) Represents restricted share units which vest with respect to 1/4th of the original number of ordinary shares subject thereto on February 1, 2020 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly



vesting period of May, August, November and February, commencing on May 1, 2020, with the last 1/16th of the original number of shares vesting on February 1, 2023, subject to continued employment with the Company.

- (5) Represents the grant date fair value calculated in accordance with the provisions of FASB ASC Topic 718. For performance share units, the amount shown is based on the probable outcome of the average net operating margin goal and the estimated outcome of the relative total shareholder return goal determined under a Monte Carlo simulation, in each case, as of the grant date, in accordance with FASB ASC Topic 718.
- (6) Mr. Waldman's 2018 equity awards were approved by the Board and the compensation committee in April 2018, and thereafter by the Company's shareholders on July 25, 2018. The grant date reflects the date of such shareholder approval.
- (7) The grants made to our named executive officers pursuant to our annual focal review were subject to shareholder approval of our Third Amended and Restated Global Share Incentive Plan and the registration of shares thereunder, and were therefore made effective August 1, 2018.

#### 2018 Outstanding Equity Awards at Fiscal Year-End Table

The following table provides information on the stock options and restricted share units held by each of our named executive officers as of December 31, 2018.

Name	Option Awards					Stock Awards				
	Vesting Commencement Date	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date	Vesting Commencement Date	Number of Shares or Units of Stock that Have Not Vested (#)	Market Value of Shares or Units of Stock that Have Not Vested (\$)(8)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested (#) (9)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested (\$) (8)
Eyal Waldman										
						5/1/2015(1)	10,000	923,800		
						5/1/2016(2)	37,500	3,464,250		
						5/1/2017(4)	56,250	5,196,375		
						8/1/2018(5)	36,000	3,325,680		
						8/1/2018(6)			63,000	5,819,940
Jacob Shulman										
						—	—	—		
Eric Johnson										
						8/1/2016(3)	2,187	202,035		
						5/1/2017(4)	2,187	202,035		
						8/1/2018(5)	4,000	369,520		
						2/1/2019(7)	5,000	461,900		
Marc Sultzbaugh										
4/22/2009	47,056	—	10.23	4/22/2019						
						5/1/2015(1)	2,250	207,855		
						5/1/2016(2)	7,500	692,850		
						5/1/2017(4)	10,625	981,538		
						8/1/2018(5)	15,500	1,431,890		
Michael Kagan										
						5/1/2015(1)	1,969	181,896		
						5/1/2016(2)	6,000	554,280		
						5/1/2017(4)	10,625	981,538		
						8/1/2018(5)	15,000	1,385,700		

- (1) Restricted share units with a vesting commencement date of May 1, 2015 vest with respect to 1/4th of the original number of ordinary shares subject thereto on May 1, 2016 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of May, August, November, and February, commencing on August 1, 2016, with the last 1/16th of the original number of shares vesting on May 1, 2019, subject to continued service on each applicable vesting date.
- (2) Restricted share units with a vesting commencement date of May 1, 2016 vest with respect to 1/4th of the original number of ordinary shares subject thereto on May 1, 2017 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of May, August, November, and February, commencing on August 1, 2017, with the last 1/16th of the original number of shares vesting on May 1, 2020, subject to continued service on each applicable vesting date.
- (3) Restricted share units with a vesting commencement date of August 1, 2016 vest with respect to 1/4th of the original number of ordinary shares subject thereto on August 1, 2017 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of August, November, February and May, commencing on November 1, 2017, with the last 1/16th of the original number of shares vesting on August 1, 2020, subject to continued service on each applicable vesting date.
- (4) Restricted share units with a vesting commencement date of May 1, 2017 vest with respect to 1/4th of the original number of ordinary shares subject thereto on May 1, 2018 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of May, August, November, and February, commencing on August 1, 2018, with the last 1/16th of the original number of shares vesting on May 1, 2021, subject to continued service on each applicable vesting date.
- (5) Restricted share units with a vesting commencement date of August 1, 2018 vest with respect to 1/4th of the original number of ordinary shares subject thereto on August 1, 2019 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of November, February, May and August commencing on November 1, 2019, with the last 1/16th of the original number of shares vesting on August 1, 2022, subject to continued employment with the Company.
- (6) Performance share units vest with respect to 25% based on total shareholder return relative to that of the companies listed on the Philadelphia Semiconductor Index as of the date of grant and as to 75% based on the Company's average net operating margin, in each case measured over a three-year performance period beginning on January 1, 2018 and ending on December 31, 2020 (or if earlier, upon the occurrence of a change in control of the Company), subject to continued service. Upon achievement of each performance metric at (i) the threshold level, 50% of the shares subject to such performance metric will vest, (ii) the target level, 100% of the shares subject to such performance metric will vest, or (iii) the maximum level, 175% of the shares subject to such performance metric will vest. No shares subject to a performance metric will vest if the applicable performance metric is achieved at below the threshold level.
- (7) Restricted share units with a vesting commencement date of February 1, 2019 vest with respect to 1/4th of the original number of ordinary shares subject thereto on February 1, 2020 and thereafter at a rate of 1/16th of the original number of shares on the first day of each quarterly vesting period of May, August, November and February, commencing on May 1, 2020, with the last 1/16th of the original number of shares vesting on February 1, 2023, subject to continued employment with the Company.
- (8) Amounts are calculated by multiplying the number of units shown by \$92.38 per share, which was the closing price of our ordinary shares on December 31, 2018.
- (9) Represents 2018 performance share units based on attainment of maximum performance.

## 2018 Option Exercises and Share Vested Table

The following table summarizes the share option exercises by our named executive officers in 2018 and restricted share unit awards that vested during 2018.

Name	Option Awards		Share Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(2)
Eyal Waldman	—	—	83,750	6,571,906
Jacob Shulman	12,590	827,442	8,562	641,363
Eric Johnson	—	—	2,563	202,776
Marc Sultzbaugh	40,000	3,335,769	17,375	1,359,037
Michael Kagan	—	—	15,562	1,219,546

(1) Represents the difference between the option exercise price and the sale price of the underlying shares at exercise multiplied by the number of shares covered by the exercised option.

(2) Represents the vesting date closing market price of our ordinary shares multiplied by the number of restricted share units that vested.

### Pension Benefits

None of our named executive officers participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us.

### Nonqualified Deferred Compensation

None of our named executives participate in or have account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us.

### Potential Payments Upon Termination Following a Change in Control

The following table sets forth quantitative estimates of the benefits to be received by each of our named executive officers (other than Messrs. Shulman and Johnson) under the executive severance benefits agreements described under “Compensation Discussion and Analysis—Change in Control Severance Arrangements,” if his employment were terminated without cause or constructively terminated (as these terms are defined in the executive severance benefits agreements) on December 31, 2018, assuming that such termination occurred during the 12-month period following a change in control (as such term is defined in the executive severance benefits agreements) of our Company. Such benefits are in addition to any payments or other benefits that our employees, including our named executive officers, who reside in Israel may be entitled to receive under applicable Israeli law. For more information, see “Compensation Discussion and Analysis—Change in Control Severance Arrangements.” Because Mr. Johnson was not a party to an executive severance benefits agreement in 2018, and because Mr. Shulman resigned effective May 4, 2018, and received no severance benefits in connection with his resignation, no amounts are shown for them in the table below.

Name	Salary Continuation (\$)	Bonus Severance (\$)	COBRA Coverage (\$)	Israeli Severance and Benefits (\$)(1)	Value of Accelerated Equity Awards (\$)(2)	Total (\$)
Eyal Waldman	349,664	—	—	822,717	9,365,023	10,537,405
Jacob Shulman	—	—	—	—	—	—
Eric Johnson	—	—	—	—	—	—
Marc Sultzbaugh	400,000	93,333	25,153	—	3,314,134	3,832,620
Michael Kagan	260,239	75,000	—	483,522	3,103,414	3,922,175

- (1) Includes severance pay and benefits in accordance with Israeli law. The executives are also entitled to such payments and benefits upon retirement, death or termination without cause (as defined in the Israeli Severance Pay Law) not in connection with a change in control.
- (2) The value of accelerated equity awards is calculated based on the closing price of our common stock on December 31, 2018, which was \$92.38 per share.

Additionally, under the Company's Third Amended and Restated Global Share Incentive Plan, in the event of a change in control of the Company, each outstanding award will be assumed or substituted by the successor corporation. If the successor corporation in a change in control refuses to assume or substitute an outstanding award, the award will vest in full. In addition, under the terms of the performance share unit award granted to our CEO in 2018, in the event of a change in control, the number of shares earned will be the greater of target and actual achievement during the performance period, and such number of shares will vest at the end of the original performance period if the award is assumed by the successor or upon the consummation of the change in control if the award is not assumed by the successor. Assuming that a change in control occurred as of December 31, 2018 and that the outstanding awards were not assumed or substituted, the value of the accelerated equity awards for Messrs. Waldman, Johnson, Sultzbaugh and Kagan would be \$18,730,046, \$1,235,492, \$3,314,134 and \$3,103,414.

#### **Pay Ratio Disclosure**

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K, we are providing the following information about the relationship of the annual total compensation of our employees and the annual total compensation of Mr. Waldman, our CEO. For 2018, our last completed fiscal year, the total compensation in 2018 of our CEO was approximately 47.1 times the median total compensation in 2018 of all of our other employees (the "Pay Ratio"). The median of the annual total compensation of all employees of our Company (other than our CEO) was \$167,865 and the annual total compensation of our CEO was \$7,897,858. As permitted by SEC rules, the median employee was the same median employee the Company identified for 2017. The Company is using the same median employee as in 2017 because there have been no changes to the Company's employee population or employee compensation arrangements that the Company reasonably believes would significantly affect the Pay Ratio. In identifying this median employee, the Company chose October 1, 2017 as the date for establishing the employee population used in identifying the median employee and used January 1, 2017 through September 30, 2017 as the measurement period. We identified the median employee using the sum of base salary or wages (based on our payroll records) earned, annual bonus actually paid, and grant date fair value of RSUs approved by the compensation committee during the measurement period for each employee (U.S. and non-U.S.) employed as of October 1, 2017. Permanent employees who joined in 2017 and permanent employees who were on leave during 2017 were assumed to have worked for the entire measurement period. We captured all full-time, part-time, seasonal and temporary employees located in the U.S., Israel, China and Denmark as of October 1, 2017, consisting of approximately 2,566 individuals, with approximately 17% of these individuals located in the U.S., approximately 77% located in Israel, and approximately 6% located in China and Denmark. As permitted by SEC rules, under the 5% "de minimis" exemption, we excluded 100 non-U.S. employees, as described in further detail below. Earnings of our employees outside the U.S. were converted to U.S. dollars using the currency exchange rate as of September 30, 2017. No cost-of-living adjustments were made. The annual total compensation of the median employee and the annual total compensation of the CEO were calculated in accordance with the requirements of Item 402(c)(2)(x) of Regulation S-K, except that because the median employee's bonus for 2018 has not yet been approved or paid, the amount recommended for approval was used.

**The non-U.S. excluded employees and their employee populations were as follows: Japan (9 employees); Netherlands (6 employees); Singapore (6 employees); Switzerland (1 employee); Taiwan (11 employees); U.K. (17 employees); Argentina (1 employee); Australia (5 employees); Czech Republic (2 employees); Greece (2 employees); India (5 employees); Indonesia (1 employee); Malaysia (2 employees); Norway (1 employee); Russia (14 employees); South Korea (3 employees); Thailand (5 employees); Turkey (2 employees); and Canada (7 employees).**

## DIRECTOR COMPENSATION

We maintain a compensation program for non-employee directors which was last approved by shareholders at our 2017 annual general meeting of shareholders held on April 25, 2017. The current annual cash compensation amounts payable to each non-employee member of our Board for their annual Board services are set forth in the table below:

	Annual Fees
Board membership	\$45,000
Additional amounts, as applicable, payable to:	
Chairperson of the Board	\$30,000
Chairperson of the audit committee	\$25,000
Chairperson of the compensation committee	\$15,000
Chairperson of the nominating and corporate governance committee	\$10,000
Chairperson of the technology, strategy and M&A committee	\$10,000
Member of the audit committee (other than chairperson)	\$10,000
Member of the compensation committee (other than chairperson)	\$7,400
Member of the nominating and corporate governance committee (other than chairperson)	\$5,000
Member of the technology*, strategy and M&A committee (other than chairperson)	\$5,000

\* The Board dissolved the technology committee effective June 19, 2018.

Our non-employee directors are reimbursed for expenses incurred in connection with attending Board and committee meetings, and are entitled to insurance, exemption and indemnification as customary for officers in the Company.

In addition to cash compensation, under the existing Board compensation plan, each of our non-employee directors receives an annual automatic, non-discretionary award of 4,200 restricted share units. Annual awards to our non-employee directors who continue to serve as a non-employee director following the annual general meeting will typically be processed on the first day of the month following the date of each annual general meeting. The annual award vests, in equal monthly increments over the 12 months following the applicable annual general meeting and will be 100% vested on the 12-month anniversary of the grant date, provided the director continues to serve as a non-employee director.

Our directors have a three-month period following cessation of service to our Company in which to exercise any outstanding vested options, except in the case of a director's death or disability, in which case the options will be exercisable by the director or his or her estate or beneficiary for a 12-month period following the cessation of services. Options and restricted share units granted to our non-employee directors will fully vest and become immediately exercisable upon a change in control of our Company.

In addition, each of our non-employee directors is subject to a policy requiring that he or she hold shares of the Company in the value of at least three times his or her annual retainer fees. Our non-employee directors have until the fifth anniversary of the later of the date that the policy was first adopted or their election to the Board. This policy is set forth in our Executive Officer and Director Share Ownership Policy and our Corporate Governance Guidelines. In January 2017, the Board also adopted a holding policy whereby, in the case that a non-employee director (or specified employee) does not hold the minimum share ownership by his or her fifth anniversary of becoming subject to the ownership policy, he or she will be required to retain the lesser of (i) twenty-five percent (25%) of the gross number of shares acquired upon an exercise, vesting or settlement or (ii) fifty percent (50%) of the number of shares remaining after satisfying the exercise price, if any, and tax withholding requirements.

The table below sets forth information regarding compensation provided by us to our non-employee directors during the year ended December 31, 2018.

**Director Compensation in Fiscal Year 2018**

<b>Name</b>	<b>Fees Earned or Paid in Cash (\$)</b>	<b>Share Awards \$(1)</b>	<b>Total (\$)</b>
Dov Baharav (2)	55,664	—	55,664
Shai Cohen (2)	35,959	—	35,959
Glenda Dorchak	58,880	344,820	403,700
Irwin Federman	75,000	344,820	419,820
Amal Johnson	61,422	344,820	406,242
Jack R. Lazar (2)	17,652	374,325	391,977
Jon A. Olson (2)	15,558	374,325	389,883
Umesh Padval (3)	31,743	461,983	493,726
David Perlmutter	52,164	344,820	426,489
Steve Sanghi (3)	30,329	461,983	492,312
Thomas Riordan (2)	43,151	—	43,151
Thomas Weatherford	62,819	344,820	407,639
Gregory L. Waters (2)	14,144	374,325	388,469

- (1) Amounts shown in this column represent the grant date fair value of restricted share units granted during 2018, in accordance with FASB ASC Topic 718. The valuation methodology used in determining the value of the RSUs is described in Note 1 to our consolidated financial statements included in this Annual Report on Form 10-K.
- (2) Pursuant to the agreement entered into between the Company, Starboard Value LP and certain of its affiliates, each of Dov Baharav, Shai Cohen and Thomas J. Riordan resigned from the Board effective June 19, 2018, and the Board appointed Jon A. Olson, Gregory Waters and Jack Lazar to the Board, each of whom were subsequently elected by our shareholders at our annual general meeting. Messrs. Olson, Waters and Lazar each received compensation in accordance with our non-employee director compensation program.
- (3) On February 20, 2018, Steve Sanghi and Umesh Padval were appointed by our Board to fill two vacancies on our Board and to serve as directors until our 2018 Annual General Meeting held on July 25, 2018. In connection with their appointment, each of Messrs. Sanghi and Padval were awarded 4,200 RSUs and received cash compensation pursuant to our non-employee director compensation program. However, because Messrs. Sanghi and Padval were appointed by the Board rather than elected by our shareholders, under applicable Israeli law, they were only entitled to compensation with respect to their services until the first general meeting of shareholders following their appointment, which was our extraordinary general meeting held on May 24, 2018. As a result, on May 24, 2018, the vesting of their restricted share units ceased and they were no longer entitled to any additional cash compensation. In order to compensate Messrs. Sanghi and Padval for their services between May 24, 2018 and our annual general meeting on July 25, 2018, at our annual general meeting, shareholders approved the vesting of an additional 700 restricted share units for each of Messrs. Sanghi and Padval and payment in cash in an amount of \$8,506.85 to Mr. Sanghi and \$9,000 for Mr. Padval.

The aggregate number of ordinary shares subject to outstanding options and restricted share units awards for each of our directors as of December 31, 2018 is as follows:

Name	Shares Subject to Outstanding Options as of 12/31/18 (#)	Shares Subject to Unvested Restricted Share Units as of 12/31/18 (#)
Dov Baharav	—	—
Shai Cohen	—	—
Glenda Dorchak	9,142	2,450
Irwin Federman	—	2,450
Amal Johnson	5,714	2,450
Jack R. Lazar	—	2,450
Jon A. Olson	—	2,450
Umesh Padval	—	2,450
David Perlmutter	45,000	2,450
Steve Sanghi	—	2,450
Thomas Riordan	—	—
Thomas Weatherford	—	2,450
Gregory L. Waters	—	2,450

#### ITEM 12—SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

##### Equity Compensation Plan Information

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2018.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (\$) (b)(1)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders(2)	3,788,666 (3)	50.73	4,565,797 (4)
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>3,788,666</b>	<b>50.73</b>	<b>4,565,797</b>

(1) Reflects weighted average price of options only.

(2) Consists of the Third Amended and Restated Global Share Incentive Plan (2006), the Global Share Incentive Assumption Plan (2010), the Kotura, Inc. Second Amended and Restated 2003 Stock Plan, the IPtronics, Inc. 2013 Restricted Stock Unit Plan, the EZchip Semiconductor Ltd. 2003 Amended and Restated Equity Incentive Plan, the EZchip Semiconductor Ltd. 2007 U.S. Equity Incentive Plan, the Amended and Restated EZchip Semiconductor Ltd. 2009 Equity Incentive Plan, and the Amended and Restated Employee Share Purchase Plan.

(3) Consists of 494,503 options and 3,294,163 restricted share units.

(4) Includes 2,935,346 shares available for issuance under the Amended and Restated Employee Share Purchase Plan as of December 31, 2018, of which up to 2,192,274 shares may be issued with respect to the current purchase period ending February 28, 2019.

#### Security Ownership of Certain Beneficial Owners and Management

The following table provides information relating to the beneficial ownership of our ordinary shares as of February 15, 2019, by:

- each shareholder known by us to own beneficially more than 5% of our ordinary shares (based on information supplied in Schedules 13D and 13G filed with the SEC, as indicated);
- each of the four named executive officers named in the summary compensation table on page 72;
- each of our directors; and
- all of our current executive officers and current directors as a group.

Beneficial ownership is determined according to the rules of the SEC and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, and includes options that are currently exercisable or exercisable within 60 days of February 15, 2019. Except as indicated by footnote, and subject to community property laws where applicable, we believe the persons named in the table have sole voting and investment power with respect to all ordinary shares shown as beneficially owned by them.

Unless otherwise indicated below, the address for each beneficial owner listed is c/o Mellanox Technologies, Inc., 350 Oakmead Parkway, Suite 100, Sunnyvale, California 94085, Attention: Chief Financial Officer.

Name of Beneficial Owner	Beneficial Ownership				Percentage of Shares Outstanding <sup>(1)</sup>
	Ordinary Shares	Options Exercisable within 60 Days	Restricted share Units Vesting or Settled within 60 Days	Shares Beneficially Owned	
<b>5% Shareholders:</b>					
Starboard Value LP <sup>(2)</sup>	3,142,678	—	—	3,142,678	5.8%
777 Third Avenue, 18th Floor New York, New York 10017					
<b>Executive Officers, Directors and Nominees for Director:</b>					
Eyal Waldman <sup>(3)</sup>	1,834,748	—	—	1,834,748	3.4%
Jacob Shulman	12,286	—	—	12,286	*
Eric Johnson	4,293	—	—	4,293	*
Michael Kagan	153,721	—	—	153,721	*
Marc Sultzbaugh	38,445	47,056	—	85,501	*
Irwin Federman	15,650	—	700	16,350	*
Glenda Dorchak	15,150	4,000	700	19,850	*
Amal M. Johnson	30,650	—	700	31,350	*
Jack Lazar	2,800	—	700	3,500	*
Jon A. Olson	2,800	—	700	3,500	*
Umesh Padval	4,200	—	700	4,900	*
David Perlmutter	15,650	45,000	700	61,350	*
Steve Sanghi	4,200	—	700	4,900	*
Gregory Waters	2,800	—	700	3,500	*
Thomas Weatherford	8,450	—	700	9,150	*
All current executive officers and current directors as a group (15 persons) <sup>(4)</sup>	2,174,693	96,056	7,000	2,277,749	4.2%

\* Represents beneficial ownership of less than one percent (1%) of the outstanding ordinary shares.



- (1) The applicable percentage ownership for 5% shareholders, members of our Board, named executive officers and all current executive officers and current directors as a group is based on 54,225,264 ordinary shares outstanding as of February 15, 2019, together with applicable options and restricted share units for such shareholder. The applicable percentage ownership for the other beneficial owners listed in the table is based on the number of outstanding shares as of the dates indicated in the relevant Schedules 13D and 13G filings described in footnote 2 below. Beneficial ownership is determined in accordance with the rules of the SEC, based on factors including voting and investment power with respect to shares. Ordinary shares subject to the options currently exercisable, or exercisable within 60 days of February 15, 2019, and ordinary shares underlying restricted share units that vest within 60 days of February 15, 2019 are deemed outstanding for computing the percentage ownership of the person holding such options but are not deemed outstanding for computing the percentage ownership of any other person.
- (2) This information is as of February 15, 2019 and is based on the Schedule 13D/A filed with the SEC on February 15, 2019 by Starboard Value LP (“Starboard”). Starboard may be deemed to be the beneficial owner and has sole voting and dispositive power of the (i) 2,052,787 ordinary shares owned by Starboard Value and Opportunity Master Fund LTD, (ii) 253,026 ordinary shares owned by Starboard Value and Opportunity S LLC, (iii) 142,339 ordinary shares owned by Starboard Value and Opportunity C LP, (iv) 108,041 ordinary shares owned by Starboard Value and Opportunity Master Fund L LP, (v) 262,498 ordinary shares owned by Starboard Leaders Papa LLC and (vi) 323,987 ordinary shares held in the Starboard Value LP Account.
- (3) Includes 1,426,041 ordinary shares held by Waldo Holdings 2, a general partnership formed pursuant to the laws of Israel, of which Mr. Waldman is a general partner. Mr. Waldman has sole voting and dispositive power over all of these shares.
- (4) Mr. Shulman resigned from the Company effective May 4, 2018. Effective, January 2, 2019, Mr. Johnson no longer serves as the interim principal financial and accounting officer of the Company. Neither person is included in the calculation of shares held by all current executive officers and current directors as a group. The shareholdings of Mr. Ahrens and Mr. Prescher are included in the calculation of shares held by all current executive officers and current directors as a group.

### **ITEM 13—CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

#### **Certain Relationships and Related Transactions**

On June 19, 2018, we entered into an agreement (the “**Settlement Agreement**”) with Starboard Value LP and certain of its affiliates named therein (collectively, “**Starboard**”), which, on that date, had a combined economic and beneficial ownership interest of approximately 10.5% of our ordinary shares.

Pursuant to the Settlement Agreement, effective as of June 19, 2018, each of Dov Baharav, Shai Cohen and Thomas J. Riordan resigned from the Board immediately following the execution of the Settlement Agreement. Further, immediately following the execution of the Settlement Agreement and the resignations of Messrs. Baharav, Cohen and Riordan, the Board appointed three independent directors, Jack Lazar, Jon A. Olson and Gregory Waters (the “**Independent Appointees**”) to the Board. We agreed to and did nominate the Independent Appointees for election at our 2018 annual general meeting. Additionally, pursuant to the Settlement Agreement, Thomas Weatherford delivered to us an irrevocable resignation letter pursuant to which he will resign from the Board and all applicable committees thereof effective upon March 2, 2019.

Concurrently with each of their appointments to the Board, Mr. Lazar was appointed to the compensation and audit committees, Mr. Olson was appointed to the audit committee and Mr. Waters was appointed to the nominating and corporate governance committee of the Board.

Subject to Starboard satisfying the Minimum Ownership Threshold (as defined below) and our failure during the Standstill Period (as defined below) to achieve certain agreed upon non-GAAP operating margin thresholds for fiscal year 2018 or certain last twelve months periods during fiscal year 2019 (the “**Operational Targets**”), as set forth in the Settlement Agreement, or our failure to timely disclose certain financial reporting information, Starboard will have the right to designate an additional director for appointment to the Board (the “**Additional Starboard Appointee**”). The Operational Targets reflect arms-length negotiated contractual agreements between us and Starboard and are not, in any way, intended to be interpreted as our financial guidance. The Operational Targets should not be regarded as an indication that we or the Board consider them to be expected or anticipated results of the Company and should not be relied upon as such.

Under the terms of the Settlement Agreement, if at any point during the Standstill Period any Independent Appointee or Additional Starboard Appointee resigns or is otherwise unable to serve as a director, Starboard will have certain replacement rights with respect to the directorship of that Independent Appointee or Additional Starboard Appointee. Starboard will not be entitled to exercise such replacement rights if, at the time it would exercise such rights, Starboard’s combined economic and

beneficial ownership is less than the lesser of 3.0% of the then outstanding ordinary shares and 1,565,937 ordinary shares (the “Minimum Ownership Threshold”).

Starboard also agreed to certain customary standstill provisions, effective as of the date of the Settlement Agreement through the earlier of (x) 15 business days prior to the deadline for the submission of shareholder nominations for the 2019 annual general meeting of shareholders and (y) 100 days prior to the first anniversary of the 2018 annual general meeting (the “Standstill Period”), prohibiting it from, among other things: (i) soliciting proxies or consents with respect to our securities, (ii) entering into a voting agreement or “group” (within the meaning of Section 13(d)(3) of the Exchange Act) with our other shareholders, other than affiliates of Starboard, (iii) encouraging any person to submit nominees in furtherance of a contested solicitation for the election or removal of directors or (iv) submitting any proposal for consideration by our shareholders at any annual or extraordinary general meeting of shareholders. If Starboard does not provide written notice of an intention to submit director nominations for the 2019 annual general meeting of shareholders prior to the deadline for such submissions, then the Standstill Period and the obligations of each of us and Starboard will be extended through the earlier of (x) 15 business days prior to the deadline for the submission of shareholder nominations for the 2020 annual general meeting of shareholders and (y) 100 days prior to the first anniversary of the 2019 annual general meeting of shareholders.

We agreed to hold the 2019 annual general meeting of shareholders during the month of July in calendar year 2019 and the 2020 annual general meeting of shareholders no later than July 25, 2020, in each case unless otherwise agreed to in writing by us and Starboard.

Under the terms of the Settlement Agreement, we agreed to reimburse Starboard for its reasonable, documented out-of-pocket fees and expenses (including legal expenses) incurred through the date of the Settlement Agreement in connection with Starboard’s involvement at the Company up to a maximum of \$2.0 million. We paid \$2.0 million for this reimbursement to Starboard on July 11, 2018.

The foregoing description of the Settlement Agreement does not purport to be complete. For a further description of the terms of the Settlement Agreement, please see our Current Report on Form 8-K that we filed with the SEC on June 19, 2018. See Part IV, Item 15, “Exhibits and Financial Statement Schedules” for a copy of the Settlement Agreement incorporated by reference into this annual report on Form 10-K as Exhibit 10.26

Since the beginning of our last fiscal year, except as disclosed above, there has not been, nor is there currently proposed, any transaction or series of similar transactions to which we were or are to be a party in which the amount involved exceeds \$120,000 and in which any of our directors, executive officers, holders of more than 5% of our ordinary shares or any members of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest.

Our audit committee, pursuant to its written charter which is available on our website as described below, is responsible for reviewing and, where required, approving related party transactions on an ongoing basis as required by the rules of the SEC and the Companies Law and the regulations promulgated thereunder. For purposes of compliance with U.S. rules and regulations, the audit committee conducts an appropriate review and oversight of all “related party transactions,” as required to be disclosed pursuant to Item 404 of Regulation S-K under the Exchange Act, for potential conflict of interest situations on an ongoing basis. We follow internal written procedures to review potential related party transactions, bring these potential related party transactions to the attention of the audit committee and review, approve or ratify, as necessary and appropriate, related party transactions. Under the Companies Law, our audit committee must also approve specified actions and transactions with office holders and controlling shareholders or in which an office holder or controlling shareholder has a Personal Interest. The audit committee is also required to determine whether any such action is material and whether any such transaction is an extraordinary transaction or non-negligible transaction, for the purpose of approving such action or transaction as required by the Companies Law. Under the Companies Law, a “controlling shareholder” is a shareholder who has the ability to direct the Company’s activity, excluding an ability deriving merely from holding an office of director or another office in the Company, and a person will be presumed to control the Company if he holds 50% or more of (i) our voting rights or (ii) the rights to appoint our directors or general managers. For the purpose of “transactions with an interested party,” under Part 6, Chapter 5 of the Companies Law, the definition of “controlling shareholder” also includes a shareholder that owns 25% or more of the voting rights in the general meeting of the Company, if there is no other person who holds more than 50% of the voting rights in the Company; two or more persons holding voting rights in the Company each of which has a Personal Interest in the approval of the transaction being brought for approval of the Company will be considered to be joint holders. The Company is not currently aware of any controlling shareholder, as such term is defined in the Companies Law. A copy of the audit committee charter is available on our website at [www.mellanox.com](http://www.mellanox.com) under “Company—Investor Relations—Corporate Governance.”

## Director Independence

The Board currently consists of eleven directors. Our Corporate Governance Guidelines require that the Board be comprised of a majority of directors who qualify as independent directors as required under the rules of Nasdaq. The Board has determined that each of our current directors and each of the other persons who served as director during the fiscal year ended December 31, 2018, other than Mr. Waldman, our president and CEO, is independent under the director independence standards of Nasdaq.

The Companies Law provides that the Board is required to determine how many of our members of the Board should be required to have financial and accounting expertise. The Board has determined that at least one member of the Board should be required to have financial and accounting expertise. Each member of the audit committee of the Board has financial and accounting expertise as defined under the Companies law.

## ITEM 14—PRINCIPAL ACCOUNTANT FEES AND SERVICES

### Audit and Non-Audit Services

Subject to shareholder approval of the audit committee's authority to determine remuneration for their services, the audit committee is directly responsible for the appointment, compensation and oversight of our independent auditors. In addition to its retention of Kost Forer Gabbay & Kasierer, the Israel-based member of Ernst & Young Global ("EY Israel") to audit our consolidated financial statements for the fiscal year ended December 31, 2018, the audit committee retained EY Israel to provide other non-audit and advisory services in 2018. The audit committee has reviewed all non-audit services provided by EY Israel in 2018 and has concluded that the provision of such non-audit services was compatible with maintaining EY Israel's independence and that such independence has not been impaired.

Set forth below are the aggregate fees billed for professional services rendered for the fiscal years ended December 31, 2017 and 2018 by EY Israel.

Service Category	Fiscal Year Ended December 31,	
	2018	2017
Audit Fees	\$ 867,000	\$ 705,000
Audit-Related Fees	21,200	69,676
Tax Fees	80,000	53,428
All Other Fees	17,000	34,200
Total	\$ 985,200	\$ 862,304

In the above table, in accordance with the SEC's definitions and rules, "audit fees" are fees for professional services for the audit and review of our annual consolidated financial statements, as well as fees for issuance of consents and for services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements except those not required by statute or regulation; "audit-related fees" are fees for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements, including attestation services that are not required by statute or regulation, due diligence and any services related to acquisitions; "tax fees" are fees for tax compliance, tax advice and tax planning; and "all other fees" are fees for any services not included in the first three categories.

The Sarbanes-Oxley Act of 2002 and the auditor independence rules of the SEC require all issuers to obtain pre-approval from their respective audit committees in order for their independent registered public accounting firms to provide professional services without impairing independence. As such, the audit committee has a policy and has established procedures by which it pre-approves all audit and other permitted professional services to be provided by the Company's independent registered public accounting firm. From time to time, the Company may desire additional permitted professional services for which specific pre-approval is obtained from the audit committee before provision of such services commences. The audit committee has considered and determined that the provision of the services other than audit services referenced above is compatible with maintenance of the auditors' independence.

PART IV

ITEM 15—EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report.

1. *Financial Statements.* The following financial statements and report of the independent registered public accounting firm are included in Item 8:

	<u>Page</u>
Reports of Independent Registered Public Accounting Firms	88
Consolidated Balance Sheets	91
Consolidated Statements of Operations	92
Consolidated Statements of Comprehensive Income (Loss)	93
Consolidated Statements of Shareholders' Equity	94
Consolidated Statements of Cash Flows	95
Notes to Consolidated Financial Statements	96

2. *Financial Statement Schedules.* The following financial statement schedule is filed as part of this report:

Schedule II—Consolidated Valuation and Qualifying Accounts	130
--	-----

All other schedules have been omitted because they are not applicable or not required, or the information is included in the Consolidated Financial Statements or Notes thereto.

3. *Exhibits.* See Item 15(b) below. Each management contract or compensatory plan or arrangement required to be filed has been identified.

(b) *Exhibits.*

## INDEX TO EXHIBITS

<u>Exhibit No.</u>		<u>Description of Exhibit</u>
3.1	(1)	<a href="#"><u>Amended and Restated Articles of Association of Mellanox Technologies, Ltd. (as amended on May 24, 2018).</u></a>
10.1	(2) *	<a href="#"><u>Mellanox Technologies, Ltd. Third Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.2	(3) *	<a href="#"><u>Mellanox Technologies, Ltd. Second Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.3	(4) *	<a href="#"><u>First Amendment to the Mellanox Technologies, Ltd. Amended and Restated Employee Share Purchase Plan.</u></a>
10.4	(5) *	<a href="#"><u>Mellanox Technologies, Ltd. Amended and Restated Employee Share Purchase Plan.</u></a>
10.5	(6) *	<a href="#"><u>Voltaire Ltd. 2007 Incentive Compensation Plan.</u></a>
10.6	(7) *	<a href="#"><u>Voltaire Ltd. 2003 Section 102 Stock Option/Stock Purchase Plan.</u></a>
10.7	(8) *	<a href="#"><u>Voltaire Ltd. 2001 Section 102 Stock Option/Stock Purchase Plan.</u></a>
10.8	(9) *	<a href="#"><u>Voltaire Ltd. 2001 Stock Option Plan.</u></a>
10.9	(10) *	<a href="#"><u>Kotura, Inc. Second Amended and Restated 2003 Stock Plan.</u></a>
10.10	(11) *	<a href="#"><u>IPtronics, Inc. 2013 Restricted Stock Unit Plan.</u></a>
10.11	(12) *	<a href="#"><u>Mellanox Technologies, Ltd., Global Share Incentive Assumption Plan (2010).</u></a>
10.12	(13) *	<a href="#"><u>EZchip Semiconductor Ltd. 2003 Amended and Restated Equity Incentive Plan.</u></a>
10.13	(14) *	<a href="#"><u>Amendment to EZchip Semiconductor Ltd. 2003 Amended and Restated Equity Incentive Plan, dated January 7, 2014.</u></a>
10.14	(15) *	<a href="#"><u>EZchip Semiconductor Ltd. 2007 U.S. Equity Incentive Plan.</u></a>
10.15	(16) *	<a href="#"><u>Amendment to EZchip Semiconductor Ltd. 2007 U.S. Equity Incentive Plan, dated September 10, 2013.</u></a>
10.16	(17) *	<a href="#"><u>Amended and Restated EZchip Semiconductor Ltd. 2009 Equity Incentive Plan.</u></a>
10.17	(18) *	<a href="#"><u>Form of Indemnification Undertaking made by and between Mellanox Technologies, Ltd. and each of its directors and executive officers.</u></a>
10.18	(19) *	<a href="#"><u>Form of Mellanox Technologies, Ltd. Executive Severance Benefits Agreement for U.S. Executives.</u></a>
10.19	(20) *	<a href="#"><u>Form of Mellanox Technologies, Ltd. Executive Severance Benefits Agreement for Israel Executives.</u></a>
10.20	(21) *	<a href="#"><u>Form of Restricted Share Unit Award Grant Notice and Restricted Share Unit Award Agreement For All Participants (Other than Participants in Israel) under the Third Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.21	(22) *	<a href="#"><u>Form of Restricted Share Unit Award Grant Notice and Restricted Share Unit Award Agreement For Participants in Israel under the Third Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.22	(23) *	<a href="#"><u>Form of Performance Share Unit Award Grant Notice and Performance Share Unit Award Agreement for Participants in the United States under the Third Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.23	(24) *	<a href="#"><u>Form of Performance Share Unit Award Grant Notice and Performance Share Unit Award Agreement for Participants in Israel under the Third Amended and Restated Global Share Incentive Plan (2006).</u></a>
10.24	(25)	<a href="#"><u>Lease Contract, dated March 1, 2011, by and between the Company, as tenant, and Sha'ar Yokneam Registered Limited Partnership, as landlord (as translated from Hebrew).</u></a>
10.25	(26)	<a href="#"><u>Lease Agreement, dated April 9, 2017, by and between the Company, as tenant, and Rubinstein Buildings Ltd., as landlord (as translated from Hebrew).</u></a>
10.26	(27)	<a href="#"><u>Settlement Agreement, dated as of June 19, 2018, among Mellanox Technologies, Ltd. and Starboard Value LP and certain of its affiliates.</u></a>

10.27	† *	<a href="#">Offer Letter, dated as of December 20, 2018, between Mellanox Technologies, Inc. and Doug Ahrens.</a>
10.28	† *	<a href="#">Executive Severance Benefits Agreement, dated as of December 16, 2018, between Mellanox Technologies, Ltd. and Doug Ahrens.</a>
21.1	†	<a href="#">List of Company Subsidiaries.</a>
23.1	†	<a href="#">Consent of Kost, Forer, Gabbay and Kasierer, a member of EY Global, independent registered public accounting firm</a>
23.2	†	<a href="#">Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm</a>
24.1	†	<a href="#">Power of Attorney (included on signature page to this annual report on Form 10-K).</a>
31.1	†	<a href="#">Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
31.2	†	<a href="#">Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
32.1	†	<a href="#">Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>
32.2	†	<a href="#">Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>
101.INS	†	XBRL Instance Document
101.SCH	†	XBRL Taxonomy Extension Schema Document
101.CAL	†	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	†	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	†	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	†	XBRL Taxonomy Extension Definition Linkbase Document

- 
- (1) Incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
  - (2) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (SEC File No. 001-33299) filed on July 25, 2018.
  - (3) Incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on May 5, 2017.
  - (4) Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on July 29, 2016.
  - (5) Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A (SEC File No. 001-33299) filed on April 19, 2012.
  - (6) Incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-8 (File No. 333-172093) filed on February 7, 2011.
  - (7) Incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-8 (File No. 333-172093) filed on February 7, 2011.
  - (8) Incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-8 (File No. 333-172093) filed on February 7, 2011.
  - (9) Incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-8 (File No. 333-172093) filed on February 7, 2011.
  - (10) Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 (File No. 333-190631) filed on August 15, 2013.
  - (11) Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 (File No. 333-189720) filed on July 1, 2013.
  - (12) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (SEC File No. 001-33299) filed on February 7, 2011.
  - (13) Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 (SEC File No. 333-209808) filed on February 29, 2016.
  - (14) Incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-8 (SEC File No. 333-209808) filed on February 29, 2016.
  - (15) Incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-8 (SEC File No. 333-209808) filed on February 29, 2016.
  - (16) Incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-8 (SEC File No. 333-209808) filed on February 29, 2016.

- (17) Incorporated by reference to Exhibit 4.6 to the Company's Registration Statement on Form S-8 (SEC File No.333-209808) filed on February 29, 2016.
- (18) Incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K (SEC File No. 001-33299) filed on February 16, 2018.
- (19) Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (20) Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (21) Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (22) Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (23) Incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (24) Incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on August 3, 2018.
- (25) Incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K (SEC File No. 001-33299) filed on March 7, 2011.
- (26) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (SEC File No. 001-33299) filed on May 5, 2017.
- (27) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (SEC File No. 001-33299) filed on June 19, 2018.

\* Indicates management contract or compensatory plan, contract or arrangement.

† Filed herewith.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Mellanox Technologies Ltd.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Mellanox Technologies Ltd. (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the two years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (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 December 31, 2018 and 2017, and the result of its operations and its cash flows for each of the two years in the period ended December 31, 2018, 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 December 31, 2018, 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 February 21, 2019 expressed an unqualified 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/ Kost Forer Gabbay and Kasierer

KOST FORER GABBAY & KASIERER  
A Member of EY Global

We have served as the Company's auditor since 2017.

Tel-Aviv, Israel  
February 21, 2019



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### To the Shareholders and the Board of Directors of Mellanox Technologies Ltd.

#### Opinion on Internal Control over Financial Reporting

We have audited Mellanox Technologies Ltd. (the Company) internal control over financial reporting as of December 31, 2018, 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, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

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 December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the two years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) and our report dated February 21, 2019 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's 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/ Kost Forer Gabbay and Kasierer

KOST FORER GABBAY & KASIERER  
A Member of EY Global

Tel-Aviv, Israel  
February 21, 2019

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Mellanox Technologies, Ltd.

In our opinion, the consolidated statements of operations, of comprehensive income (loss), of shareholders' equity and of cash flows for the year ended December 31, 2016 present fairly, in all material respects, the results of operations and cash flows of Mellanox Technologies, Ltd. and its subsidiaries for the year ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule for the year ended December 31, 2016 presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audit. We conducted our audit of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
February 17, 2017

MELLANOX TECHNOLOGIES, LTD.

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2018	2017
(In thousands, except par value)		
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 56,766	\$ 62,473
Short-term investments	381,724	211,281
Accounts receivable, net	150,625	154,213
Inventories	104,381	64,657
Other current assets	16,942	14,295
Total current assets	710,438	506,919
Property and equipment, net	105,334	109,919
Severance assets	17,043	18,302
Intangible assets, net	179,328	228,195
Goodwill	473,916	472,437
Deferred taxes and other long-term assets	101,139	66,162
Total assets	\$ 1,587,198	\$ 1,401,934
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 70,336	\$ 59,090
Accrued liabilities	121,878	114,058
Deferred revenue	20,558	23,485
Total current liabilities	212,772	196,633
Accrued severance	21,645	23,205
Deferred revenue	18,665	17,820
Term debt	—	72,761
Other long-term liabilities	32,468	34,067
Total liabilities	285,550	344,486
Commitments and Contingencies (Note 10)		
Shareholders' equity		
Ordinary shares: NIS 0.0175 par value, 200,000 shares authorized, 53,918 and 51,488 shares issued and outstanding at December 31, 2018 and 2017, respectively	233	221
Additional paid-in capital	982,677	873,979
Accumulated other comprehensive income (loss)	(1,051)	1,618
Retained earnings	319,789	181,630
Total shareholders' equity	1,301,648	1,057,448
Total liabilities and shareholders' equity	\$ 1,587,198	\$ 1,401,934

The accompanying notes are an integral part of these consolidated financial statements.

MELLANOX TECHNOLOGIES, LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,		
	2018	2017	2016
	(In thousands, except per share data)		
Total revenues	\$ 1,088,743	\$ 863,893	\$ 857,498
Cost of revenues	388,573	300,450	301,986
Gross profit	700,170	563,443	555,512
Operating expenses:			
Research and development	360,344	365,878	322,620
Sales and marketing	148,553	150,457	133,780
General and administrative	68,870	52,170	68,522
Restructuring and impairment charges	10,329	12,019	—
Total operating expenses	588,096	580,524	524,922
Income (loss) from operations	112,074	(17,081)	30,590
Interest expense	(2,185)	(7,937)	(7,352)
Other income	2,322	3,115	1,090
Interest and other, net	137	(4,822)	(6,262)
Income (loss) before taxes on income	112,211	(21,903)	24,328
Provision for (benefit from) taxes on income	(22,047)	(2,478)	5,810
Net income (loss)	\$ 134,258	\$ (19,425)	\$ 18,518
Net income (loss) per share — basic	\$ 2.54	\$ (0.39)	\$ 0.38
Net income (loss) per share — diluted	\$ 2.46	\$ (0.39)	\$ 0.37
Shares used in computing net income (loss) per share:			
Basic	52,863	50,310	48,145
Diluted	54,646	50,310	49,526

The accompanying notes are an integral part of these consolidated financial statements.

MELLANOX TECHNOLOGIES, LTD.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year ended December 31,		
	2018	2017	2016
	(In thousands)		
Net income (loss)	\$ 134,258	\$ (19,425)	\$ 18,518
Other comprehensive income (loss), net of tax:			
Change in unrealized gains on available-for-sale securities, net	234	929	342
Change in unrealized gains (losses) on derivative contracts, net (net of tax effect of (\$171), \$105, and \$47)	(2,903)	1,617	399
Other comprehensive income (loss)	(2,669)	2,546	741
Total comprehensive income (loss), net of tax	\$ 131,589	\$ (16,879)	\$ 19,259

The accompanying notes are an integral part of these consolidated financial statements.

MELLANOX TECHNOLOGIES, LTD.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Ordinary Shares		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	Shares	Amount				
(In thousands, except share data)						
Balance at December 31, 2015	47,119,754	\$ 200	\$ 684,824	\$ (1,669)	\$ 183,326	\$ 866,681
Net income	—	—	—	—	18,518	18,518
Unrealized losses on available-for-sale securities, net of taxes	—	—	—	342	—	342
Unrealized gain on derivative contracts, net of taxes	—	—	—	399	—	399
Share-based compensation	—	—	66,309	—	—	66,309
Issuances of shares through employee equity incentive plans	1,463,884	7	5,083	—	—	5,090
Issuance of shares through employee share purchase plan	491,968	2	17,463	—	—	17,465
Income tax benefit from share options exercised	—	—	(46)	—	—	(46)
Fair value of awards attributable to pre-acquisition services	—	—	972	—	—	972
Balance at December 31, 2016	49,075,606	\$ 209	\$ 774,605	\$ (928)	\$ 201,844	\$ 975,730
Net loss	—	—	—	—	(19,425)	(19,425)
Effect of adopting ASU 2016-09: <i>Improvements to Employee Share-Based Payment Accounting</i>	—	—	789	—	(789)	—
Unrealized gain on available-for-sale securities, net of taxes	—	—	—	929	—	929
Unrealized gains on derivative contracts, net of taxes	—	—	—	1,617	—	1,617
Share-based compensation	—	—	68,864	—	—	68,864
Issuances of shares through employee equity incentive plans	1,843,168	9	7,633	—	—	7,642
Issuance of shares through employee share purchase plan	568,876	3	22,088	—	—	22,091
Balance at December 31, 2017	51,487,650	\$ 221	\$ 873,979	\$ 1,618	\$ 181,630	\$ 1,057,448
Net income	—	—	—	—	134,258	134,258
Effect of adopting ASU 2014-09, <i>Revenue from Contracts with Customers (Topic 606)</i> , net of tax effect of \$600	—	—	—	—	3,901	3,901
Unrealized gains on available-for-sale securities, net of taxes	—	—	—	234	—	234
Unrealized losses on derivative contracts, net of taxes	—	—	—	(2,903)	—	(2,903)
Share-based compensation	—	—	71,342	—	—	71,342
Issuances of shares through employee equity incentive plans	1,940,435	10	14,508	—	—	14,518
Issuance of shares through employee share purchase plan	490,123	2	22,848	—	—	22,850
Balance at December 31, 2018	53,918,208	\$ 233	\$ 982,677	\$ (1,051)	\$ 319,789	\$ 1,301,648

The accompanying notes are an integral part of these consolidated financial statements.

**MELLANOX TECHNOLOGIES, LTD.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Year ended December 31,		
	2018	2017	2016
(In thousands)			
<b>Cash flows from operating activities:</b>			
Net income (loss)	\$ 134,258	\$ (19,425)	\$ 18,518
<b>Adjustments to reconcile net income (loss) to net cash provided by operating activities:</b>			
Depreciation and amortization	101,590	103,821	97,731
Deferred income taxes	(26,697)	(2,150)	809
Share-based compensation	71,342	68,864	66,309
Gains on short-term investments, net	(5,278)	(3,460)	(1,774)
Impairment charges and loss on disposal of property and equipment	4,754	12,019	—
<b>Changes in assets and liabilities, net of effect of acquisitions:</b>			
Accounts receivable, net	3,588	(12,175)	(41,331)
Inventories	(43,301)	(887)	8,263
Prepaid expenses and other assets	(2,650)	(681)	6,948
Accounts payable	10,486	170	13,330
Accrued liabilities and other liabilities	16,765	15,216	27,261
Net cash provided by operating activities	<u>264,857</u>	<u>161,312</u>	<u>196,064</u>
<b>Cash flows from investing activities:</b>			
Purchase of severance-related insurance policies	(1,203)	(1,312)	(1,172)
Purchase of short-term investments	(395,560)	(188,745)	(300,858)
Proceeds from sales and maturities of short-term investments	230,629	252,211	387,489
Proceeds from sales of property and equipment	3,239	—	—
Purchase of property and equipment	(36,338)	(41,376)	(42,976)
Purchase of intangible assets	(6,535)	(2,843)	(7,962)
Purchase of investments in privately-held companies	(12,500)	(15,021)	(4,982)
Acquisitions, net of cash acquired	(7,379)	(872)	(693,692)
Net cash provided by (used in) investing activities	<u>(225,647)</u>	<u>2,042</u>	<u>(664,153)</u>
<b>Cash flows from financing activities:</b>			
Proceeds from term debt	—	—	280,000
Principal payments on term debt	(74,000)	(172,000)	(34,000)
Term debt issuance costs	—	—	(5,521)
Principal payments on capital lease and intangible assets obligations	(8,426)	(7,369)	(1,364)
Proceeds from issuances of ordinary shares through employee equity incentive plans	37,368	29,733	22,555
Net cash provided by (used in) financing activities	<u>(45,058)</u>	<u>(149,636)</u>	<u>261,670</u>
Net increase (decrease) in cash, cash equivalents, and restricted cash	(5,848)	13,718	(206,419)
Cash, cash equivalents, and restricted cash at beginning of period	70,498	56,780	263,199
Cash, cash equivalents, and restricted cash at end of period	<u>\$ 64,650</u>	<u>\$ 70,498</u>	<u>\$ 56,780</u>

**Supplemental disclosures of cash flow information**

Interest paid	\$ 577	\$ 5,384	\$ 5,335
Income taxes paid	<u>\$ 2,174</u>	<u>\$ 1,218</u>	<u>\$ 835</u>

**Supplemental disclosure of non-cash investing and financing activities**

Intangible assets financed with debt	\$ 2,585	\$ 12,981	\$ 8,834
Unpaid property and equipment	<u>\$ 1,537</u>	<u>\$ 3,962</u>	<u>\$ 5,425</u>
Transfer from inventory to property and equipment	<u>\$ 3,577</u>	<u>\$ 1,753</u>	<u>\$ 3,814</u>

The accompanying notes are an integral part of these consolidated financial statements.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

*Company*

Mellanox Technologies, Ltd., an Israeli corporation (the "Company" or "Mellanox"), was incorporated and commenced operations in March 1999. Mellanox is a supplier of high-performance interconnect products for computing, storage and communications applications.

*Principles of presentation*

The consolidated financial statements include the Company's accounts as well as those of its wholly owned subsidiaries after the elimination of all intercompany balances and transactions.

On February 23, 2016, the Company completed its acquisition of EZchip Semiconductor, Ltd. ("EZchip"), a public company formed under the laws of the State of Israel and specializing in network-processing semiconductors. Upon the consummation of the acquisition, EZchip became a wholly owned subsidiary of the Company. The consolidated financial statements include the results of operations of EZchip commencing as of the acquisition date.

*Risks and uncertainties*

The Company is subject to all of the risks inherent in a company which operates in the dynamic and competitive semiconductor industry. Significant changes in any of the following areas could have a material adverse impact on the Company's financial position and results of operations; unpredictable volume or timing of customer orders; ordered product mix; the sales outlook and purchasing patterns of the Company's customers based on consumer demands and general economic conditions; loss of one or more of the Company's customers; decreases in the average selling prices of products or increases in the average cost of finished goods; the availability, pricing and timeliness of delivery of components used in the Company's products; reliance on a limited number of subcontractors to manufacture, assemble, package and production test the Company's products; the Company's ability to successfully develop, introduce and sell new or enhanced products in a timely manner; product obsolescence and the Company's ability to manage product transitions; the timing of announcements or introductions of new products by the Company's competitors, and the Company's ability to successfully integrate acquired businesses.

*Use of estimates*

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the dates of the financial statements and the reported amounts of net revenue and expenses in the reporting periods. The Company regularly evaluates estimates and assumptions related to revenue recognition, allowances for doubtful accounts, allowances for price adjustments, investment valuation, warranty reserves, inventory reserves, share-based compensation expense, long-term asset valuations, useful lives of property, equipment, and intangibles, accounting for business combinations, goodwill and purchased intangible asset valuation, investments in privately-held companies, accounting and fair value of financial instruments and derivatives, deferred income tax asset valuation, uncertain tax positions, litigation and other loss contingencies. These estimates and assumptions are based on current facts, historical experience and various other factors that the Company believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of revenue, costs and expenses that are not readily apparent from other sources. The actual results that the Company experiences may differ materially and adversely from the Company's original estimates. To the extent there are material differences between the estimates and actual results, the Company's future results of operations will be affected.

*Cash and cash equivalents*

The Company considers all highly liquid investments with a maturity of three months or less from the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks and money market funds.



MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**Restricted cash**

The Company maintains certain cash amounts that are restricted as to withdrawal or use over the long-term. The cash is securing bank guarantees primarily issued against long-term tenancy agreements. The long-term restricted cash balance of \$7.9 million and \$8.0 million was reported in deferred taxes and other long-term assets on the balance sheet as of December 31, 2018 and 2017, respectively, and was included in the ending balance of cash, cash equivalents and restricted cash in the statement of cash flows for the year ended December 31, 2018 and 2017, respectively. There was no restricted cash as of December 31, 2016. The following table provides a reconciliation of the cash and cash equivalents balances reported on the balance sheets and the cash, cash equivalents and restricted cash balances reported in the statements of cash flows:

	December 31,		
	2018	2017	2016
	(In thousands)		
Cash and cash equivalents, as reported on the balance sheets	\$ 56,766	\$ 62,473	\$ 56,780
Restricted cash in other long-term assets, as reported on the balance sheets	7,884	8,025	—
Cash, cash equivalents, and restricted cash, as reported in the statements of cash flows	<u>\$ 64,650</u>	<u>\$ 70,498</u>	<u>\$ 56,780</u>

**Short-term investments**

The Company's short-term investments are classified as available-for-sale securities and are reported at fair value. Unrealized gains or losses are recorded in shareholders' equity and included in other comprehensive income ("OCI"). The Company views its available-for-sale portfolio as available for use in its current operations. Accordingly, the Company has classified all investments in available for sale securities with readily available markets as short-term, even though the stated maturity date may be one year or more beyond the current balance sheet date, because of the intent and ability to sell these securities prior to maturity to meet liquidity needs or as part of a risk management program. The Company regularly reviews its investment portfolio and charges unrealized losses against net income when a decline in fair value is determined to be other-than-temporary. The Company reviews several factors to determine whether a loss is other-than-temporary. These factors include but are not limited to: (1) the length of time a security is in an unrealized loss position, (2) the extent to which fair value is less than cost, (3) the financial condition and near term prospects of the issuer and (4) our intent and ability to hold the security for a period of time sufficient to allow for any anticipated recovery in fair value.

**Fair value of financial instruments**

The Company's financial instruments consist of cash equivalents, restricted cash, short-term investments and foreign currency derivative contracts. The fair value of a financial instrument is the amount that would be received in an asset sale or paid to transfer a liability in an orderly transaction between unaffiliated market participants. When there is no readily available market data, fair value estimates may be made by the Company, which may not necessarily represent the amounts that could be realized in a current or future sale of these assets.

**Derivatives**

The Company enters into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks, mainly the exposure to changes in the exchange rate of the NIS against the U.S. dollar that are associated with forecasted future cash flows and existing assets and liabilities. The Company's primary objective in entering into these arrangements is to reduce the volatility of earnings and cash flows associated with changes in foreign currency exchange rates. The program is not designated for trading or speculative purposes. The Company's derivative instruments expose the Company to credit risk to the extent that the counter-parties may be unable to meet the terms of the agreement. The Company seeks to mitigate such risk by limiting its counter-parties to major financial institutions and by spreading the risk across a number of major financial institutions. In addition, the potential risk of loss with any one counter-party resulting from this type of credit risk is monitored on an ongoing basis.

The Company accounts for its derivative instruments as either assets or liabilities and carries them at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. For derivative instruments that hedge the exposure to variability in expected future cash flows that are designated as cash flow hedges, the effective portion of the unrealized gains or losses on the derivative instruments is reported as a

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

component of accumulated other comprehensive income ("AOCI") in shareholders' equity and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of the gains or losses on the derivative instruments, if any, is recognized in earnings in the current period. The derivative instruments that hedge the exposure to variability in the fair value of assets or liabilities are not currently designated as hedges for financial reporting purposes, and thus the gains or losses on such derivative instruments are recognized in earnings in the current period.

**Concentration of credit risk**

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash, cash equivalents, restricted cash, short-term investments and accounts receivable. Cash, cash equivalents, restricted cash and short-term investment balances are maintained with high quality financial institutions, the composition and maturities of which are regularly monitored by management. The Company's accounts receivable are derived from revenue earned from customers primarily located in North America, Europe and Asia. The Company performs ongoing credit evaluations of its customers' financial condition and, generally, requires no collateral from its customers. The Company maintains an allowance for doubtful accounts receivable based upon the expected collectability of accounts receivable. The Company reviews its allowance for doubtful accounts quarterly by assessing individual accounts receivable over a specific aging and amount, and all other balances based on historical collection experience and an economic risk assessment. If the Company determines that a specific customer is unable to meet its financial obligations to the Company, the Company provides an allowance for credit losses to reduce the receivable to the amount management reasonably believes will be collected.

The following table summarizes the revenues from customers (including original equipment manufacturers) in excess of 10% of the total revenues:

	Year Ended December 31,		
	2018	2017	2016
HPE	12%	13%	16%
Dell	12%	11%	*

\* Less than 10%

The following table summarizes accounts receivable balances in excess of 10% of total accounts receivable:

	December 31, 2018	December 31, 2017
HPE	*	13%

\* Less than 10%

**Inventory**

Inventory includes finished goods, work-in-process and raw materials. Inventory is stated at the lower of cost (principally standard cost which approximates actual cost on a first-in, first-out basis) or net realizable value. Reserves for potentially excess and obsolete inventory are made based on management's analysis of inventory levels, future sales forecasts and market conditions. Once established, the original cost of the Company's inventory less the related inventory reserve represents the new cost basis of such products.

**Property and equipment**

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is generally calculated using the straight-line method over the estimated useful lives of the related assets, which is three years for computer equipment and software, seven years for lab equipment, and seven years for office furniture and fixtures. Leasehold improvements and assets acquired under capital leases are amortized on a straight-line basis over the term of the lease, or the useful lives of the assets, whichever is shorter. Maintenance and repairs are charged to expense as incurred, and improvements are capitalized. When assets are retired or otherwise disposed of, the cost and accumulated depreciation or amortization are removed from the accounts and any resulting gain or loss is reflected in the results of operations in the period realized. The Company retired fully

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

depreciated assets when they were no longer in use. As a result, \$16.6 million and \$72.8 million of cost and accumulated depreciation was removed from the accounts during the years ended December 31, 2018 and 2017, respectively. No gain or loss was recognized.

The Company capitalizes certain costs incurred in connection with internal use of inventory items in the Company's data centers and laboratories. Capitalized inventory costs are included in Property and equipment, net and amortized on a straight-line basis over the estimated useful life of the asset.

***Business combinations***

The Company accounts for business combinations using the acquisition method of accounting. The Company determines the recognition of intangible assets based on the following criteria: (i) the intangible asset arises from contractual or other rights; or (ii) the intangible asset is separable or divisible from the acquired entity and capable of being sold, transferred, licensed, returned or exchanged. The Company allocates the purchase price of business combinations to the tangible assets, liabilities and intangible assets acquired, including in-process research and development ("IPR&D"), based on their estimated fair values. The excess purchase price over those fair values is recorded as goodwill. The process of estimating the fair values requires significant estimates, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from customer contracts, customer lists and distribution agreements, acquired developed technologies, expected costs to develop IPR&D into commercially viable products, estimated cash flows from projects when completed and discount rates. The Company estimates fair value based upon assumptions that are believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

***Goodwill and intangible assets***

Goodwill represents the excess of the cost of acquired businesses over the fair market value of their identifiable net assets. The Company conducts a goodwill impairment qualitative assessment during the fourth quarter of each fiscal year or more frequently if facts and circumstances indicate that goodwill may be impaired. The goodwill impairment qualitative assessment requires the Company to perform an assessment to determine if it is more likely than not that the fair value of the business is less than its carrying amount. The qualitative assessment considers various factors, including the macroeconomic environment, industry and market specific conditions, market capitalization, stock price, financial performance, earnings multiples, budgeted-to-actual revenue performance from prior year, gross margin and cash flow from operating activities and issues or events specific to the business. If adverse qualitative trends are identified that could negatively impact the fair value of the business, the Company performs a "two step" goodwill impairment test. "Step one" is the identification of potential impairment. This involves comparing the fair value of each reporting unit, which the Company has determined to be the entity itself as one reporting unit, with its carrying amount including goodwill. If the fair value of a reporting unit exceeds its carrying amount, the goodwill of the reporting unit is considered not impaired and "Step two" of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, "Step two" is performed. This involves comparing the carrying amount of goodwill to its implied fair value, which is determined to be the excess of the reporting unit's fair value over the fair value of its identifiable net assets other than goodwill. If the carrying amount of goodwill exceeds its implied fair value, an impairment exists and is recorded. As of December 31, 2018, the Company's qualitative assessment of goodwill impairment indicated that goodwill was not impaired.

Intangible assets represent acquired intangible assets including developed technology, customer relationships and IPR&D, as well as licensed technology. The Company amortizes its finite lived intangible assets over their useful lives using a method that reflects the pattern in which the economic benefits of the intangible assets are consumed or otherwise used, or, if that pattern cannot be reliably determined, using a straight-line amortization method. The Company capitalizes IPR&D projects acquired as part of a business combination as intangible assets with indefinite lives. On completion of each project, IPR&D assets are reclassified to developed technology and amortized over their estimated useful lives. If any of the IPR&D projects are abandoned, the Company would impair the related IPR&D asset.

Indefinite-lived intangible assets are tested for impairment annually or more frequently when indicators of impairment exist. The Company first assesses qualitative factors to determine if it is more likely than not that an indefinite-lived intangible asset is impaired and whether it is necessary to perform a quantitative impairment test. The qualitative assessment considers various factors, including reductions in demand, the abandonment of IPR&D projects or significant economic slowdowns in the semiconductor industry and macroeconomic environment. If adverse qualitative trends are identified that could negatively impact the fair value of the asset, then quantitative impairment tests are performed to compare the carrying value of the asset to its undiscounted expected future cash flows. If this test indicates that there is impairment, the impaired asset is written down to

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

fair value, which is typically calculated using: (i) quoted market prices or (ii) discounted expected future cash flows utilizing an appropriate discount rate. Impairment is based on the excess of the carrying amount over the fair value of those assets. The Company performed an impairment test on the IPR&D during the fourth quarter of 2017 when the project reached technological feasibility and was transferred to developed technology, and concluded that the asset was not impaired. Intangible assets with finite lives are tested for impairment in accordance with our policy for long-lived assets.

***Equity investments in privately-held companies***

The Company has equity investments in privately-held companies. These investments are recorded at cost, less impairments, adjusted by observable price changes. The investments are included in deferred taxes and other long-term assets on the accompanying balance sheets. The Company monitors the investments and if facts and circumstances indicate an investment may be impaired, then it conducts an impairment test of its investment. To determine if the investment is recoverable, it reviews the privately-held company's revenue and earnings trends relative to pre-defined milestones and overall business prospects, the general market conditions in its industry and other factors related to its ability to remain in business, such as liquidity and receipt of additional funding.

While performing its review for impairment for the fourth quarter of 2018, the Company noted an observable price change related to one of its investments in a privately-held company. As a result, the Company recorded an impairment charge of \$1.5 million in the fourth quarter of 2018.

***Impairment of long-lived assets***

Long-lived assets include equipment and furniture and fixtures and finite-lived intangible assets. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable. If the sum of the expected future cash flows (undiscounted and without interest charges) from the long-lived assets is less than the carrying amount of such assets, an impairment loss would be recognized, and the assets would be written down to their estimated fair values. The Company reviews for possible impairment on a regular basis.

While performing the review for impairment for the fourth quarter of 2017, the Company noted an impairment indicator associated with the potential sale or discontinuation of the 1550nm silicon photonics line of business. As a result, the Company recorded impairment charges totaling \$12.0 million in the fourth quarter of 2017, of which \$7.7 million was related to property and equipment and \$4.3 million was related to intangible assets.

Also in connection with the discontinuation of the 1550nm silicon photonics development activities, the Company recorded impairment charges and a net loss on disposal of assets of \$2.4 million during the year ended December 31, 2018. There was also a \$0.9 million impairment charge on fixed assets not related to the 1550nm silicon photonics development activities recorded during the year ended December 31, 2018. See Note 17, "Restructuring and Impairment Charges" for more details about the impairment charges.

***Revenue recognition***

The Company recognizes revenue when (or as) it satisfies performance obligations by transferring promised products or services to its customers in an amount that reflects the consideration the Company expects to receive. The Company applies the following five steps: (1) identify the contract with a customer, (2) identify the 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 a performance obligation is satisfied.

The Company considers customer purchase orders, which in some cases are governed by master sales agreements, to be the contracts with a customer. For each contract, the Company considers the promise to transfer tangible products, extended warranty and post-contract customer support, each of which are distinct, to be the identified performance obligations. In determining the transaction price, the Company evaluates whether the price is subject to rebates and adjustments to determine the net consideration to which the Company expects to receive. As the Company's standard payment terms are less than one year, the contracts have no significant financing component. The Company allocates the transaction price to each distinct performance obligation based on its relative standalone selling price. Revenue from tangible products is recognized when control of the product is transferred to the customer (i.e., when the Company's performance obligation is satisfied), which typically occurs at shipment. The revenues from fixed-price support or maintenance contracts, including extended warranty contracts and post-contract customer support agreements, are recognized ratably over the contract period and the costs

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

associated with these contracts are recognized as incurred. The Company's standard arrangements with its customers do not allow for rights of return.

The Company maintains inventory, or hub arrangements with certain customers. Pursuant to these arrangements, the Company delivers products to a customer or a designated third party warehouse based upon the customer's projected needs, but does not recognize product revenue unless and until the customer reports it has removed the Company's product from the warehouse to be incorporated into its end products.

A portion of the Company's sales are made to distributors under agreements which contain price protection provisions. Revenue from sales to distributors is recognized upon shipment and transfer of control, net of estimated distribution price adjustments ("DPAs"). The Company calculates the estimated DPAs based on specific earned DPA claims and estimated unearned DPA claims based on an analysis of historical DPA claims, at the distributor level, over a period of time considered adequate to account for current pricing and business trends. The earned DPA claims are recorded as a reduction of revenue and a reduction of gross accounts receivable. The Company records the estimated unearned DPAs as a reduction of revenue and an increase in the allowance for unearned DPAs.

In addition, the Company records revenue reserves for rebates as a reduction of revenue and a reduction of gross accounts receivable. The reserves are recorded in the same period that the related revenue is recorded, and are based on the amounts stated in the contracts. The Company reverses reserves for unclaimed rebates as specific rebate programs contractually end and when it believes unclaimed rebates are no longer subject to payment and will not be paid. As a result, the reversal of unclaimed rebates may have a positive impact on our net revenue and net income in subsequent periods.

Most of the Company's distributors are entitled to a limited right of return related to stock rotation. Distributors have the right to return a limited amount of product not to exceed a percentage of the distributor's prior quarter's net purchases. However, a simultaneous, compensating order of equal or greater value must be placed by the distributor within the same quarter of the return.

**Product warranty**

The Company typically offers a limited warranty for its products for periods up to three years. The Company accrues for estimated returns of defective products at the time revenue is recognized based on historical activity. The determination of these accruals requires the Company to make estimates of the frequency and extent of warranty activity and estimated future costs to either replace or repair the products under warranty. If the actual warranty activity and/or repair and replacement costs differ significantly from these estimates, adjustments to record additional cost of revenues may be required in future periods. Changes in the Company's liability for product warranty were as follows:

	Year Ended December 31,	
	2018	2017
	(In thousands)	
Balance, beginning of the period	\$ 889	\$ 1,474
New warranties issued during the period	2,532	1,459
Reversal of warranty reserves	—	(565)
Settlements during the period	(2,046)	(1,479)
Balance, end of the period	1,375	889
Less: long-term portion of product warranty liability	(285)	(183)
Balance, end of the period	<u>\$ 1,090</u>	<u>\$ 706</u>

**Research and development**

Costs incurred in research and development are charged to operations as incurred. The Company expenses all costs for internally developed patents as incurred.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Advertising*

Costs related to advertising and promotion of products are charged to sales and marketing expense as incurred. Advertising expense was approximately \$2.6 million, \$2.9 million and \$2.1 million for the years ended December 31, 2018, 2017 and 2016, respectively.

*Share-based compensation*

The Company accounts for share-based compensation expense based on the estimated fair value of the equity awards as of the grant dates. The fair value of restricted stock units ("RSUs"), is based on the closing market price of our ordinary shares on the date of grant. The Company estimates the fair value of share options and the Employee Share Purchase Plan ("ESPP") using the Black-Scholes option valuation model, which requires the input of subjective assumptions including the expected share price volatility and the calculation of expected term, as well as the fair value of the underlying ordinary share on the date of grant, among other inputs.

The Company bases its estimate of expected volatility on the historical volatility of the Company's shares. The Company did not grant share options in 2018, 2017, and 2016.

Share-based compensation expense is recognized on a straight-line basis over each recipient's requisite service period, which is generally the vesting period. Share-based compensation expense is recorded in full during the vesting period, and the effect of forfeitures will be recorded as they actually occur.

During the year ended December 31, 2018, the Company granted 36,000 performance share units ("PSUs"). The PSUs will vest and be earned based on the Company's achievement of relative total shareholder return and average non-GAAP net operating margin over a three-year performance period commencing on January 1, 2018 and ending on December 31, 2020, subject to the continued service to the Company through the end of the performance period. The number of shares that will actually vest range from zero to 175% of the target. The share-based compensation expense related to these PSUs was not material for the year ended December 31, 2018.

*Comprehensive income (loss)*

Accumulated other comprehensive income (loss), net of tax on the consolidated balance sheets at December 31, 2018 and 2017, represents the accumulated unrealized gains (losses) on available-for-sale securities, and the accumulated unrealized gains (losses) related to derivative instruments accounted for as cash flow hedges. The amount of income tax expense allocated to unrealized gains (losses) on available-for-sale securities and derivative instruments was immaterial at December 31, 2018 and 2017.

*Foreign currency translation and remeasurement*

The Company uses the U.S. dollar as its functional currency. Foreign currency assets and liabilities are remeasured into U.S. dollars at the end-of-period exchange rates except for non-monetary assets and liabilities, which are remeasured at historical exchange rates. The Company derives all revenues in U.S. dollars. Expenses are remeasured at the exchange rate in effect on the day the transaction occurred, except for those expenses related to non-monetary assets and liabilities, which are remeasured at historical exchange rates. Gains or losses from foreign currency transactions are included in the Consolidated Statements of Operations as part of "Other income (loss), net."

*Net income (loss) per share*

Basic net income (loss) per share is computed by dividing the net income (loss) by the weighted-average number of ordinary shares outstanding during the period. Diluted net income (loss) per share is computed by dividing the net income (loss) by the weighted-average number of ordinary shares outstanding during the period increased to include the number of additional shares that would have been outstanding if the potentially dilutive shares had been issued. Potentially dilutive shares include unvested RSUs, PSUs, outstanding stock options, and shares to be purchased by employees under the Company's employee stock purchase plan. The dilutive effect of potentially dilutive shares is reflected in diluted net income (loss) per share by application of the treasury stock method.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table sets forth the computation of basic and diluted net income (loss) per share for the periods indicated:

	Year Ended December 31,		
	2018	2017	2016
	(In thousands, except per share data)		
Net income (loss)	\$ 134,258	\$ (19,425)	\$ 18,518
Basic and diluted shares:			
Weighted average ordinary shares outstanding	52,863	50,310	48,145
Effect of dilutive shares	1,783	—	1,381
Shares used to compute diluted net income (loss) per share	54,646	50,310	49,526
Net income (loss) per share—basic	\$ 2.54	\$ (0.39)	\$ 0.38
Net income (loss) per share—diluted	\$ 2.46	\$ (0.39)	\$ 0.37

The Company excluded 0.2 million potentially dilutive share options and RSUs from the computation of diluted net income per share for the year ended December 31, 2018, 4.5 million outstanding share options and RSUs from the computation of diluted net loss per share for the year ended December 31, 2017, and 0.5 million potentially dilutive shares options and RSUs from the computation of diluted net income per share for the year ended December 31, 2016, respectively, because including them would have had an anti-dilutive effect.

**Segment reporting**

The Company has one reportable segment: the development, manufacturing, marketing and sales of interconnect products.

**Income taxes**

To prepare the Company's consolidated financial statements, the Company estimates its income taxes in each of the jurisdictions in which it operates. This process involves estimating the Company's actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are calculated using tax rates expected to be in effect during the period these temporary differences would reverse, and are included within the Company's consolidated balance sheet.

The Company must also make judgments regarding the realizability of deferred tax assets. The carrying value of the Company's net deferred tax assets is based on its belief that it is more likely than not that the Company will generate sufficient future taxable income in certain jurisdictions to realize these deferred tax assets. A valuation allowance has been established for deferred tax assets which the Company does not believe meet the "more likely than not" criteria. The Company's judgments regarding future taxable income may change due to changes in market conditions, changes in tax laws, tax planning strategies or other factors. If the Company's assumptions and consequently its estimates change in the future, the valuation allowances it has established may be increased or decreased, resulting in a respective increase or decrease in income tax expense. The Company's effective tax rate is highly dependent upon the geographic distribution of its worldwide earnings or losses, the tax regulations and tax holidays in each geographic region, the availability of tax credits and carryforwards, and the effectiveness of its tax planning strategies.

The Company uses a two-step approach to recognizing and measuring uncertain tax positions accounted for in accordance with the guidance on judgments regarding the realizability of deferred taxes. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. The Company considers many factors when evaluating and estimating its tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes. The Company recognizes potential accrued interest and penalties related to unrecognized tax benefits within the consolidated statements of income as income tax expense.

**Adoption of new accounting principles**

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The standard replaced the revenue recognition guidance in U.S.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

GAAP under Topic 605, and was required to be applied retrospectively to each prior period presented, or applied using a modified retrospective method with the cumulative effect recognized in the beginning retained earnings during the period of initial application. Subsequently, the FASB issued several additional ASUs related to ASU No. 2014-09, collectively they are referred to as the "new revenue standards", which became effective for the Company beginning January 1, 2018. The Company adopted the standard using the modified retrospective method. See Note 2, "Revenue" for details about the impact from adopting the new revenue standard and other required disclosures.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments-Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU 2016-01 amended various aspects of the recognition, measurement, presentation, and disclosure of financial instruments, and became effective for the Company beginning January 1, 2018. One aspect that may have a material impact on the Company's consolidated financial statements relates to the measurement of its equity investments in privately-held companies whose fair values are not readily determinable. With the election to use the measurement alternative (as opposed to fair value), the Company measures these equity investments at cost, less impairments, adjusted by observable price changes. See Note 6, "Investments" for details about the impact of remeasuring the Company's equity investments in privately-held companies.

**Recent accounting pronouncements**

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU clarifies the accounting treatment for implementation costs for cloud computing arrangements (hosting arrangements) that are service contracts. This standard becomes effective for the Company beginning January 1, 2020. The Company is currently assessing the effect that this ASU will have on its consolidated financial statements and related disclosures.

In July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*. The standard provides an additional transition method that allows entities to apply the new leases standard at adoption date and recognize a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption. The Company elected this new transition method when it adopted ASU 2016-02 on January 1, 2019.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The standard requires lessees to recognize almost all leases on the balance sheet as a right-of-use asset and a lease liability and requires leases to be classified as either an operating or a finance type lease. The standard excludes leases of intangible assets or inventory. The standard became effective for the Company beginning January 1, 2019. The Company has estimated the opening balances of the right-of-use assets and lease liabilities upon adopting the standard as of January 1, 2019 to be approximately \$69 million and \$72 million, respectively. The Company is still in the process of finalizing the calculation. In addition, a material portion of the Company's leases are denominated in currencies other than the U.S. Dollar, mainly in NIS. As a result, the associated lease liabilities will be remeasured using the current exchange rate in the future reporting periods, which may result in material foreign exchange gains or losses. Other than the matters discussed above, the standard is not expected to have a material impact on the Company's results of operations or cash flows.

**NOTE 2—REVENUE**

On January 1, 2018, the Company adopted ASC Topic 606-10 using the modified retrospective method and applied the standard to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606-10, while prior period amounts are not adjusted and continue to be reported in accordance with the historic accounting under Topic 605.

The Company recognized the cumulative effect of initially adopting Topic 606-10 as an adjustment to the opening balance of retained earnings as of January 1, 2018. Distributor revenue was recognized using the sell-through method under Topic 605, while such revenue is recognized using the sell-in method under Topic 606-10, which primarily contributed to the adjustment to the opening balance of retained earnings as well as the impact of adoption disclosed in the tables below.

The cumulative effect of the changes made to the consolidated balance sheet as of January 1, 2018 for the adoption of Topic 606-10 was as follows:



## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	December 31, 2017	Adjustments (in thousands)		January 1, 2018
Deferred taxes and other long-term assets	\$ 66,162	\$	(600)	\$ 65,562
Deferred revenue, short term	\$ 23,485	\$	(4,501)	\$ 18,984
Retained earnings	\$ 181,630	\$	3,901	\$ 185,531

In accordance with Topic 606-10, the disclosure of the impact of adoption on the consolidated balance sheet as of December 31, 2018 was as follows:

	As Reported	Impact of Adoption (in thousands)		Amounts under Topic 605
<b>Consolidated Balance Sheet</b>				
Deferred taxes and other long-term assets	\$ 101,139	\$	600	\$ 101,739
Deferred revenue, short term	\$ 20,558	\$	11,400	\$ 31,958
Retained earnings	\$ 319,789	\$	(10,800)	\$ 308,989

In accordance with Topic 606-10, the disclosure of the impact of adoption on the consolidated statement of operations and cash flows was as follows:

	Year ended December 31, 2018			
	As Reported	Impact of Adoption (in thousands, except per share data)		Amounts under Topic 605
<b>Consolidated Statement of Operations</b>				
Total revenues	\$ 1,088,743	\$	(9,299)	\$ 1,079,444
Cost of revenues	\$ 388,573	\$	(2,400)	\$ 386,173
Net income	\$ 134,258	\$	(6,899)	\$ 127,359
Earnings per share				
Basic	\$ 2.54	\$	(0.12)	\$ 2.42
Diluted	\$ 2.46	\$	(0.12)	\$ 2.34
<b>Consolidated Statement of Cash Flows</b>				
Cash flows from operating activities:				
Net income	\$ 134,258	\$	(6,899)	\$ 127,359
Accrued liabilities and other liabilities	\$ 16,765	\$	6,899	\$ 23,664

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Revenues by geographic region are as follows (prior period amounts have not been adjusted under the modified retrospective method):

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
United States	\$ 402,840	\$ 327,528	\$ 386,360
China	258,451	172,405	192,581
Europe	174,892	176,937	149,855
Other Americas	128,077	92,449	52,447
Other Asia	124,483	94,574	76,255
Total revenue	\$ 1,088,743	\$ 863,893	\$ 857,498

The following tables represent our total revenues by product type and interconnect protocol (prior period amounts have not been adjusted under the modified retrospective method):

Revenues by product type and interconnect protocol are as follows:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
ICs	\$ 149,180	\$ 161,216	\$ 170,641
Boards	495,753	325,845	337,304
Switch systems	247,478	222,836	204,083
Cables, accessories and other	196,332	153,996	145,470
Total revenue	\$ 1,088,743	\$ 863,893	\$ 857,498

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
InfiniBand:			
HDR	\$ 10,177	\$ —	\$ —
EDR	234,655	194,261	125,249
FDR	149,168	181,465	302,093
QDR/DDR/SDR	44,359	31,599	49,987
Total	438,359	407,325	477,329
Ethernet	618,471	401,005	317,241
Other	31,913	55,563	62,928
Total revenue	\$ 1,088,743	\$ 863,893	\$ 857,498

The Company recognizes contract liabilities, or deferred revenues, when it bills customers in advance or receives advance payments from customers before performance obligations primarily related to extended warranty and post-contract customer support have been performed. Advance payments are received at the beginning of the service period and the related deferred revenues are reclassified to revenue ratably over the service period. The balance of deferred revenues approximates the aggregate amount of the transaction price allocated to the unsatisfied performance obligations at the end of reporting period. The Company expects to recognize the long-term portion of deferred revenue over the remaining service period of up to five years.

## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table presents the significant changes in the deferred revenue balance during the year ended December 31, 2018:

	(in thousands)
Balance, beginning of the period	\$ 36,804
New performance obligations	29,604
Reclassification to revenue during the year from the beginning balance as a result of satisfying performance obligations	(18,996)
Reclassification to revenue during the year as a result of satisfying new performance obligations	(8,189)
Balance, end of the period	39,223
Less: long-term portion of deferred revenue	18,665
Current portion, end of the period	\$ 20,558

Because all performance obligations in the Company's contracts with customers, other than extended warranty and post-contract customer support, relate to contracts with a duration of less than one year, the Company has elected to apply the optional exemption and is not required to disclose the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period.

## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## NOTE 3—BALANCE SHEET COMPONENTS:

	December 31, 2018	December 31, 2017
	(In thousands)	
<b>Accounts receivable, net:</b>		
Accounts receivable	\$ 156,525	\$ 154,845
Less: allowance for unearned DPA	(5,400)	—
Less: allowance for doubtful accounts	(500)	(632)
	<u>\$ 150,625</u>	<u>\$ 154,213</u>
<b>Inventories:</b>		
Raw materials	\$ 19,391	\$ 12,656
Work-in-process	39,425	22,769
Finished goods	45,565	29,232
	<u>\$ 104,381</u>	<u>\$ 64,657</u>
<b>Property and equipment, net:</b>		
Computer, equipment, and software	\$ 180,125	\$ 164,707
Furniture and fixtures	2,140	3,198
Leasehold improvements	46,179	47,262
	<u>228,444</u>	<u>215,167</u>
Less: Accumulated depreciation and amortization	(123,110)	(105,248)
	<u>\$ 105,334</u>	<u>\$ 109,919</u>
<b>Deferred taxes and other long-term assets:</b>		
Equity investments in privately-held companies	\$ 40,300	\$ 29,255
Deferred taxes	50,660	24,563
Long-term restricted cash	7,884	8,025
Other assets	2,295	4,319
	<u>\$ 101,139</u>	<u>\$ 66,162</u>
<b>Accrued liabilities:</b>		
Payroll and related expenses	\$ 76,788	\$ 71,868
Accrued expenses	28,821	31,951
Other	16,269	10,239
	<u>\$ 121,878</u>	<u>\$ 114,058</u>
<b>Other long-term liabilities:</b>		
Income tax payable	\$ 25,600	\$ 24,425
Deferred rent	2,532	2,220
Other	4,336	7,422
	<u>\$ 32,468</u>	<u>\$ 34,067</u>

## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**NOTE 4—BUSINESS COMBINATION:**

On February 23, 2016, the Company completed its acquisition of EZchip Semiconductor Ltd. ("EZchip"). Under the terms of the Agreement of Merger dated as of September 30, 2015 (as amended on November 17, 2015), by and among the Company, Mondial Europe Sub Ltd. and EZchip (the "Merger Agreement"), the total consideration was \$782.2 million, including \$1.0 million attributable to assumed RSUs. The net cash purchase price of \$693.7 million consisted of a \$781.2 million cash payment for all outstanding common shares of EZchip at the price of \$25.50 per share and net of \$87.5 million cash acquired. The Company also assumed 891,822 EZchip RSUs and converted them to 499,894 equivalent Company RSU awards. The fair value of the converted RSUs was determined based on the per share value of the underlying Mellanox ordinary shares of \$46.40 per share as of the acquisition date. The 499,894 RSUs had a total aggregate value of \$23.2 million, of which \$1.0 million was recorded as a component of the purchase price for service rendered prior to the acquisition date and \$22.2 million was recognized as share-based compensation expense over the remaining required service period of up to 2.25 years from the acquisition date.

In connection with the acquisition, the Company entered into a \$280.0 million variable interest rate Term Debt maturing February 21, 2019. See Note 16, "Term Debt" for additional information.

The Company accounted for the transaction using the acquisition method, which requires, among other things, that the assets acquired and liabilities assumed in a business combination be recognized at their respective estimated fair values as of the acquisition date. The following summarizes consideration paid for EZchip at the acquisition date:

	(in thousands)
Consideration:	
Cash payment for all outstanding common shares of EZchip at \$25.50 per share	\$ 781,237
Fair value of awards attributable to pre-acquisition services	972
Total consideration:	782,209
Less: cash acquired	87,545
Fair value of total consideration transferred, net of cash acquired	\$ 694,664

The following summarizes the Company's allocation of the total purchase price, net of cash acquired for the EZchip acquisition after consultation with third party valuation specialists:

	(in thousands)
Short-term investments	\$ 108,862
Other current assets	34,114
Other long-term assets	9,638
Intangible assets	288,246
Goodwill	270,485
Total assets	711,345
Current liabilities	(10,253)
Long-term liabilities	(6,428)
Total liabilities	(16,681)
Total purchase price allocation	\$ 694,664

Acquisition-related expenses for the EZchip acquisition for the year ended December 31, 2017 were \$0.3 million and primarily consisted of employee-related expenses. Acquisition-related expenses for the EZchip acquisition for the year ended December 31, 2016 were \$8.3 million and primarily consisted of investment banking, consulting, and other professional fees.

## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Identifiable finite-lived intangible assets*

	Fair value	Weighted Average Useful
	(in thousands)	Life
		(in years)
Purchased intangible assets:		
Trade names	\$ 5,600	3
Customer relationships	56,400	9
Backlog	11,300	1
Developed technology	181,246	4 - 6
In-process research and development <sup>(1)</sup>	33,700	-
Total purchased intangible assets	<u>\$ 288,246</u>	

<sup>(1)</sup> IPR&D will not be amortized until the underlying products reach technological feasibility. Upon completion, each IPR&D project will be amortized over its useful life.

Trade name represents the fair values of brand and name recognition associated with the marketing of EZchip's products and services. The Company used the income approach and utilized a discount rate of 10.0% to determine the fair value of trade name assets.

Customer relationships represent the fair value of future projected revenues that will be derived from the sale of products to existing customers of EZchip. The Company used the comparative method ("with/without") of the income approach to determine the fair value of this intangible asset and utilized a discount rate of 10.0%.

Backlog represents the fair value of sales order backlog as of the valuation date. The Company used the income approach to determine the fair value of this intangible asset and utilized a discount rate of 8.0%.

Developed technology represents completed technology that has passed technological feasibility and/or is currently offered for sale to customers. The Company used the income approach to value the developed technology. Under the income approach, the expected future cash flows from each technology are estimated and discounted to their net present values at an appropriate risk-adjusted rate of return. Significant factors considered in the calculation of the rate of return are the weighted average cost of capital and the return on assets. The Company applied a discount rate of 9.0% to value the developed technology assets taking into consideration market rates of return on debt and equity capital and the risk associated with achieving forecasted revenues related to these assets.

The IPR&D intangible asset represents the value assigned to an acquired research and development project that, as of the acquisition date, had not established technological feasibility. The fair value of IPR&D was determined using a discount rate of 12.0%. This intangible asset will be capitalized on the balance sheet and evaluated periodically for impairment until the project is completed, at which time it will be transferred to developed technology and become subject to amortization over its useful life. IPR&D consists of one project related to the development of two network processors. The estimated remaining costs to complete the IPR&D project was \$22.3 million as of the acquisition date, which was charged to operating expense in the consolidated statements of operations as incurred.

During the three months ended September 30, 2016, one component of the IPR&D project reached technological feasibility and \$4.2 million was transferred to developed technology. During the three months ended December 31, 2017, the remaining IPR&D project reached technological feasibility and \$29.5 million was transferred to developed technology. The total developed technology balance at December 31, 2017 will be amortized over seven years.

*Goodwill*

Goodwill arising from the acquisition represents the value of the skilled assembled workforce and projected growth in overall revenues. The EZchip acquisition is a step in the Company's strategy to become a leading broad-line supplier of intelligent interconnect solutions for data centers. The addition of EZchip's products and expertise in network processing is expected to enhance the Company's leadership position, and ability to deliver complete end-to-end, intelligent interconnect and processing solutions for advanced data center and edge platforms. The combined company has diverse and robust solutions to enable customers to meet the growing demands of data-intensive applications used in high-performance computing, Web 2.0, cloud, secure data center, enterprise, telecom, database, financial services, and storage environments. These significant factors

## MELLANOX TECHNOLOGIES, LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

were the basis for the recognition of goodwill. Goodwill is not expected to be deductible for tax purposes. Goodwill will not be amortized but instead will be tested for impairment annually or more frequently if certain indicators are present.

*Supplemental pro forma data*

The following unaudited pro forma data have been prepared as if the EZchip acquisition had occurred on January 1, 2015, and include adjustments for amortization of intangible assets acquired, the effect of purchase accounting adjustments including the step-up of inventory, share-based compensation expense, and interest on the Term Debt incurred to partially finance the acquisition. Pro forma results are not indicative of what would have occurred had the acquisition occurred as of January 1, 2015 or of results that may occur in the future.

	<u>Year Ended December 31,</u>	
	<u>2016</u>	
	(in thousands, except per share amounts)	
Revenues	\$	867,422
Net income	\$	40,288
Net income per share — basic	\$	0.82
Net income per share — diluted	\$	0.80

Material non-recurring adjustments included in the unaudited pro forma net income for the year ended December 31, 2016 for the effect of purchase accounting adjustments include: a reduction of acquisition-related costs of \$15.3 million, composed of acquisition cost of \$8.3 million incurred by the Company and \$7.0 million incurred by EZchip; a reduction of amortization expense related to the acquired intangible assets and the step-up of inventory of \$13.0 million; and a reduction of the share-based compensation expense related to accelerated RSUs of \$4.8 million.

The Company immediately integrated EZchip into its ongoing operations. As a result, it is impracticable to determine EZchip's effect on revenue and earnings in the consolidated statement of operations for the reporting period.

**NOTE 5—FAIR VALUE MEASUREMENTS:***Fair value hierarchy:*

The Company measures its cash equivalents, restricted cash, and marketable securities at fair value. The Company's cash equivalents are classified within Level 1. Cash equivalents are valued primarily using quoted market prices utilizing market observable inputs. The Company's restricted cash and investments in debt securities and certificates of deposits are classified within Level 2 as the market inputs to value these instruments consist of market yields, reported trades and broker/dealer quotes. In addition, foreign currency contracts are classified within Level 2 as the valuation inputs are based on quoted prices and market observable data of similar instruments. The Level 3 valuation inputs include the Company's best estimate of what market participants would use in pricing the asset or liability at the measurement date. The inputs are unobservable in the market and significant to the instrument's valuation. As of December 31, 2018 and December 31, 2017, the Company did not have any assets or liabilities valued based on Level 3 valuations.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis:*

The following table represents the fair value hierarchy of the Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2018.

	Level 1	Level 2	Total
	(in thousands)		
Money market funds	\$ 1,265	\$ —	\$ 1,265
Certificates of deposit	—	95,038	95,038
U.S. Government and agency securities	—	50,670	50,670
Commercial paper	—	57,443	57,443
Corporate bonds	—	128,765	128,765
Municipal bonds	—	17,506	17,506
Foreign government bonds	—	32,302	32,302
	1,265	381,724	382,989
Long-term restricted cash	—	7,884	7,884
Derivative contracts	—	96	96
<b>Total financial assets</b>	<b>\$ 1,265</b>	<b>\$ 389,704</b>	<b>\$ 390,969</b>
Derivative contracts	\$ —	\$ 2,536	\$ 2,536
<b>Total financial liabilities</b>	<b>\$ —</b>	<b>\$ 2,536</b>	<b>\$ 2,536</b>

The following table represents the fair value hierarchy of the Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2017.

	Level 1	Level 2	Total
	(in thousands)		
Money market funds	\$ 1,857	\$ —	\$ 1,857
Certificates of deposit	—	58,003	58,003
U.S. Government and agency securities	—	43,872	43,872
Commercial paper	—	27,029	27,029
Corporate bonds	—	54,447	54,447
Municipal bonds	—	15,169	15,169
Foreign government bonds	—	12,761	12,761
	1,857	211,281	213,138
Long-term restricted cash	—	8,025	8,025
Derivative contracts	—	982	982
<b>Total financial assets</b>	<b>\$ 1,857</b>	<b>\$ 220,288</b>	<b>\$ 222,145</b>
Derivative contracts	\$ —	\$ 17	\$ 17
<b>Total financial liabilities</b>	<b>\$ —</b>	<b>\$ 17</b>	<b>\$ 17</b>

There were no transfers between Level 1 and Level 2 securities during the years ended December 31, 2018 and 2017.



MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

NOTE 6—INVESTMENTS:

*Cash, cash equivalents and short-term investments:*

At December 31, 2018 and 2017, the Company held cash, cash equivalents and short-term investments classified as available-for-sale securities as follows:

	December 31, 2018			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
	(in thousands)			
Cash	\$ 55,501	\$ —	\$ —	\$ 55,501
Money market funds	1,265	—	—	1,265
Certificates of deposit	95,080	1	(43)	95,038
U.S. Government and agency securities	50,643	64	(37)	50,670
Commercial paper	57,529	—	(86)	57,443
Corporate bonds	129,042	27	(304)	128,765
Municipal bonds	17,512	2	(8)	17,506
Foreign government bonds	32,294	26	(18)	32,302
Total	438,866	120	(496)	438,490
Less amounts classified as cash and cash equivalents	(56,766)	—	—	(56,766)
Short-term investments	\$ 382,100	\$ 120	\$ (496)	\$ 381,724

	December 31, 2017			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
	(in thousands)			
Cash	\$ 60,616	\$ —	\$ —	\$ 60,616
Money market funds	1,857	—	—	1,857
Certificates of deposit	58,039	—	(36)	58,003
U.S. Government and agency securities	44,070	—	(198)	43,872
Commercial paper	27,073	1	(45)	27,029
Corporate bonds	54,673	—	(226)	54,447
Municipal bonds	15,227	—	(58)	15,169
Foreign government bonds	12,809	—	(48)	12,761
Total	274,364	1	(611)	273,754
Less amounts classified as cash and cash equivalents	(62,473)	—	—	(62,473)
Short-term investments	\$ 211,891	\$ 1	\$ (611)	\$ 211,281

The Company does not intend to sell the short-term investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases, which may be at maturity.

Interest income and gains (losses) on short-term investments, net were \$5.6 million and \$3.7 million for the years ended December 31, 2018 and 2017, respectively. At December 31, 2018, gross unrealized losses on investments that were in a gross unrealized loss position for greater than 12 months were immaterial. These investments were not deemed to be other-than-temporarily impaired and the gross unrealized losses were recorded in OCI.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The contractual maturities of short-term investments at December 31, 2018 and 2017 were as follows:

	December 31, 2018		December 31, 2017	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(in thousands)			
Due in less than one year	\$ 281,303	\$ 280,959	\$ 148,232	\$ 147,921
Due in one to three years	100,797	100,765	63,659	63,360
	<u>\$ 382,100</u>	<u>\$ 381,724</u>	<u>\$ 211,891</u>	<u>\$ 211,281</u>

*Equity investments in privately-held companies:*

As of December 31, 2018 and 2017, the Company held a total of \$40.3 million and \$29.3 million, respectively, in equity investments in privately-held companies, which were reported using the cost method.

While performing its review for impairment for the fourth quarter of 2018, the Company noted an observable price change related to one of its investments in a privately-held company. As a result, the Company recorded an impairment charge of \$1.5 million in the fourth quarter of 2018.

**NOTE 7—GOODWILL AND INTANGIBLE ASSETS:**

The following table represents changes in the carrying amount of goodwill:

	(in thousands)
Balance as of December 31, 2017	\$ 472,437
Acquisitions	1,479
Adjustments	—
Balance as of December 31, 2018	<u>\$ 473,916</u>

The carrying amounts of intangible assets as of December 31, 2018 were as follows:

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Useful Life
	(in thousands)			(in years)
Licensed technology	\$ 49,546	\$ (30,062)	\$ 19,484	1-8
Developed technology	285,443	(164,406)	121,037	4-7
Customer relationships	69,776	(31,246)	38,530	4-9
Trade names	5,600	(5,323)	277	3
Total intangible assets	<u>\$ 410,365</u>	<u>\$ (231,037)</u>	<u>\$ 179,328</u>	

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The carrying amounts of intangible assets as of December 31, 2017 were as follows:

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Useful Life
	(in thousands)			(in years)
Licensed technology	\$ 40,407	\$ (16,478)	\$ 23,929	1-8
Developed technology	279,543	(122,414)	157,129	4-7
Customer relationships	69,776	(24,783)	44,993	4-9
Trade names	5,600	(3,456)	2,144	3
Total intangible assets	<u>\$ 395,326</u>	<u>\$ (167,131)</u>	<u>\$ 228,195</u>	

Amortization expense of intangible assets totaled approximately \$63.9 million, \$61.3 million and \$59.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. An impairment charge of \$4.3 million was recorded in the fourth quarter of 2017 to write-off the intangible assets related to the 1550nm silicon photonics development activities. See Note 17, "Restructuring and Impairment Charges" for more details about the impairment charge.

The estimated future amortization expense from amortizable intangible assets is as follows:

	(in thousands)
2019	\$ 63,477
2020	50,544
2021	36,939
2022	11,979
2023	8,077
Thereafter	8,312
Total	<u>\$ 179,328</u>

**NOTE 8—DERIVATIVES AND HEDGING ACTIVITIES:**

*Fair Value of Derivative Contracts*

The fair value of derivative contracts as of December 31, 2018 and 2017 was as follows:

	Other current assets	Other accrued liabilities	Other current assets	Other accrued liabilities
	December 31, 2018		December 31, 2017	
	(in thousands)			
Derivatives designated as hedging instruments				
Currency forward and option contracts	\$ 27	\$ 2,122	\$ 980	\$ —
Derivatives not designated as hedging instruments				
Currency forward and option contracts	69	414	2	17
Total derivatives	<u>\$ 96</u>	<u>\$ 2,536</u>	<u>\$ 982</u>	<u>\$ 17</u>

The gross notional amounts of derivative contracts were NIS denominated. The notional amounts of outstanding derivative contracts in U.S. dollar at December 31, 2018 and 2017 were as follows:

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	December 31, 2018	December 31, 2017
(in thousands)		
Derivatives designated as hedging instruments		
Currency forward and option contracts	\$ 92,956	\$ 52,380
Derivatives not designated as hedging instruments		
Currency forward and option contracts	\$ 57,844	\$ 47,015

*Effect of Derivatives Designated as Hedging Instruments on Accumulated Other Comprehensive Income (Loss)*

The following table represents the unrealized gains (losses) of derivatives designated as hedging instruments, net of tax effects, that were recorded in accumulated other comprehensive income (loss) as of December 31, 2018 and 2017, and their effect on OCI for the year ended December 31, 2018 (in thousands):

December 31, 2017	\$ 925
Amount of losses recognized in OCI (effective portion)	(7,690)
Amount of losses reclassified from OCI to income (effective portion)	4,787
December 31, 2018	\$ (1,978)

Foreign exchange contracts designated as hedging instruments primarily relate to operating expenses and the associated gains and losses are expected to be recorded in operating expenses when reclassified out of OCI. See Note 12, "Accumulated Other Comprehensive Income (Loss)" for the amounts recorded in each operating expense account. The Company expects to realize the accumulated OCI balance related to foreign exchange contracts within the next twelve months.

*Effect of Derivative Contracts on the Consolidated Statement of Operations*

The effect of derivative contracts on the consolidated statement of operations in the years ended December 31, 2018, 2017, and 2016 was as follows:

	Derivatives designated as hedging instruments			Derivatives not designated as hedging instruments		
	Year Ended December 31,			Year Ended December 31,		
	2018	2017	2016	2018	2017	2016
(in thousands)						
Operating income (expenses)	\$ (4,787)	\$ 7,034	\$ 623	\$ —	\$ —	\$ —
Other income	\$ —	\$ —	\$ —	\$ (4,553)	\$ 3,248	\$ 384

**NOTE 9—EMPLOYEE BENEFIT PLANS:**

The Company has established a pretax savings plan under Section 401(k) of the Internal Revenue Code. The 401(k) Plan allows eligible employees in the United States to voluntarily contribute a portion of their pre-tax or after-tax salary, subject to a maximum limit specified in the Internal Revenue Code. The Company matches employee contributions of up to 4% of their annual base salaries. The total expenses for these contributions were \$1.8 million, \$2.2 million and \$1.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Under Israeli law, the Company is required to make severance payments to certain of its retired or dismissed Israeli employees. For employees hired prior to January 1, 2007 the severance pay liability is calculated based on the last monthly salary of each employee multiplied by the number of years of such employee's employment and is presented in the Company's balance sheet in long-term liabilities, as if it was payable at each balance sheet date on an undiscounted basis. This liability is partially funded by the purchase of insurance policies or pension funds in the name of the employees. The surrender value of the insurance policies or pension funds is presented in long-term assets.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The severance pay detail is as follows:

	December 31,	
	2018	2017
	(in thousands)	
Accrued severance liability	\$ 21,645	\$ 23,205
Severance assets	17,043	18,302
Unfunded portion	\$ 4,602	\$ 4,903

For other Israeli employees, the Company's contributions for severance pay replace its severance obligation. When the Company makes the monthly contribution equal to 8.3% of the employee's monthly salary to an insurance policy or pension fund, no additional calculations shall be conducted between the parties regarding the matter of severance pay and no additional payments will be made by the Company to the employee. Further, the related obligation and amounts deposited on behalf of the employee for such obligation are not stated on the balance sheet, as the Company is legally released from the obligation to employees once the deposit amounts have been paid.

Severance expenses for the years ended December 31, 2018, 2017 and 2016 were \$13.7 million, \$12.6 million and \$11.0 million, respectively.

In addition, the Company has established a pension contribution plan with respect to its employees in Israel. Under the plan, for the period from January 1 to June 30, 2016, the Company contributed up to 6.0% of employee monthly salary toward the plan. Effective July 1, 2016 the contribution percentage was increased to 6.25%, and was further increased to 6.5% effective January 1, 2017. Employees are entitled to amounts accumulated in the plan upon reaching retirement age, subject to any applicable law. Defined contribution pension plan expenses were \$10.6 million, \$10.4 million and \$8.0 million in the years ended December 31, 2018, 2017 and 2016, respectively.

**NOTE 10—COMMITMENTS AND CONTINGENCIES:**

*Leases*

The Company leases office space and motor vehicles under operating leases with various expiration dates through 2031. Expenses related to office space and motor vehicle leases were approximately \$22.9 million, \$21.3 million and \$18.9 million for the years ended December 31, 2018, 2017 and 2016, respectively. The terms of the facility leases provide for rental payments on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period, and has accrued for rent expense incurred but not paid.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

At December 31, 2018, future lease payments under non-cancelable operating leases are as follows:

<u>Year Ended December 31,</u>	<u>Operating Leases</u>
	<u>(in thousands)</u>
2019	\$ 21,585
2020	18,361
2021	15,245
2022	10,301
2023	10,349
Thereafter	46,042
Total lease payments (1) (2) (3)	<u>\$ 121,883</u>

(1) Future lease payments have not been reduced by minimum sublease rental income of \$2.4 million due to the Company in the future under noncancelable subleases.

(2) Future lease payments include executory costs of \$14.8 million, which are not part of the minimum lease payments.

(3) Future lease payments include contractual commitments of \$23.6 million related to premises which the Company has not yet taken possession as of December 31, 2018.

***Purchase commitments***

At December 31, 2018, the Company had the following non-cancelable purchase commitments:

<u>Year Ended December 31,</u>	<u>Purchase Commitments</u>
	<u>(in thousands)</u>
2019	\$ 195,718
2020	1,737
2021	585
2022	261
Total purchase commitments	<u>\$ 198,301</u>

***Other Commitments***

***Royalty-bearing grants***

In April 2018, the Company entered into a settlement agreement with the IIA, which eliminated the future contingent royalty payment obligations of the Company (approximately \$36.4 million at March 31, 2018) and the associated future interest payments. These obligations were related to the funding the Company received from the IIA prior to the date of the agreement under approved plans in accordance with the R&D Law and the regulations and rules of the IIA. As part of the agreement, the Company paid approximately \$9.3 million to the IIA and the expense was included in cost of revenues during the second quarter of 2018. The Company could be subject to the payment to the IIA of transfer fees or license fees, if the related know-how is transferred outside of Israel.

***Unrecognized tax benefits***

Due to the inherent uncertainty with respect to the timing of future cash outflows associated with the Company's unrecognized tax benefits, it is unable to reliably estimate the timing of cash settlement with the respective taxing authorities. As of December 31, 2018, the Company's unrecognized tax benefits totaled \$46.5 million, out of which an amount of \$25.7 million would reduce the Company's income tax expense and effective tax rate, if recognized.

**Contingencies**

***Legal proceedings***

The Company is involved in a variety of claims, suits, investigations and proceedings that arise from time to time in the ordinary course of its business, including actions with respect to contracts, intellectual property, taxation, employment, benefits,

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

securities, personal injuries and other matters. The results of these proceedings in the ordinary course of business are not expected to have a material adverse effect on the Company's consolidated financial position or results of operations.

The Company records a liability when it believes that it is both probable that a liability will be incurred, and the amount of loss can be reasonably estimated. The Company evaluates, at least quarterly, developments in its legal matters that could affect the amount of liability that has been previously accrued and makes adjustments as appropriate. Significant judgment is required to determine both probability and the estimated amount of a loss or potential loss. The Company may be unable to reasonably estimate the reasonably possible loss or range of loss for a particular legal contingency for various reasons, including, among others: (i) if the damages sought are indeterminate; (ii) if proceedings are in the early stages; (iii) if there is uncertainty as to the outcome of pending proceedings (including motions and appeals); (iv) if there is uncertainty as to the likelihood of settlement and the outcome of any negotiations with respect thereto; (v) if there are significant factual issues to be determined or resolved; (vi) if the proceedings involve a large number of parties; (vii) if relevant law is unsettled or novel or untested legal theories are presented; or (viii) if the proceedings are taking place in jurisdictions where the laws are complex or unclear. In such instances, there is considerable uncertainty regarding the ultimate resolution of such matters, including a possible eventual loss, if any.

**NOTE 11—SHARE INCENTIVE PLANS:**

*Stock option plans*

During the 2016 annual shareholder meeting, the Company's shareholders approved the Mellanox Technologies, Ltd. Amended and Restated Global Share Incentive Plan (2006) (the "First Restated 2006 Plan"), which constitutes an amendment and restatement of the Mellanox Technologies, Ltd. Global Share Incentive Plan (2006) and its appendices (the "2006 Plan"). The First Restated 2006 Plan became effective on March 14, 2016 ("Effective Date"). The approval of the First Restated 2006 Plan extended the term to February 2026.

The First Restated 2006 Plan reserved 750,000 ordinary shares for issuance under new equity awards and reduces to zero the shares available for issuance under all of the Company's other equity incentive plans in effect, including the Voltaire Ltd. 2007 Incentive Compensation Plan, the Voltaire Ltd. 2003 Section 102 Stock Option/Stock Purchase Plan, the Voltaire Ltd. 2001 Section 102 Stock Option/Stock Purchase Plan, the Voltaire Ltd. 2001 Stock Option Plan, the Kotura, Inc. Second Amended and Restated 2003 Stock Plan, the IPtronics, Inc. 2013 Restricted Stock Unit Plan, the Global Share Incentive Assumption Plan (2010), the EZchip Semiconductor Ltd. 2003 Amended and Restated Equity Incentive Plan, the EZchip Semiconductor Ltd. 2007 U.S. Equity Incentive Plan, and the Amended and Restated EZchip Semiconductor Ltd. 2009 Equity Incentive Plan (collectively, the "Prior Plans").

As of the Effective Date of the First Restated 2006 Plan, the Company ceased granting awards under the Prior Plans, and will grant new awards only from the First Restated 2006 Plan. Any shares subject to issued and outstanding awards under the Prior Plans that expire, are canceled or otherwise terminate after the Effective Date of the First Restated 2006 Plan will be added back to share reserves under the First Restated 2006 Plan. The share reserve of the 2006 Plan will no longer be available for issuance under the First Restated 2006 Plan. In addition, the First Restated 2006 Plan implements additional amendments to reflect compensation and governance best practices.

On April 25, 2017, the Company's shareholders approved the Mellanox Technologies, Ltd. Second Amended and Restated Global Share Incentive Plan (2006) (the "Second Restated 2006 Plan"), which constitutes a second amendment and restatement of the 2006 Plan, as amended and restated by the First Restated 2006 Plan. The Second Restated 2006 Plan became effective on February 14, 2017. The Second Restated 2006 Plan increased the ordinary shares reserved for issuance under the First Restated 2006 Plan by 1,640,000 shares to 2,390,000 shares plus any shares subject to issued and outstanding awards under the other equity incentive plans that existed prior to the First Restated 2006 Plan that expire, are cancelled or otherwise terminated after the effective date of the First Restated 2006 Plan. The Second Restated Plan also extends the term of the First Restated 2006 Plan to February 14, 2027. In addition, the Second Restated Plan implements additional amendments to reflect compensation and governance best practices.

On July 25, 2018, the Company's shareholders approved the Mellanox Technologies, Ltd. Third Amended and Restated Global Share Incentive Plan (2006) (the "Third Restated Plan"), which constitutes an amendment and restatement of the Mellanox Technologies, Ltd. Second Amended and Restated Global Share Incentive Plan (2006) (the "Second Restated Plan").

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Third Restated Plan increased the ordinary shares reserved for issuance under the Second Restated Plan by 2,077,000 shares to 4,467,000 shares plus any shares subject to issued and outstanding awards under certain of the Company's prior equity plans that expire, are cancelled or otherwise terminated after March 14, 2016, the effective date of the first amendment and restatement of the Global Share Incentive Plan (2006). The Third Restated Plan also implements certain additional amendments, including specifically providing for the grant of PSUs.

*Assumed EZchip restricted stock units*

In connection with the acquisition of EZchip, the Company assumed 891,822 unvested EZchip RSUs and converted them into 499,894 Mellanox RSUs using an exchange ratio of 0.56. The aggregate value of the 499,894 Mellanox RSUs was \$23.2 million of which \$1.0 million related to service prior to the acquisition date and was included in the EZchip purchase price consideration. The remaining fair value of \$22.2 million represents post-acquisition share-based compensation expense that was recognized over the requisite service period of approximately 2.25 years from the date of acquisition. The assumed RSUs retained all applicable terms and vesting periods.

*Share option activity*

The following table summarizes the share option activity under all equity incentive plans:

	Options Outstanding	
	Number of Shares	Weighted Average Exercise Price
Outstanding at December 31, 2016	1,634,485	\$ 32.79
Options exercised	(479,105)	\$ 15.95
Options canceled	(45,319)	\$ 74.59
Outstanding at December 31, 2017	1,110,061	\$ 38.35
Options exercised	(586,076)	\$ 24.77
Options canceled	(29,482)	\$ 100.81
Outstanding at December 31, 2018	494,503	\$ 50.73

There were no options granted in 2018, 2017 and 2016.

The total pretax intrinsic value of options exercised in 2018 was \$33.5 million. This intrinsic value represents the difference between the fair market value of the Company's ordinary shares on the date of exercise and the exercise price of each option. Based on the most recently available closing price of the Company's ordinary shares of \$92.38 prior to December 31, 2018, the total pretax intrinsic value of all outstanding options was \$21.8 million. The total pretax intrinsic value of exercisable options at December 31, 2018 was \$21.7 million.

The total pretax intrinsic value of options exercised in 2017 was \$16.9 million. Based on the most recently available closing price of the Company's ordinary shares of \$64.70 prior to December 31, 2017, the total pretax intrinsic value of all outstanding options was \$35.5 million. The total pretax intrinsic value of exercisable options at December 31, 2017 was \$35.4 million.

The weighted average remaining contractual life of options outstanding at December 31, 2018 was 2.7 years. There were 493,462 options exercisable at December 31, 2018 with a weighted average exercise price \$50.76 per share.



MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Restricted share unit activity*

The following table summarizes the restricted share unit activity under all equity incentive plans:

	Restricted Share Units Outstanding	
	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested restricted share units at December 31, 2016	3,324,519	\$ 46.67
Restricted share units granted	1,844,350	\$ 49.88
Restricted share units vested	(1,364,063)	\$ 46.25
Restricted share units canceled	(390,101)	\$ 47.79
Non-vested restricted share units at December 31, 2017	3,414,705	\$ 48.45
Restricted share units granted	1,773,217	\$ 80.40
Restricted share units vested	(1,354,359)	\$ 48.35
Restricted share units canceled	(539,400)	\$ 52.29
Non-vested restricted share units at December 31, 2018	3,294,163	\$ 65.05

The weighted average fair value of restricted share units granted was \$80.40, \$49.88 and \$48.39 for the years ended December 31, 2018, 2017 and 2016, respectively. The total intrinsic value of all outstanding restricted share units was \$304.3 million as of December 31, 2018.

The non-vested restricted share units at December 31, 2018 included 36,000 PSUs. The PSUs will vest and be earned based on the Company's achievement of relative total shareholder return and average non-GAAP net operating margin over a three-year performance period commencing on January 1, 2018 and ending on December 31, 2020, subject to the continued service to the Company through the end of the performance period. The number of shares that will actually vest range from zero to 175% of the target.

*Employee stock purchase plan activity*

The ESPP is designed to allow eligible employees to purchase the Company's ordinary shares, at semi-annual intervals, with their accumulated payroll deductions. A participant may contribute up to 15% of his or her base compensation through payroll deductions, and the accumulated deductions will be applied to the purchase of shares on the purchase date, which is the last trading day of the offering period. The purchase price per share will be equal to 85% of the fair market value per share on the start date of the offering period in which the participant is enrolled or, if lower, 85% of the fair market value per share on the purchase date. In May 2016 the shareholders approved an increase of 4,000,000 additional shares under the ESPP for a total of 6,585,712 shares reserved for issuance. No participant in the ESPP may be issued or transferred more than \$25,000 worth of ordinary shares pursuant to purchase rights under the ESPP per calendar year. During the years ended December 31, 2018, 2017 and 2016, 490,123, 568,876, and 491,968 shares, respectively, were issued under the ESPP at weighted average per share prices of \$46.62, \$38.83 and \$35.50, respectively.

*Shares reserved for future issuance*

The Company had the following ordinary shares reserved for future issuance under its equity incentive plans as of December 31, 2018:

	Number of Shares
Share options outstanding	494,503
Restricted share units outstanding	3,294,163
Shares authorized for future issuance	1,630,451
ESPP shares available for future issuance	2,935,346
Total shares reserved for future issuance as of December 31, 2018	8,354,463

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Share-based compensation

The Company accounts for share-based compensation expense for share option awards and ESPP based on the estimated fair value of the instruments as of the grant dates. There were no employee share options granted in 2018, 2017 and 2016. The following weighted average assumptions were used in the valuation of the ESPP for the years ended December 31, 2018, 2017 and 2016:

	Employee Share Purchase Plan		
	Year ended December 31,		
	2018	2017	2016
Dividend yield, %	—	—	—
Expected volatility	31.0%	24.6%	35.8%
Risk free interest rate	1.78%	1.20%	0.45%
Expected life, years	0.50	0.50	0.50

The following table summarizes the distribution of total share-based compensation expense in the Consolidated Statements of Operations:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
Share-based compensation expense by caption:			
Cost of goods sold	\$ 1,950	\$ 2,000	\$ 2,375
Research and development	38,922	40,278	40,475
Sales and marketing	17,042	15,693	15,183
General and administrative	13,428	10,893	13,085
Total share-based compensation expense	\$ 71,342	\$ 68,864	\$ 71,118
Share-based compensation expense by type of award:			
Share options	\$ 12	\$ 115	\$ 2,711
ESPP	6,378	6,232	6,394
RSU	64,059	62,517	62,013
PSU	893	—	—
Total share-based compensation expense	\$ 71,342	\$ 68,864	\$ 71,118

Share-based compensation expense during the year ended December 31, 2016 included cash payments of \$4.8 million for the settlement of accelerated RSUs for individuals terminated on the Closing Date of the EZchip acquisition.

At December 31, 2018, there was \$192.3 million of total unrecognized share-based compensation costs related to non-vested share-based compensation arrangements. The costs are expected to be recognized over a weighted average period of approximately 2.94 years.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

NOTE 12—ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):

The following table summarizes the changes in accumulated other comprehensive income (loss) for the years ended December 31, 2018 and 2017:

	Unrealized Gains (Losses) on Available-for-Sale Securities	Unrealized Gains (Losses) on Derivatives Designated as Hedging Instruments	Total
	(in thousands)		
Balance at December 31, 2017	\$ 693	\$ 925	\$ 1,618
Other comprehensive income (loss) before reclassifications, net of taxes	218	(7,690)	(7,472)
Realized (gains)/losses reclassified from accumulated other comprehensive income	16	4,787	4,803
Net current-period other comprehensive income (loss), net of taxes	234	(2,903)	(2,669)
Balance at December 31, 2018	<u>\$ 927</u>	<u>\$ (1,978)</u>	<u>\$ (1,051)</u>
Balance at December 31, 2016	\$ (236)	\$ (692)	\$ (928)
Other comprehensive income before reclassifications, net of taxes	918	8,651	9,569
Realized (gains)/losses reclassified from accumulated other comprehensive income	11	(7,034)	(7,023)
Net current-period other comprehensive income, net of taxes	929	1,617	2,546
Balance at December 31, 2017	<u>\$ 693</u>	<u>\$ 925</u>	<u>\$ 1,618</u>

The following table provides details about the realized (gains)/losses reclassified from accumulated other comprehensive income for the years ended December 31, 2018 and 2017:

	Realized (Gains)/Losses Reclassified from Accumulated Other Comprehensive Income		Affected Line Item in the Statement of Operations
	Year ended December 31,		
	2018	2017	
	(in thousands)		
Realized (gains)/losses on derivatives designated as hedging instruments	\$ 4,787	\$ (7,034)	Cost of revenues and Operating expenses:
	206	(347)	Cost of revenues
	472	(635)	General and administrative
	384	(628)	Sales and marketing
	3,725	(5,424)	Research and development
Realized losses on available-for-sale securities	16	11	Other income, net
Total reclassifications for the period	<u>\$ 4,803</u>	<u>\$ (7,023)</u>	Total

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

NOTE 13—INCOME TAXES:

The components of income (loss) before taxes on income are as follows:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
United States	\$ 19,526	\$ (21,528)	\$ (17,969)
Foreign	92,685	(375)	42,297
Income (loss) before taxes on income	\$ 112,211	\$ (21,903)	\$ 24,328

The components of the provision for (benefit from) income taxes are as follows:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
Current:			
U.S. federal	\$ 1,306	\$ (617)	\$ (1,333)
State and local	512	632	220
Foreign	4,648	(261)	6,161
Total current	6,466	(246)	5,048
Deferred:			
U.S. federal	(17,487)	—	—
State and local	(12,283)	—	—
Foreign	1,257	(2,232)	762
Total deferred	(28,513)	(2,232)	762
Provision for (benefit from) taxes on income	\$ (22,047)	\$ (2,478)	\$ 5,810

At December 31, 2018 and 2017, significant deferred tax assets and liabilities are as follows:

	December 31,	
	2018	2017
	(in thousands)	
Deferred tax assets:		
Net operating loss and credit carryforwards	\$ 42,345	\$ 51,281
Reserves and accruals	13,861	13,196
Research and development expenses	3,624	3,230
Depreciation and amortization	27	1,641
Other	3,418	3,299
Gross deferred tax assets	63,275	72,647
Valuation allowance	(8,152)	(42,241)
Total deferred tax assets	55,123	30,406
Intangible assets	(4,463)	(5,843)
Total deferred tax liabilities	(4,463)	(5,843)
Net deferred tax assets	\$ 50,660	\$ 24,563

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During the year ended December 31, 2018, the Company recorded a correction of a prior-period error related to its U.S. subsidiaries, which increased the net deferred tax assets at December 31, 2017 by \$10.5 million, with a corresponding increase to the valuation allowance in the same amount, with a zero net impact on benefit from taxes on income. The correction primarily related to the Federal net operating loss ("NOL") carryforwards and R&D credit carryforwards of \$8.4 million and the reserves and accruals and depreciation and amortization of \$2.1 million. The Company evaluated the error and concluded that it was not material to the 2017 or 2018 reporting periods.

The Company records net deferred tax assets to the extent it believes these assets will more likely than not be realized. As of each reporting date, management considers new evidence, both positive and negative, that could impact management's view with regards to the future realization of deferred tax assets for each jurisdiction. During the year ended December 31, 2018, the Company released \$32.1 million of valuation allowance against the deferred tax assets primarily related to NOL carryforwards and tax credit carryforwards related to its U.S. subsidiaries. After the discontinuation of the Company's 1550nm silicon photonics development activities in the first quarter of fiscal 2018, the Company expects its U.S. subsidiaries will have sufficient taxable income in the future to utilize the deferred tax assets before they expire. After weighing all positive and negative evidence, including historical results and projections of future taxable income, the Company determined that it remained more likely than not that \$50.7 million and \$24.6 million of deferred tax assets would be realized as of December 31, 2018 and 2017, respectively. The Company continued to provide a valuation allowance against the deferred tax assets related to capital loss carryforwards on the consolidated balance sheet as of December 31, 2018 due to uncertainty concerning realization of these deferred tax assets.

In December 2017, the U.S. enacted significant tax reform through the TCJA. The TCJA enacted significant changes affecting the year ended December 31, 2017, including, but not limited to, (1) reducing the U.S. federal corporate income tax rate to 21% effective 2018, and (2) imposing a one-time Transition Tax on certain unrepatriated earnings of foreign subsidiaries of U.S. companies that had not been previously taxed in the U.S.

The TCJA also established new tax provisions affecting 2018, including, but not limited to, (1) creating a new provision designed to tax global intangible low-tax income ("GILTI"); (2) generally eliminating U.S. federal taxes on dividends from foreign subsidiaries; (3) eliminating the corporate alternative minimum tax ("AMT"); (4) creating the base erosion anti-abuse tax ("BEAT"); (5) establishing a deduction for foreign derived intangible income ("FDII"); (6) repealing the domestic production activity deduction; and (7) establishing new limitations on deductible interest expense and certain executive compensation.

The reduction of the U.S. federal corporate income tax rate required the Company to remeasure its deferred tax assets and liabilities as of the date of enactment. For the year ended December 31, 2017, the Company decreased the net deferred tax assets as a result of such remeasurement with a corresponding decrease to the valuation allowance as provisional amounts, resulting in no net effect on the benefit from taxes on income for the year ended December 31, 2017. As of December 31, 2018, the Company has completed the accounting for all the impacts of the TCJA with no material adjustments to the provisional amounts recorded as of December 31, 2017.

On January 5, 2016, the Israeli Government legislated a reduction in corporate income tax rates from 26.5% to 25.0%, effective in 2016. Deferred tax assets and liabilities at December 31, 2015 were measured using the 26.5% tax rate. Deferred tax assets and liabilities as of January 1, 2016 were remeasured using the 25.0% tax rate. The change in the corporate income tax rate from 26.5% to 25.0% resulted in a reduction of approximately \$1.3 million to the Company's deferred tax assets and a corresponding increase in the Company's income tax expense during the first quarter of 2016. On December 29, 2016, the Israeli Government legislated a reduction in corporate income tax rates from 25.0% to 24.0% in 2017 and to 23.0% in 2018 and thereafter. This change in the corporate income tax rates from 25.0% to 24.0% and 23.0% resulted in a reduction of approximately \$1.4 million to the Company's deferred tax assets as of December 31, 2016, and a corresponding increase in the Company's income tax expense during the fourth quarter of 2016.

At December 31, 2018, the Company had NOL carryforwards of approximately \$156.8 million in Israel, \$76.4 million in the U.S. for federal tax purposes, \$63.8 million in the U.S. for state tax purposes and \$3.1 million in Denmark. The U.S. NOL carryforwards for federal tax purposes will expire from 2024 to 2027, and the U.S. NOL carryforwards for state tax purposes will expire from 2019 to 2037. The non-U.S. NOL carryforwards have no expiration date.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company has not provided for Israeli income and foreign withholding taxes on \$4.5 million of its non-Israeli subsidiaries' undistributed earnings as of December 31, 2018. The Company currently has no plans to repatriate those funds and intends to indefinitely reinvest them in its non-Israeli operations. The amount of the unrecognized deferred tax liability for temporary differences related to investments in non-Israeli subsidiaries that were essentially permanent in duration as of December 31, 2018 was \$1.0 million.

The reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

	December 31,		
	2018	2017	2016
Tax at statutory rate	21.0%	35.0%	35.0%
Tax at rates other than the statutory rate	(14.2)	(4.8)	(84.5)
Valuation allowance	(29.1)	47.3	40.8
Net change in tax reserves	4.1	8.0	17.1
Adjustment of deferred tax balances following changes in tax rates	—	(71.8)	10.9
Other, net	(1.4)	(2.4)	4.6
Provision for (benefit from) taxes on income	(19.6)%	11.3%	23.9%

The Company's operations in Israel were granted "Approved Enterprise" status by the Investment Center in the Israeli Ministry of Economy and Industry (formerly, the Ministry of Industry Trade and Labor) and "Beneficiary Enterprise" status from the Israeli Income Tax Authority, which makes the Company eligible for tax benefits under the Encouragement Law. Under the terms of the Approved and Beneficiary Enterprise programs, income that is attributable to the Company's operations in Yokneam, Israel, is exempt from income tax commencing fiscal year 2011 through 2021. Income that is attributable to the Company's operations in Tel Aviv, Israel is subject to a reduced income tax rate (generally between 10% and the current corporate tax rate, depending on the percentage of foreign investment in the Company) commencing fiscal year 2013 through 2021. The tax holiday has resulted in a cash tax savings of approximately \$27.9 million, \$11.6 million and \$37.3 million in 2018, 2017, and 2016, respectively, increasing diluted earnings per share by approximately \$0.51, \$0.23 and \$0.75 in the years ended December 31, 2018, 2017, and 2016, respectively.

The following summarizes the activity related to the Company's unrecognized tax benefits:

	December 31,		
	2018	2017	2016
(in thousands)			
Gross unrecognized tax benefits, beginning of the period	\$ 45,154	\$ 41,460	\$ 25,382
Increases in tax positions for prior years	1,377	3,655	252
Decreases in tax positions for prior years	(1,860)	—	—
Increases in tax positions for current year	5,516	8,090	8,131
Increases in tax positions acquired or assumed in a business combination	—	—	8,990
Decreases due to lapses of statutes of limitations	(3,646)	(8,051)	(1,295)
Gross unrecognized tax benefits, end of the period	\$ 46,541	\$ 45,154	\$ 41,460

As of December 31, 2018, 2017 and 2016, the total amount of gross unrecognized tax benefits was \$46.5 million, \$45.2 million, and \$41.5 million, respectively. Of these amounts as of December 31, 2018, 2017 and 2016, \$25.7 million, \$24.6 million, and \$23.4 million, respectively, would reduce our income tax expense and effective tax rate, if recognized.

It is the Company's policy to classify accrued interest and penalties as part of the accrued unrecognized tax benefits liability and record the expense in the provision for income taxes. As of December 31, 2018, 2017 and 2016, the amount of accrued interest and penalties related to unrecognized tax benefits totaled \$2.6 million, \$2.9 million, and \$1.8 million,

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

respectively, which is not included in the table above. For unrecognized tax benefits that existed at December 31, 2018, the Company does not anticipate any significant changes within the next twelve months.

On December 29, 2016, the Israeli government legislated new regulations regarding the "Preferred Technological Enterprise" regime, under which a company that complies with the terms may be entitled to certain tax benefits. On June 14, 2017, the Israeli government legislated new regulations, stipulating the calculation method of the tax benefits under the Preferred Technological Enterprise regime. The Company expects that its operation in Israel will comply with the terms of the Preferred Technological Enterprise regime. Therefore, the Company may utilize the tax benefits under this regime after the end of the benefit period of its Approved and Beneficiary Enterprise statuses (i.e., from fiscal year 2022 onwards). Under the new legislation, the majority of the Company's income from its operations in Yokneam, Israel, will be subject to a corporate rate of 7.5%, while the majority of the income from its operations in Tel-Aviv, Israel, will be subject to a corporate rate of 12%. As a result of the lower tax rates mentioned above, the Company recorded a decrease of approximately \$0.2 million in deferred tax assets and a corresponding increase in tax expense during the second quarter of 2017.

As a multinational corporation, the Company conducts business in many countries and is subject to taxation in many jurisdictions. The taxation of the Company's business is subject to the application of multiple and sometimes conflicting tax laws and regulations as well as multinational tax conventions. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation and the evolution of regulations and court rulings. Consequently, taxing authorities may impose tax assessments or judgments against the Company that could materially impact its tax liability and/or its effective income tax rate. As of December 31, 2018, the 2015 through 2017 tax years are open and may be subject to potential examinations in the U.S. The Company has net operating losses in the U.S. from prior tax periods beginning in 2003 which may be subject to examination upon utilization in future tax periods. As of December 31, 2018, the 2013 through 2017 tax years are open and may be subject to potential examinations in Denmark, and the 2014 through 2017 tax years are open and may be subject to potential examinations in Israel. As of December 31, 2018, the income tax returns of the Company and one of its subsidiaries in Israel are under examination by the Israeli Tax Authority for certain years from 2014 to 2016.

**NOTE 14—GEOGRAPHIC INFORMATION:**

The Company operates in one reportable segment, the development, manufacturing, marketing and sales of interconnect products. The Company's chief operating decision maker is the chief executive officer. Since the Company operates in one segment, all financial segment information can be found in the accompanying Consolidated Financial Statements.

Revenues by geographic region are as follows:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
United States	\$ 402,840	\$ 327,528	\$ 386,360
China	258,451	172,405	192,581
Europe	174,892	176,937	149,855
Other Americas	128,077	92,449	52,447
Other Asia	124,483	94,574	76,255
Total revenue	<u>\$ 1,088,743</u>	<u>\$ 863,893</u>	<u>\$ 857,498</u>

Revenues are attributed to countries based on the geographic location of the customers. Intercompany sales between geographic areas have been eliminated.

MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Property and equipment, net by geographic location are as follows:

	December 31,	
	2018	2017
	(in thousands)	
Israel	\$ 99,589	\$ 99,752
United States	3,495	7,017
Other	2,250	3,150
Total property and equipment, net	<u>\$ 105,334</u>	<u>\$ 109,919</u>

Property and equipment, net is attributed to the geographic location in which it is located.

**NOTE 15—OTHER INCOME (LOSS), NET:**

Other income (loss), net, is summarized in the following table:

	Year ended December 31,		
	2018	2017	2016
	(in thousands)		
Interest income and gains (losses) on short-term investments, net	\$ 5,629	\$ 3,748	\$ 2,244
Foreign exchange loss, net	(1,256)	(596)	(840)
Impairment of investment in a privately-held company	(1,494)	—	—
Other	(557)	(37)	(314)
Total other income (loss), net	<u>\$ 2,322</u>	<u>\$ 3,115</u>	<u>\$ 1,090</u>

**NOTE 16—TERM DEBT:**

In connection with the Company's acquisition of EZchip, on February 22, 2016, the Company and its wholly owned subsidiary, Mellanox Technologies, Inc., entered into a \$280.0 million variable interest rate Term Debt note maturing February 21, 2019. Debt issuance costs of \$5.5 million on the Term Debt were amortized to interest expense at the effective interest rate over the contractual term of the Term Debt. The Term Debt allowed for voluntary prepayments at any time and additional term loan borrowings under certain conditions.

On April 30, 2018, the Company paid off all outstanding principal and interest related to the Term Debt. As a result, the unamortized debt issuance costs were fully amortized when the outstanding principal and interest were fully paid.

**NOTE 17—RESTRUCTURING AND IMPAIRMENT CHARGES:**

While performing the review for impairment for the fourth quarter of 2017, the Company noted an impairment indicator associated with the potential sale or discontinuation of the 1550nm silicon photonics line of business. As a result, the Company recorded impairment charges totaling \$12.0 million in the fourth quarter of 2017, of which \$7.7 million was related to property and equipment and \$4.3 million was related to intangible assets.

The impairment charges were calculated based on the differences between the net book values of the related assets and their estimated fair values. The Company primarily used the market approach to determine the estimated fair values of the property and equipment. Under this approach we considered various factors, including secondary market comparables, replacement costs, age and condition of the assets and estimated selling costs. The impaired intangible assets represent obsolete technologies that were deemed to have no value, and therefore were fully written off.



MELLANOX TECHNOLOGIES, LTD.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In connection with the discontinuation of its 1550nm silicon photonics development activities, the Company initiated a restructuring plan to wind down the business operations related to these activities, which primarily included terminating employees, exiting contracts with vendors, selling assets, and exiting facilities.

The Company recorded \$3.5 million, \$3.4 million, and \$2.4 million of employee separation and severance costs, contract exit costs, and impairment charges and losses on disposal of assets, respectively, during the year ended December 31, 2018. The Company does not expect additional costs related to these activities in future periods.

As of December 31, 2018, the Company is still using the facilities related to the discontinued activities and therefore has not recorded any related restructuring charges. The Company expects to record up to \$0.5 million of facility related charges in 2019.

There was also a \$0.9 million impairment charge on fixed assets not related to the discontinuation of the 1550nm silicon photonics development activities recorded during the year ended December 31, 2018.

**NOTE 18—RELATED PARTY TRANSACTIONS:**

On June 19, 2018, the Company entered into a settlement agreement (the “Settlement Agreement”) with Starboard Value LP and certain of its affiliates (“Starboard”), together holding, on such date, approximately 10.3% of the Company’s outstanding ordinary shares. The Settlement Agreement provided for, among other things, the concurrent resignations of three members of the Company’s Board of Directors (the “Board”) and the concurrent appointment of two independent directors nominated by Starboard and one mutually agreed upon independent nominee to the Board. Starboard also agreed to terminate its proxy contest against the Company and withdraw its notice of shareholder nomination of individuals for election as directors at the Company’s 2018 annual general meeting of shareholders. Furthermore, the Company agreed to reimburse Starboard for its reasonable, documented out-of-pocket fees and expenses (including legal expenses) incurred through the date of the Settlement Agreement in connection with Starboard’s interactions with the Company up to a maximum of \$2.0 million. On July 11, 2018, the Company paid \$2.0 million for such costs to Starboard.

**SCHEDULE II—CONSOLIDATED VALUATION AND QUALIFYING ACCOUNTS**

**MELLANOX TECHNOLOGIES, LTD.**

<b>Description:</b>	<b>Balance at Beginning of Year</b>	<b>Charged to Costs and Expenses</b>	<b>Deductions</b>	<b>Balance at End of Year</b>
	<b>(in thousands)</b>			
<b>Year ended December 31, 2018</b>				
Deducted from asset accounts:				
Allowance for doubtful accounts	\$ 632	\$ —	\$ (132)	\$ 500
Allowance for sales returns and adjustments	—	—	—	—
Income tax valuation allowance	42,241	—	(34,089)	8,152
<b>Total</b>	<b>\$ 42,873</b>	<b>\$ —</b>	<b>\$ (34,221)</b>	<b>\$ 8,652</b>
<b>Year ended December 31, 2017</b>				
Deducted from asset accounts:				
Allowance for doubtful accounts	\$ 632	\$ —	\$ —	\$ 632
Allowance for sales returns and adjustments	—	—	—	—
Income tax valuation allowance	55,827	—	(13,586)	42,241
<b>Total</b>	<b>\$ 56,459</b>	<b>\$ —</b>	<b>\$ (13,586)</b>	<b>\$ 42,873</b>
<b>Year ended December 31, 2016</b>				
Deducted from asset accounts:				
Allowance for doubtful accounts	\$ 621	\$ 11	\$ —	\$ 632
Allowance for sales returns and adjustments	—	—	—	—
Income tax valuation allowance	28,999	26,828	—	55,827
<b>Total</b>	<b>\$ 29,620</b>	<b>\$ 26,839</b>	<b>\$ —</b>	<b>\$ 56,459</b>

**ITEM 16—FORM 10-K SUMMARY**

Not applicable.

