

LATTICE SEMICONDUCTOR CORP  
Form 10-K  
March 02, 2016  
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 10-K  
(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED JANUARY 2, 2016  
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: 000-18032

LATTICE SEMICONDUCTOR CORPORATION  
(Exact name of registrant as specified in its charter)

Delaware 93-0835214  
(State of Incorporation) (I.R.S. Employer Identification Number)  
111 SW Fifth Ave, Ste 700, Portland, OR 97204  
(Address of principal executive offices) (Zip Code)  
Registrant's telephone number, including area code: (503) 268-8000

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

\_\_\_\_\_  
(Title of Class) (Name of each exchange on which registered)  
Common Stock, \$.01 par value NASDAQ Global Select Market

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

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

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

Indicate by 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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. [X]

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

Large accelerated filer [X]

Accelerated filer o

Non-accelerated filer o

Smaller reporting company o

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

Aggregate market value of voting stock held by non-affiliates of the registrant as of July 4, 2015 567,750,755

Number of shares of common stock outstanding as of February 26, 2016

118,994,539

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this Report, to the extent not set forth herein, is incorporated herein by reference from the registrant's definitive proxy statement relating to the 2016 Annual Meeting of Stockholders, which definitive proxy statement shall be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Report relates.

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PART I

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Item 1. Business

Overview

Lattice Semiconductor Corporation and its subsidiaries (“Lattice,” the “Company,” “we,” “us,” or “our”) develop semiconductor technologies that we monetize through products, solutions, and licenses.

We enable our customers to quickly and easily develop smart and connected products. We help their products become more aware, interact more intelligently, and make better and faster connections. In an increasingly intense global technology market, we help our customers get their products to market faster than their competitors.

Our historic focus was on the programmable logic devices (PLDs). In 2011, we made the strategic decision to competitively differentiate from other established programmable logic companies with ultra-low power and ultra-small sized field programmable gate array (FPGA) solutions, a type of PLD. As a result we acquired a leader in this technology, SiliconBlue Technologies, Inc. In 2015, we extended our capabilities beyond PLDs with the acquisition of Silicon Image, Inc. and its portfolio of standards-driven Video Connectivity application specific standard products (ASSPs), 60 GHz mmWave devices, and associated intellectual property (IP). We believe that video consumption will continue to grow strongly and our broader product portfolio will allow us to reach markets that we could not previously access. Video expertise combined with FPGA-based hardware acceleration and both wired and wireless ways to distribute data allow us to penetrate new markets.

Our results for the year ended January 2, 2016 include the results of Silicon Image for the approximately 10-month period from March 11, 2015 through January 2, 2016. Results presented for prior fiscal years are those historically reported for Lattice only.

Our Markets and Customers

We sell globally into three markets: Consumer, Communications, and Industrial.

In the Consumer Market you can find our solutions making consumer products smarter and thinner, including: smartphones, tablets and e-readers, wearables, accessories such as chargers and docks, Ultra High-Definition (UHD) TVs, Digital SLR cameras, drones, and other connected devices.

Our Consumer customers are driven by the need to deliver richer and more responsive experiences. They typically require:

- Higher resolution video content on larger screen sizes with minimal delays.
- More intelligence and computing power. Products need to be always-on and always-aware.
- Longer battery lives for handheld devices and reduced energy consumption for plugged-in devices.
- Fast design cycles. Products must be quickly and easily differentiated.
- Smaller form factors. Products need to lay flatter on the wall or sit more easily in people’s pockets.

Lattice solutions help solve these challenges with the following products and services (described in detail below):

- A full suite of standards-based HDMI and MHL Video Connectivity ASSPs which enable the immersive audio-visual experience that consumers demand.
- PLDs which bring multiple benefits to our customers. PLD’s parallel architecture enables faster processing than competing devices, such as processors, allowing for a user experience with shorter pauses and fewer delays. Our

FPGAs are among the lowest power in the industry, enabling the application processor and other high power components to remain dormant longer, resulting in longer battery life. Finally, with some of the industry's smallest packages, we enable thinner end products.

mmWave Devices such as our SiBEAM Snap and WirelessHD products. SiBEAM Snap is a wireless connection technology that can transfer a high definition movie to a mobile device in seconds while eliminating the connector port. WirelessHD products enable laptops, projectors, accessories, and other Consumer products to wirelessly communicate at very high speeds.

Intellectual Property Licensing which enables customers who wish to develop a proprietary solution to use our proven technology.

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Our proprietary solutions help our customers get their products to market faster than typical development cycles. With re-programmability and flexibility our PLDs inherently allow our customers to have quicker product development. Our deep engagement with industry standards bodies gives us an intimate knowledge of that technology and the ability to get better products to market faster. Our mmWave technology is at the forefront of wireless connectivity innovation. These time-to-market advantages are critical given shorter product life cycles and higher competition in our customers' end markets.

In the Communications Market our solutions play key roles in HetNet small cell base stations, network backhaul, wired access aggregation, and other related applications.

Our Communications customers need to "connect anything to everything," at ever-increasing data rates. Networks typically require progressively higher bandwidth and increased reliability as more data is demanded by consumer and other connected devices. Bandwidth demands are also driven by the rapid transition to a cloud based infrastructure.

As wireless cells become smaller, there is a growing requirement for smaller form factors with lower costs.

We help customers solve these problems with the following products:

PLDs optimized for Input-Output (IO) expansion, acceleration and hardware management. Our FPGAs consume very low power, which reduces operating costs. Their small form factor enables higher functional density in less space. Finally, our FPGAs are IO rich, which allows for more connections with system application specific integrated circuits (ASICs) and ASSPs). Our programmable mixed signal devices make power and thermal management easy and reliable.

mmWave transceivers feature high-integration, low power design, and internal / external antenna options. Our beam-steering technology makes point-to-point links lighter, cheaper, lower power and easier to install, enabling backhaul at "wireless fiber" data rates.

Examples of our products enabling intelligent automation in the Industrial Market (Industrial) include: machine vision, robotics, factory automation, industrial handhelds, surveillance cameras and DVRs, digital signage, driver assistance, automotive infotainment, servers, and data center networks.

Our Industrial customers face numerous challenges:

As smart factories develop, sensors are proliferating and machine vision is becoming higher definition, in turn requiring increasing amounts of data to be gathered, connected, and processed.

Cars, trucks, and trains are also becoming smarter and more connected. Drivers and passengers are demanding better in-cabin experiences including entertainment, diagnostics, and enhanced safety.

As data center servers become smaller and power costs become more dominant, there is a growing requirement for smaller form factors with lower installed and operational costs.

Our product portfolio helps solve these challenges with the following products and services:

Our small-sized, low-power PLDs not only provide the IO expansion, connectivity and processing inherent in FPGAs to the full Industrial Market, but they also form the backbone of several integrated solutions, including complete HD camera and DVR solutions on a single FPGA device and Human-Machine Interfaces (HMI) on a chip.

Performance-tested and regulatory-approved mmWave modules greatly reduce the complexity of adding high-performance wireless video capabilities to displays, without the wires that clutter a factory floor or medical suite.

Automotive qualified MHL / HDMI Video Connectivity ASSPs allow consumers to stream UHD video from their mobile phones to their in-car entertainment system, delivering the ultimate connected car experience.

Our Products, Services, and Competition

We deliver three types of semiconductor devices to help solve our customers' problems: PLDs, Video Connectivity ASSPs, and mmWave devices. We also serve our customers with IP licensing and various other services.

#### Programmable Logic Devices (“PLDs”)

PLDs are regular arrays of logic that can be custom-configured by the user through software. This programmability allows our customers flexibility and reduced time to market while allowing us to offer the chips to many different customers in many different markets. Four product family lines anchor our PLD offerings:

The ECP families are our “Connectivity & Acceleration FPGAs.” They offer customers the lowest cost per gate, Digital Signal Processing (DSP) capability, and Serialize-Deserialize (SerDes) connectivity. ECP devices are optimized for the Communications market but also find significant use in the Industrial market.



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The MachXO families are known as “Bridging and Expansion FPGAs.” They are control oriented and offer the lowest cost per gate. MachXO3L was chosen by the trade publication EDN as one of the “100 Hot Products of 2014.”

[<http://www.edn.com/electronics-products/other/4437466/EDN-Hot-100-products-of-2014--MCUs--Processors---Programmable-Logic-Devices>]

MachXO families are widely used across our three primary target markets: Communications, Industrial, and Consumer.

iCE40 families are known as the “World’s Smallest FPGAs.” Their small size and ultra-low power, make them the optimal products for customizing Consumer mobile and Industrial handheld products. The most recent member of the iCE40 families, the iCE40 UltraLite, was named “Digital Semiconductor Product of the Year” by the 2015 Elektra European Electronics Industry Awards.

[<http://www.electronicweekly.com/news/elektra-awards-2015-the-winners-2015-11/>]

Programmable Mixed Signal devices, such as our Platform Manger 2 and L-ASC10 combine programmable digital logic with analog functionality to help customers manage power, thermal, and control planes in real time.

To enable our customers to get to market faster we support the PLDs with intellectual property cores, reference designs, development kits, and design software.

Competition for our PLDs is fragmented.

While ASICs, ASSPs, and microcontrollers have historically dominated high-volume market segments through low cost and reduced power consumption, our PLDs have become small enough with sufficiently low power that we are now considered by customers in cases where they need the architectural benefits of PLDs, namely programmability with its accelerated time-to-market and the speed that comes from parallelism. If a customer’s design is not working as intended, the customer can quickly change it using the programmability of our PLDs through software. In contrast, ASICs and ASSPs require time consuming and expensive redesign and fabrication. Against microcontrollers we differentiate our products with smaller sized packages and higher performance.

Our main PLD competitors are Xilinx and Intel/Altera. Both make PLDs but are generally focused on the high-density end of the market, making devices that are up to a full order of magnitude larger than ours with the associated increases in power and size. We differentiate from them with ultra-low power and very small sized packages.

### Video Connectivity ASSPs

In the Consumer market, consumers need to connect many different types of audio-video devices and expect them to work seamlessly together. We refer to these connections as “Video Connectivity.” Industry standards, such as HDMI, MHL, and USB Type-C, ensure that consumers are able to successfully make those connections. These industry standards support resolutions up to 8K, High Dynamic Range, Deep Color, and HDCP 2.2 content protection. Our Video Connectivity ASSPs implement these standards along with value-added features and allow Consumer original equipment manufacturers (OEMs) manufacturers to quickly get feature rich and interoperable products to market.

Our Video Connectivity ASSPs perform many functions, including ensuring interoperability, enhancing picture quality, converting between resolutions, and transmitting / receiving content without the need for additional components. Specific device types include port processors, port controllers, video processors, transmitters, receivers, bridges, and converters. These devices are used in products such as mobile phones, HD TVs, home theater systems, automotive infotainment, PCs, accessories, projectors, and monitors.

In general, our Video Connectivity competition includes:

• HDMI or MHL functionality offered in either discrete devices or integrated into system-on-a-chip products. These are offered by a small number of companies.

• In-house semiconductor solutions designed by large consumer electronics OEMs.

• Alternative HD connectivity technologies such as DisplayPort and MiraCast which are offered by a small number of companies.

While our competition mainly tries to win with price, we believe that we have an advantage because of our deep engagement with industry standards bodies. This involvement enables us to bring our “standards plus” products to market more quickly and gives our customers confidence that we have the expertise needed to successfully execute.

#### mmWave Devices

Our mmWave Devices and modules allow customers to wirelessly transfer data and UHD video content at gigabit speeds. Built using our proprietary 60 GHz SiBEAM technology, our mmWave transceivers, processors, and antenna arrays are divided into three groups, differentiated by their transmission range:

- Gigabit Connector devices “eliminate the connectors on your mobile products.” Built with SiBEAM Snap technology these devices under development connect consumer products and are effective across centimeter distances.

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Our Gigabit Indoor devices and modules “cut the wires in home, office, and factory.” Geared around the Consumer and Industrial Markets these devices reach distances measured in meters.

Gigabit Outdoor products provide “wireless fiber for network backhaul.” Achieving a range of 100’s of meters these devices provide the Communications market with ultra-high speed links for point-to-point connectivity.

Our competition includes a small number of established semiconductor companies that work to create an advantage by bundling mmWave technology into their reference designs and processors. We believe that the depth of our 60 GHz experience enables us to get products to market faster and when combined with advanced features, such as our advanced beam-forming technology, gives us an edge over our competition.

### Intellectual Property (IP) Licensing

Lattice has a broad set of technological capabilities and many US and international patents. We generate revenue from our technology portfolio via upfront fees and on-going royalty payments with three sets of activities:

Standard IP Licensing - these activities include our participation in two consortia for the licensing of HDMI and 1. MHL technologies to customers who adopt the technology into their products and voluntarily report their usage and royalties. The royalties are split between consortia members, including us.

IP Core Licensing - some customers need Lattice’s technology for specific functions or features, but for various reasons are not able to use our silicon solutions. In those cases, we may sell them IP cores which they can integrate 2. into their own ASICs. In contrast to the use of consortia, these licensing activities are generally performed internally.

Patent Monetization - we sell certain patents from our portfolio generally for technology that we are no longer 3. actively developing. The revenue from these sales generally consists of upfront payments and potential future royalties.

### Simplay Labs, LLC (“Simplay Labs”)

Simplay Labs develops performance standards, testing services, development tools, and technologies for Consumer product manufacturers. By partnering with Simplay Labs, manufacturers can reduce the time and cost to market, providing products that are distinguished by reliability and ease of operation while delivering the high-performance HD their customers demand. The products that Simplay Labs tests include televisions, A/V receivers, sound bars, set-top boxes, gaming consoles, and media hubs. Simplay Labs has service centers operating in the United States, South Korea, China, and Taiwan. Simplay’s service centers provide compliance, interoperability and performance testing.

### Research and Development

We place a substantial emphasis on new product development, with a priority on return on investment, and believe that continued investment in research and development is required to maintain and improve our competitive position. Our product development activities emphasize new proprietary products, advanced packaging, enhancement of existing products and process technologies, improvement of software development tools, development of innovative technology standards, and enhanced services. Research and development activities occur primarily in: Hillsboro, Oregon; San Jose and Sunnyvale, California; Shanghai, China; Alabang, Philippines; and Hyderabad, India.

Research and development expenses were \$136.9 million in 2015, \$88.1 million in 2014, and \$81.0 million in 2013. The increase in fiscal 2015 as compared to fiscal 2014 is substantially due to the inclusion of approximately ten months of activity from Silicon Image following acquisition. We expect to continue to make significant investments in research and development.

## Operations

We do not manufacture our own silicon products. We maintain strategic relationships with large semiconductor foundries to source our finished silicon wafers. This strategy allows us to focus our internal resources on product and market development, and eliminates the fixed cost of owning and operating semiconductor manufacturing facilities. We are also able to take advantage of the ongoing advanced process technology development efforts of semiconductor foundries.

Lattice and Fujitsu Limited ("Fujitsu") have entered into agreements pursuant to which Fujitsu manufactures our products on its 130nm, 90nm and 65nm CMOS process technologies, as well as on 130nm, 90nm and 65nm technologies with embedded flash memory that we have jointly developed with Fujitsu. Taiwan Semiconductor Manufacturing Company Ltd. ("TSMC") manufactures our 40nm iCE and legacy Silicon Image products. United Microelectronics Corporation ("UMC") manufactures certain of our 40nm products, as well as some of our 350nm and 180nm products. Seiko Epson ("Epson") manufactures some of our 500nm, 350nm, 250nm and 180nm products.

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All of our assembly and volume test operations are performed by outside suppliers.

We rely on third party vendors to provide cost-effective and efficient supply chain services. Among other activities, these outsourced services relate to direct sales logistics, including order fulfillment, inventory management and warehousing, and shipment of inventory to third party distributors.

We perform certain test operations as well as reliability and quality assurance processes internally. We have achieved and maintained ISO9001:2008 Quality Management Systems Certification and released a line of products qualified to the AEC-Q100 Reliability Standard.

### Wafer Fabrication

We source silicon wafers from our foundry partners, Fujitsu and Epson in Japan, and TSMC and UMC in Taiwan, pursuant to agreements with each company and their respective affiliates. We negotiate wafer volumes, prices and other terms with our foundry partners and their respective affiliates on a periodic basis.

### Assembly

After wafer fabrication and initial testing, we ship wafers to independent subcontractors for assembly. During assembly, wafers are separated into individual die and encapsulated in plastic packages. We have qualified assembly partners in Indonesia, Malaysia, Taiwan, the Philippines, South Korea, Singapore, Japan, and the United States. We negotiate assembly prices, volumes and other terms with our assembly partners and their respective affiliates on a periodic basis.

We currently offer an extensive list of standard products in lead (Pb) free packaging. Our lead-free products meet the European Parliament Directive entitled "Restrictions on the use of Hazardous Substances" ("ROHS"). A select and growing subset of our ROHS compliant products are also offered with a "Halogen Free" material set.

### Testing

We electrically sort test the die on most wafers prior to shipment for assembly. Following assembly, but prior to customer shipment, each product undergoes final testing and quality assurance procedures. Wafer sort testing is performed by independent contractors in Malaysia, Japan, Indonesia, Taiwan, and Singapore. Final testing is performed by independent contractors in Indonesia, Malaysia, the Philippines, Singapore, Taiwan, South Korea, Japan, and the United States. We also perform certain test operations, as well as reliability and quality assurance processes, internally.

### Sales and Revenue

We generate revenue by monetizing our technology and patents using two go-to-market strategies.

• Product and Technology Sales involve direct and channel sales of silicon based products with their associated solutions and services.

• Intellectual Property Licensing involves either the license or sale of intellectual property that we have developed, some of which is used in our products.

### Seasonality

While we periodically may experience some seasonal trends in the sale of our products, general economic conditions and the cyclical nature of the end markets we serve generally have a greater impact on our business and financial

results than seasonal trends.

### Backlog

Our backlog consists of orders from distributors and certain OEMs which are for deliveries within the next year.

Historically, our backlog is a poor predictor of future sales or customer demand for the following reasons:

- Purchase orders, consistent with common industry practices, can generally be revised or canceled up to 30 days before the scheduled delivery date without significant penalty.

- Our backlog for sell-through distributors is valued at list price, which in most cases is substantially higher than the prices ultimately recognized as revenue.

- A sizable portion of our revenue comes from our "turns business," where the product is ordered and delivered within the same quarter.

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A growing portion of our revenue arises from vendor managed inventory arrangements where the timing and volume of customer utilization is difficult to predict.

## Sales and Customers

We primarily sell our products to end customers from Lattice Semiconductor Corporation or our wholly-owned subsidiary, Lattice SG Pte. Ltd. We sell both directly and through a network of independent manufacturers' representatives. Additionally, we sell indirectly through independent sell-in (primarily Japan) and sell-through distributors. We also employ a direct sales management and field applications engineering organization to support our end customers and indirect sales resources. Our end customers are primarily original equipment manufacturers ("OEMs") in the Communications, Consumer and Industrial end markets.

We have agreements with 20 manufacturers' representatives in North America. We have established sales channels in over 50 foreign countries and maintain a network of 10 international sales representatives. A substantial portion of our sales are made through distributors.

We provide global technical support to our end customers with engineering staff based at our headquarters, product development centers and selected field sales offices. We maintain numerous domestic and international field sales offices in major metropolitan areas.

Resale of product by sell-through distributors accounted for approximately 45% of our net revenue in each of fiscal 2015, 2014, and 2013, and we expect our distributors to generate a significant portion of our revenue in the future. We depend on our distributors to sell our products to end customers, complete order fulfillment, and maintain sufficient inventory of our products. Our distributors also provide technical support and other value-added services to our end customers. We have two global sell-through distributors. We also have regional distribution in Asia, Japan, Israel, and North America, and we sell through three major on-line distributors.

In fiscal 2015, our revenue was broadly distributed across end markets and customers, with no individual end customer accounting for more than 10% of the total revenue for the year. In fiscal 2014, Huawei Technologies Co. Ltd. accounted for 12% of total revenue while Samsung Electronics Co., Ltd. accounted for 19% of total revenue that same year, down from 22% in fiscal 2013. No other individual end customers, in any end markets, accounted for more than 10% of total revenue in either of the fiscal years 2014 or 2013.

Revenue from foreign sales as a percentage of total revenue was 92%, 92%, and 91%, for fiscal 2015, 2014, and 2013, respectively. We assign revenue to geographies based on customer ship-to address at the point where revenue is recognized. Revenue attributed to China for fiscal 2015 was approximately 36% of total revenue, compared to 43% and 45% in fiscal 2014 and fiscal 2013, respectively. In the case of sell-in distributors and OEMs, revenue is typically recognized, and geography is assigned, when products are shipped. In the case of sell-through distributors, revenue is recognized when resale to the end customer occurs and geography is assigned based on the end customer location on the resale reports provided by the distributor. Both foreign and domestic sales are denominated in U.S. dollars, with the exception of sales in Japan, where sales to certain customers are denominated in yen.

The composition of our revenue by geography, based on ship-to location, is as follows:

(In thousands)	Year Ended						% Change in	
	January 2, 2016		January 3, 2015		December 28, 2013		2015	2014
Asia	\$308,534	76 %	\$266,831	73 %	\$245,689	74 %	16	9
Europe	55,596	14	59,041	16	47,459	14	(6 )	24
Americas	41,836	10	40,255	11	39,377	12	4	2
Total revenue	\$405,966	100 %	\$366,127	100 %	\$332,525	100 %	11	10

## Intellectual Property, Patents, and Licensing

### Intellectual Property

We seek to protect our products and technologies primarily through patents, trade secrecy measures, copyrights, mask work protection, trademark registrations, licensing restrictions, confidentiality agreements and other approaches designed to protect proprietary information. There can be no assurance that others may not independently develop competitive technology not covered by our intellectual property rights or that measures we take to protect our technology will be effective.



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### Patents

We hold numerous United States and international patents and have patent applications pending in the United States and Internationally. Our current patents will expire at various times between 2016 and 2034, subject to our payment of periodic maintenance fees. There can be no assurance that pending or future patent applications will result in issued patents, or that any issued patents will survive challenges to their validity. Although we believe that our patents have value, there can be no assurance that our patents, or any additional patents that may be issued in the future, will provide meaningful protection from competition. We believe that our success will depend primarily upon the technical expertise, experience, and creativity, and the sales and marketing abilities, of our personnel.

Patent and other proprietary rights infringement claims are common in our industry. There can be no assurance that, with respect to any claim made against us, we would be able to successfully defend against the claim or that we could obtain a license that would allow us to use the proprietary rights on terms or under conditions that would not harm our business.

### Licenses

We have acquired various licenses from third parties to certain technologies that are implemented in IP cores or embedded in our products. Those licenses support our continuing ability to make and sell these products to our customers. While our various licenses are important to our success, we believe our business as a whole is not materially dependent on any particular license, or group of licenses.

### Our Team

As of January 2, 2016, we had 1,146 full-time employees worldwide. We believe that our future success will depend, in part, on our ability to continue to attract and retain highly skilled technical, sales, and management personnel. None of our employees are represented by a collective bargaining agreement. We have never experienced any work stoppages and consider our employee relations to be good.

### Corporate Background

Lattice was incorporated in Oregon in 1983 and reincorporated in Delaware in 1985. Our headquarters is located at 111 SW Fifth Avenue, Suite 700, Portland, Oregon 97204, and our website is [www.latticesemi.com](http://www.latticesemi.com). Information contained or referenced on our website is not incorporated by reference into, and does not form a part of, this Annual Report on Form 10-K. Our common stock trades on the NASDAQ Global Select Market under the symbol LSCC.

### Reporting Calendar

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our fiscal 2015 was a 52-week year that ended January 2, 2016. Our fiscal 2014 was a 53-week year, with a 14-week fourth quarter, that ended January 3, 2015. Our fiscal 2013, 2012, and 2011 were 52-week years that ended December 28, 2013, December 29, 2012, December 31, 2011, respectively. Our fiscal 2016 will be a 52-week year and will end on December 31, 2016. All references to quarterly or yearly financial results are references to the results for the relevant fiscal period.

### Available Information

We make available, free of charge through the Investor Relations section of our website at [www.latticesemi.com](http://www.latticesemi.com), our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and

amendments to those reports and statements as soon as reasonably practicable after such materials are electronically filed with, or furnished to, the SEC. You may also obtain free copies of these materials by contacting our Investor Relations Department at 111 SW Fifth Ave, Ste. 700, Portland, Oregon 97204, telephone (503) 268-8000. Our SEC filings are also available at the SEC's website at [www.sec.gov](http://www.sec.gov), and they may be read and copied at the SEC's public reference room at 100 F Street NE, Washington, DC 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The content on any website referred to in this filing is not incorporated by reference into this filing unless expressly noted otherwise.

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ITEM 1A. Risk factors

The following risk factors and other information included in this Annual Report should be carefully considered before making an investment decision relating to our common stock. If any of the risks described below occur, our business, financial condition, operating results and cash flows could be materially adversely affected. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and financial results.

We rely on a limited number of independent suppliers for the manufacture of all of our products and a failure by our suppliers to provide timely, cost-effective, and quality products could adversely affect our operations and financial results.

We depend on independent foundries to supply silicon wafers for our products. These foundries include Fujitsu in Japan, which supplies the majority of our programmable logic wafers, and Taiwan Semiconductor Manufacturing, which supplies most of our HDMI and MHL integrated circuits. We negotiate wafer volumes, prices, and other terms with our foundry partners and their respective affiliates on a periodic basis typically resulting in short-term agreements which do not ensure long-term supply or allocation commitments. We rely on our foundry partners to produce wafers with competitive performance attributes. If the foundries that supply our wafers experience manufacturing problems, including unacceptable yields, delays in the realization of the requisite process technologies, or difficulties due to limitations of new and existing process technologies, our operating results could be adversely affected. If for any reason the foundries are unable to, or do not, manufacture sufficient quantities of our products or continue to manufacture a product for the full life of the product, we may be required to prematurely limit or discontinue the sales of certain products or incur significant costs to transfer products to other foundries, and our customer relationships and operating results could be adversely affected. In addition, weak economic conditions may adversely impact the financial health and viability of the foundries and cause them to limit or discontinue their business operations, resulting in shortages of supply and an inability to meet their commitments to us, which could adversely affect our financial condition and operating results.

A disruption of our foundry partners' operations as a result of a fire, earthquake, act of terrorism, political or labor unrest, governmental uncertainty, war, disease, or other natural disaster or catastrophic event, or any other reason, could disrupt our wafer supply and could adversely affect our operating results.

Establishing, maintaining and managing multiple foundry relationships requires the investment of management resources as well as additional costs. If we fail to maintain our foundry relationships, or elect or are required to change foundries, we will incur significant costs and manufacturing delays. The success of certain of our next generation products is dependent upon our ability to successfully partner with Fujitsu, Taiwan Semiconductor and other foundry partners. If for any reason one or more of our foundry partners does not provide its facilities and support for our development efforts, we may be unable to effectively develop new products in a timely manner.

Should a change in foundry relationships be required, we may be unsuccessful in establishing new foundry relationships for our current or next generation products, or we may incur substantial cost and or manufacturing delays until we form and ramp relationships, and migrate products, each of which could adversely affect our operating results.

The Consumer end market is rapidly changing and cyclical, and a downturn in this end market or our failure to accurately predict the frequency, duration, timing, and severity of these cycles could adversely affect our financial condition and results.

With the acquisition of Silicon Image, the Consumer end market has increased in importance to us. Revenue from the Consumer end market accounted for 31% of our revenue in fiscal 2015. Revenue from the Consumer end market consists primarily of revenue from our products designed and used in a broad range of consumer electronics products including smartphones, tablets and e-readers, wearables, accessories such as chargers and docks, Ultra High-Definition (UHD) TVs, Digital SLR cameras, drones, and other connected devices. This market is characterized by rapidly changing requirements and product features and volatility in consumer demand. Our success in this market will depend principally on our ability to:

- meet the market windows for consumer products;
- predict technology and market trends;
- develop IP cores to meet emerging market needs;
- develop products on a timely basis;
- maintain multiple design wins across different markets and customers to dampen the effects of market volatility;
- be designed into our customers' products; and
- avoid cancellations or delay of products.

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Our inability to accomplish any of the foregoing, or to offset the volatility of this end market through diversification into other markets, could materially and adversely affect our business, financial condition, and results of operations. Cyclicalities in the Consumer end market could periodically result in higher or lower levels of revenue and revenue concentration with a single or small number of customers. In addition, rapid changes in this market may affect demand for our products, may cause our revenue derived from sales in this market to vary significantly over time, adversely affecting our financial results.

A downturn in the Communications end market could cause a meaningful reduction in demand for our products and limit our ability to maintain revenue levels and operating results.

Revenue from the Communications end market accounted for 28% of our revenue in fiscal 2015. Three of our top five programmable logic customers participate primarily in the Communications end market. In the past, cyclical weakening in demand for programmable logic products from customers in the Communications end market has adversely affected our revenue and operating results. In addition, telecommunication equipment providers are building network infrastructure for which we compete for product sales. Any deterioration in the Communications end market, our end customers' reduction in spending, or a reduction in spending by their customers to support this end market or use of our competitors' products could lead to a reduction in demand for our products which could adversely affect our revenue and results of operations. This type of decline impacted our results during 2015.

We depend on a concentrated group of customers for a significant part of our revenues. If any of these customers reduce their use of our products, our revenue could decrease significantly.

A large portion of our revenue depends on sales to a limited number of customers. During fiscal 2015, our top two end customers, Samsung Electronics Co., Ltd. and Huawei Technologies Co. Ltd, accounted for 9% and 8%, respectively, of our total revenue as compared to fiscal 2014, which was prior to the acquisition of Silicon Image, during which these same top two customers accounted for 19% and 12%, respectively, of our total revenue. Additionally, during fiscal 2015, our top five end customers accounted for approximately 32% of our total revenue, which was down from fiscal 2014, during which our top five end customers accounted for approximately 45% of our total revenue. If any of these relationships were to diminish, or if these customers were to develop their own solutions, or adopt alternative solutions or competitors' solutions, our results could be adversely affected.

While we strive to maintain a strong relationship with our customers, their continued use of our products is frequently reevaluated, as certain of our customers' product life cycles are relatively short and they continually develop new products. The selection process for our products to be included in our customers' new products is highly competitive. There are no guarantees that our products will be included in the next generation of products introduced by these customers. For example, in December 2014, one of its largest customers informed Silicon Image that the customer had decided not to include Silicon Image's MHL functionality in certain designs in order to reduce costs. Any significant loss of, or a significant reduction in purchases by, one or more of these customers, or their failure to meet their commitments to us, could have an adverse effect on our financial condition and results of operations. If any one or more of our concentrated group of customers were to experience significantly adverse financial conditions, our financial condition and business could be adversely affected as well, as occurred when Silicon Image's fiscal 2014 mobile product revenue decreased as a result of a significant production slowdown by one of its key customers.

Acquisitions, strategic investments and strategic partnerships present risks, and we may not realize the goals that were contemplated at the time of a transaction.

On March 10, 2015, we acquired Silicon Image, and we may make further acquisitions and strategic investments in the future. Acquisitions and strategic investments, including our acquisition of Silicon Image, present risks, including:

- our ongoing business may be disrupted and our management's attention may be diverted by investment, acquisition, transition, or integration activities;
- an acquisition or strategic investment may not perform as well or further our business strategy as we expected, and we may not integrate an acquired company or technology as successfully as we expected;
- we may incur unexpected costs, claims, or liabilities that we assume from an acquired company or technology or that are otherwise related to an acquisition;
- we may discover adverse conditions post-acquisition that are not covered by representations and warranties;
- we may increase some of our risks, such as increasing customer or end product concentration;
- we may have difficulty incorporating acquired technologies or products with our existing product lines;
- we may have higher than anticipated costs in continuing support and development of acquired products, and in general and administrative functions that support such products;
- we may have difficulty integrating and retaining key personnel;
- we may have difficulty integrating business systems, processes, and tools, such as accounting software, inventory management systems, or revenue systems which may have an adverse effect on our business;
- our liquidity and/or capital structure may be adversely impacted;
- our strategic investments may not perform as expected;

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- we may experience unexpected changes in how we are required to account for our acquisitions and strategic investments pursuant to U.S. GAAP;
- we may have difficulty integrating acquired entities into our global tax structure with potentially negative impacts on our effective tax rate;
- if the acquisition or strategic investment does not perform as projected, we might take a charge to earnings due to impaired goodwill;
- we may divest certain assets of acquired businesses, leading to charges against earnings; and
- we may experience unexpected negative responses from vendors or customers to the acquisition, which may adversely impact our operations.

The occurrence of any of these risks could have a material adverse effect on our business, results of operations, financial condition, or cash flows, particularly in the case of a larger acquisition or several concurrent acquisitions or strategic investments. In addition, we may enter into strategic partnerships with third parties with the goal of gaining access to new and innovative products and technologies. Strategic partnerships pose many of the same risks as do acquisitions or investments.

We do not guarantee that we will be able to complete any future acquisitions or that we will realize any anticipated benefits from any of our past or future acquisitions, strategic investments, or strategic partnerships. We may not be able to find suitable acquisition opportunities that are available at attractive valuations, if at all. A sustained decline in the price of our common stock may make it more difficult and expensive to initiate or complete additional acquisitions on commercially acceptable terms.

As a result of current year and past acquisitions, as of January 2, 2016, we had \$267.5 million in goodwill and \$162.6 million in net intangible assets on our balance sheet, net of impairment charges recorded in fiscal 2015. We are required under U.S. GAAP to test goodwill for possible impairment on an annual basis, and to test goodwill and long-lived assets, including amortizable intangible assets, for impairment at any other time that circumstances arise indicating the carrying value may not be recoverable. For purposes of testing for impairment, the Company operates as two reporting units: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure. Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment. Following our assessment of goodwill and long-lived asset impairment in the fourth quarter of 2015, we concluded that goodwill and long-lived assets had been impaired in the Qterics segment. As a result, we recorded impairment charges related to goodwill and intangible assets in the Qterics segment amounting to \$12.7 million and \$9.0 million, respectively, in the Consolidated Statements of Operations for the year ended January 2, 2016. No impairment charges were recorded for the Core segment in fiscal 2015, and we had no impairment charges in either fiscal 2014 or 2013. There is no assurance that future impairment tests will indicate that goodwill will be deemed recoverable.

We depend on distributors to generate a significant portion of our revenue and complete order fulfillment and any adverse change in our relationship or the distributors' financial health, reduction of selling efforts, or inaccuracy in resale reports could harm our sales or result in misreporting our results.

We depend on our distributors to sell our products to end customers, complete order fulfillment, and maintain sufficient inventory of our products. Our distributors also provide technical support and other value-added services to our end customers. Resales of product through distributors accounted for 45% of our revenue in 2015, with two distributors accounting for 32% of our revenue in 2015. With the acquisition of Silicon Image, we expect that distributors will continue to generate a significant portion of our revenue.

We expect our distributors to generate a significant portion of our revenue in the future. Any adverse change to our relationships with our distributors or a failure by one or more of our distributors to perform its obligations to us could have a material impact on our business. In addition, a significant reduction of effort by a distributor to sell our products or a material change in our relationship with one or more distributors may reduce our access to certain end customers and adversely affect our ability to sell our products.

The financial health of our distributors is important to our success. Economic conditions may adversely impact the financial health of one or more of our distributors. This could result in the inability of distributors to finance the purchase of our products or cause the distributors to delay payment of their obligation to us and increase our credit risk. If the financial health of our distributors impairs their performance and we are unable to secure alternate distributors, our financial condition and results of operations may be negatively impacted.

Since we have limited ability to forecast inventory levels at our end customers, it is possible that there may be significant build-up of inventories in the distributor channel, with the OEM or the OEM's contract manufacturer. Such a buildup could result in a slowdown in orders, requests for returns from customers, or requests to move out planned shipments. This could adversely affect our revenues and profits. Any failure to manage these challenges could disrupt or reduce sales of our products and unfavorably impact our financial results.

We depend on the timeliness and accuracy of resale reports from our distributors; late or inaccurate resale reports could have a detrimental effect on our ability to properly recognize revenue and our ability to predict future sales.



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Our outstanding indebtedness could reduce our strategic flexibility and liquidity and may have other adverse effects on our results of operations.

In connection with our acquisition of Silicon Image, we entered into a secured Credit Agreement providing for a \$350 million term loan. Our obligations under the Credit Agreement are guaranteed by our U.S. subsidiaries. Our obligations include a requirement to pay up to 75% of our excess cash flow toward repayment of the facility. The Credit Agreement also contains certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and additional indebtedness. The amount and terms of our indebtedness, as well as our credit rating, could have important consequences, including the following:

- we may be more vulnerable to economic downturns, less able to withstand competitive pressures, and less flexible in responding to changing business and economic conditions;
- our cash flow from operations may be allocated to the payment of outstanding indebtedness, and not to research and development, operations or business growth;
- we might not generate sufficient cash flow from operations or other sources to enable us to meet our payment obligations under the facility and to fund other liquidity needs;
- our ability to make distributions to our stockholders in a sale or liquidation may be limited until any balance on the facility is repaid in full; and
- our ability to incur additional debt, including for working capital, acquisitions, or other needs, is more limited.

If we breach a loan covenant, the lenders could accelerate the repayment of the term loan. We might not have sufficient assets to repay such indebtedness upon a default. If we are unable to repay the indebtedness, the lenders could initiate a bankruptcy proceeding against us or collection proceedings with respect to our assets and subsidiaries securing the facility, which could materially decrease the value of our common stock.

Our success and future revenue depends on our ability to innovate, develop and introduce new products that achieve customer and market acceptance, and to successfully compete in the highly competitive semiconductor industry, and failure to do so could have a material adverse effect on our financial condition and results of operations.

The semiconductor industry is intensely competitive and many of our direct and indirect competitors have substantially greater financial, technological, manufacturing, marketing, and sales resources. We currently compete directly with companies that have licensed our technology or have developed similar products, as well as numerous semiconductor companies that offer products based on alternative solutions such as applications processor, application specific standard product, microcontroller, analog, and digital signal processing technologies. Competition from these semiconductor companies may intensify as we offer more products in any of our end markets. These competitors include established, multinational semiconductor companies as well as emerging companies.

The markets in which we compete are characterized by rapid technology and product evolution, generally followed by a relatively longer process of ramping up to volume production on advanced technologies. Our markets are also characterized by evolving industry standards, frequent new product introduction, short product life cycles, and increased demand for higher levels of integration and smaller process geometry. Our competitive position and success depends on our ability to innovate, develop, and introduce new products that compete effectively on the basis of price, density, functionality, power consumption, form factor, and performance addressing the evolving needs of the markets we serve. These new products typically are more technologically complex than their predecessors.

Our future growth and the success of new product introductions depend upon numerous factors, including:

- timely completion and introduction of new product designs;

- ability to generate new design opportunities and design wins, including those which result in sales of significant volume;
- availability of specialized field application engineering resources supporting demand creation and customer adoption of new products;
- ability to utilize advanced manufacturing process technologies;
- achieving acceptable yields and obtaining adequate production capacity from our wafer foundries and assembly and test subcontractors;
- ability to obtain advanced packaging;
- availability of supporting software design tools;
- utilization of predefined IP logic;
- market acceptance of our MHL-enabled and wireless mobile products, and our 60 GHz wireless products;
- customer acceptance of advanced features in our new products; and
- market acceptance of our customers' products.

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Our product innovation and development efforts may not be successful; our new products, MHL-enabled products, and 60GHz wireless products may not achieve market or customer acceptance; and we may not achieve the necessary volume of production to achieve acceptable cost. Revenue relating to our mature products is expected to decline in the future, which is normal for our product life cycles. As a result, we may be increasingly dependent on revenue derived from our newer products as well as anticipated cost reductions in the manufacture of our current products. We rely on obtaining yield improvements and corresponding cost reductions in the manufacture of existing products and on introducing new products that incorporate advanced features and other price/performance factors that enable us to increase revenues while maintaining acceptable margins. To the extent such cost reductions and new product introductions do not occur in a timely manner, or that our products do not achieve market acceptance or market acceptance at acceptable pricing, our forecasts of future revenue, financial condition, and operating results could be materially adversely affected.

General economic conditions and deterioration in the global business environment could have a material adverse effect on our business, operating results, and financial condition.

Adverse economic conditions, or our customers' perceptions of the economic environment, may negatively affect customer demand for our products and services and result in delayed or decreased spending. Weak global economic conditions in the past have resulted in weak demand for our products in certain geographies and had an adverse impact on our results of operations. If weak economic conditions persist or worsen, our business could be harmed due to customers or potential customers reducing or delaying orders. In addition, the inability of customers to obtain credit, the insolvency of one or more customers, or the insolvency of key suppliers could result in sales or production delays. Any of these effects could impact our ability to effectively manage inventory levels and collect receivables, require additional restructuring actions, and decrease our revenue and profitability. Uncertainty about future economic conditions makes it difficult for us to forecast operating results and to make decisions about future investments. Any or all of these factors could adversely affect our financial condition and results of operations in the future.

The intellectual property licensing component of our business strategy increases our business risk and fluctuation of our revenue.

Our business strategy includes licensing our intellectual property to companies that incorporate it into their respective technologies, which address markets in which we do not directly participate or compete. We also license our intellectual property into markets where we do participate and compete. Our licensing and services revenue may be impacted by the introduction of new technologies by customers in place of the technologies based on our intellectual property, changes in the law that may weaken our ability to prevent the use of our patented technology by others, and changes of selling prices for products using licensed patents. We make no assurance that our licensing customers will continue to license our technology on commercially favorable terms or at all, or that these customers will introduce and sell products incorporating our technology, accurately report royalties owed to us, pay agreed upon royalties, honor agreed upon market restrictions, maintain the confidentiality of our proprietary information, or will not infringe upon or misappropriate our intellectual property. Our intellectual property licensing agreements are complex and depend upon many factors including completion of milestones, allocation of values to delivered items and customer acceptances. Many of these require significant judgments. Additionally, this is a new end market for us, with which we do not yet have extensive experience.

We have also generated revenue from the sale of certain patents from our portfolio, generally for technology that we are no longer actively developing. While we plan to continue to monetize our patent portfolio through sales of non-core patents, we may not be able to realize adequate interest or prices for those patents. Accordingly, we do not provide assurance that we will continue to generate revenue from these sales. In addition, although we seek to be strategic in our decisions to sell patents, we might incur reputational harm if a purchaser of our patents sues one of our customers for infringement of the purchased patent, and we might later decide to enter a space that requires the use of

one or more of the patents we sold.

Our licensing and services revenue fluctuates, sometimes significantly, from period to period because it is heavily dependent on a few key transactions being completed in a given period, the timing of which is difficult to predict and may not match our expectations. Because of its high margin, the licensing and services revenue portion of our overall revenue can have a disproportionate impact on gross profit and profitability. Generating revenue from intellectual property licenses is a lengthy and complex process that may last beyond the period in which our efforts begin, and the accounting rules governing the recognition of revenue from intellectual property licensing transactions are increasingly complex and subject to interpretation. As a result, the amount of license revenue recognized in any period may differ significantly from our expectations.

A single large customer may be in a position to demand certain functionality, pricing or timing requirements that may detract from or interfere with our normal business activities. If this happens, delays in our normal development schedules could occur, causing our products to miss market windows thereby reducing the total number of units sold of a particular product.

The products we develop are complex and require significant planning and resources. In the Consumer end market, new products are typically introduced early in the year, often in association with key trade shows. In order to meet these deadlines, our customers must complete their product development by year-end, which usually means we must ship sample parts in early spring. If we cannot ship sample parts in early spring, customers may be forced to remove the feature provided by our product,

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use a competitor's product, or use an alternate technology in order to meet their timelines. We plan our product development with these market windows in mind, but if we receive requests from a large customer to deploy resources to meet their requirements or work on a specific solution, our normal development path could be delayed, causing us to miss sample deadlines and therefore future revenues.

A number of factors, including our inventory strategy, can impact our gross margins.

A number of factors, including yield, wafer pricing, cost of packaging raw materials, product mix, market acceptance of our new products, competitive pricing dynamics, geographic and/or end market mix, and pricing strategies, can cause our gross margins to fluctuate. In addition, forecasting our gross margins is difficult because a significant portion of our business is based on turns within the same quarter.

Our customers typically test and evaluate our products prior to deciding to design our product into their own products, and then require additional time to begin volume production of those products. This lengthy sales cycle may cause us to experience significant delays and to incur additional inventory costs until we generate revenue from our products. It is possible that we may never generate any revenue from products after incurring significant expenditures.

While our sales cycles are typically long, our average product life cycles tend to be short as a result of the rapidly changing technology environment in which we operate. In addition, our inventory levels may be higher than historical norms, from time to time, due to inventory build decisions aimed at reducing direct material cost or enabling responsiveness to expected demand. In the event the expected demand does not materialize, or if our short sales cycle does not generate sufficient revenue, we may be subject to incremental excess and obsolescence costs. In addition, future product cost reductions could impact our inventory valuation, which could adversely affect our operating results.

We and our connectivity customers depend on the availability of certain functions and capabilities within mobile and personal computing operating systems over which we may have no control. New releases of these operating systems may render certain of our products inoperable or may require significant engineering effort to create new device driver software.

Certain portions of our business operate within a market that is dominated by a few key OEMs. These OEMs could play a role in driving the growth of our business or could prevent our growth through deliberate or non-deliberate action. We do not have a presence in the iOS or Windows eco-systems or in all Android devices. Our success and ability to grow depend upon our ability to continue to be successful within the Android eco-system or gain significant traction within the iOS eco-system or Windows eco-system. Failure to maintain and grow our presence in these key eco-systems could adversely affect unit volumes.

Further, many of our products depend on the availability of certain functionality in the device operating system, typically Android, Linux, Windows, or iOS. Certain operating system primitives are needed to support video output. We have no control over these operating systems or the companies that produce them, and it is unlikely that we could influence any internal decision these companies make that may have a negative impact on our integrated circuits and their function. Updates to these operating systems that, for example, change the way video is output or remove the ability to output video could materially affect sales of MHL and HDMI integrated circuits.

Products targeted to personal computing or mobile, laptop, or notebook designs often require device driver software to operate. This software is difficult to produce and may require certifications before being released. Failure to produce this software could have a negative impact on our relation with operating system providers and may damage our reputation with end consumers as a quality supplier of products.

We may experience difficulties in transitioning to smaller geometry process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries, and increased expenses.

To remain competitive, we expect to continue to transition our semiconductor products to increasingly smaller geometries. This requires us to change the manufacturing processes for our products and to redesign some products as well as standard cells and other integrated circuit designs we may use in multiple products. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to reduce our costs. The transition to lower nanometer geometry process technologies will result in significantly higher mask and prototyping costs, as well as additional expenditures for engineering design tools.

We depend on our relationships with our foundry partners to transition to smaller geometry processes successfully. We make no assurance that our foundry partners will be able to effectively manage the transition in a timely manner, or at all. If we or any of our foundry partners experience significant delays in this transition or fail to efficiently implement this transition, we could experience reduced manufacturing yields, delays in product deliveries, and increased expenses, all of which could adversely affect our relationships with our customers and our financial condition and operating results.

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Shortages in, or increased costs of, wafers and materials could adversely impact our gross margins and lead to reduced revenues.

Worldwide manufacturing capacity for silicon wafers is relatively inelastic. If the demand for silicon wafers or assembly material materially exceeds market supply, our supply of silicon wafers or assembly material could quickly become limited. A shortage in manufacturing capacity could hinder our ability to meet product demand and therefore reduce our revenue. In addition, silicon wafers constitute a material portion of our product cost. If we are unable to purchase wafers at favorable prices, our gross margins will be adversely affected.

We depend on independent contractors for most of our assembly and test services, and disruption of these services, or an increased in cost of these services, could negatively impact our financial condition and results of operations.

We depend on subcontractors to assemble, test, and ship our products with acceptable quality and yield levels. Our operations and operating results may be adversely affected if we experience problems with our subcontractors that impact the delivery of product to our customers. Those problems include: prolonged inability to obtain wafers or packaging materials with competitive performance and cost attributes; inability to achieve adequate yields or timely delivery; disruption or defects in assembly, test, or shipping services; or delays in stabilizing manufacturing processes or ramping up volume for new products,. Economic conditions may adversely impact the financial health and viability of our subcontractors and result in their inability to meet their commitments to us resulting in product shortages, quality assurance problems, reduced revenue, and/or increased costs which could negatively impact our financial condition and results of operations.

In the past, we have experienced delays in obtaining assembled and tested products and in securing assembly and test capacity commitments from our suppliers. We currently anticipate that our assembly and test capacity commitments are adequate; however, these existing commitments may not be sufficient for us to satisfy customer demand in future periods. We negotiate assembly and test prices and capacity commitments from our contractors on a periodic basis. If any of our assembly or test contractors reduce their capacity commitment or increase their prices, and we cannot find alternative sources, our operating results could be adversely affected.

The semiconductor industry routinely experiences cyclical market patterns and a significant industry downturn could adversely affect our operating results.

Our revenue and gross margin can fluctuate significantly due to downturns in the semiconductor industry. These downturns can be severe and prolonged and can result in price erosion and weak demand for our products. Weak demand for our products resulting from general economic conditions affecting the end markets we serve or the semiconductor industry specifically and reduced spending by our customers can result, and in the past has resulted, in excess and obsolete inventories and corresponding inventory write-downs. The dynamics of the markets in which we operate make prediction of and timely reaction to such events difficult. Due to these and other factors, our past results are not reliable predictors of our future results.

Our expense levels are based, in part, on our expectations of future sales. Many of our expenses, particularly those relating to facilities, capital equipment, and other overhead, are relatively fixed. We might be unable to reduce spending quickly enough to compensate for reductions in sales. Accordingly, shortfalls in sales could adversely affect our operating results.

Our participation in HDMI and MHL includes our acting as agent for these consortia for which we receive adopter fees. There is no guarantee that we will continue to act as agent for either or both of these standards, in which case we

may lose adopter fees.

Through our wholly owned subsidiary, HDMI Licensing, LLC, we act as agent of the HDMI consortium and are responsible for promoting and administering the specification. We receive all of the adopter fees paid by adopters of the HDMI specification in connection with our role as agent. We are currently in discussions with the other HDMI founders regarding a restructuring of our role as agent. While not concluded, we believe these discussions will likely result in a narrowing of our agent functions, resulting in a lowering of the adopter fees received by us in the future.

We share HDMI royalties with the other HDMI founders based on an allocation formula, which is reviewed every three years. The current royalty sharing formula covers the period from January 1, 2014 through December 31, 2016. Our portion of the royalty allocation has declined for the last several years, and in 2015 we received between 24% to 25% of the royalty allocation. If the level of this royalty allocation continues to decline, our financial performance could be adversely affected.

Through our wholly owned subsidiary, MHL, LLC, we act as agent of the MHL specification and are responsible for promoting and administering the specification. As agent, we are entitled to receive license fees paid by adopters of the MHL specification sufficient to reimburse us for the costs we incur to promote and administer the specification. Given the limited number of MHL adopters to date, we do not believe the license fees paid by such adopters will be sufficient to reimburse us for these costs and we make no assurance that the license fees paid by MHL adopters will ever be sufficient to reimburse us the costs we incur as agent of the specification.



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We currently intend to promote and continue to be involved and actively participate in other standard setting initiatives. For example, through Silicon Image's acquisition of SiBEAM, Inc. in May 2011, it achieved SiBEAM's prior position as founder and chair of the WirelessHD Consortium. We may decide to license additional elements of our intellectual property to others for use in implementing, developing, promoting, or adopting standards in our target markets, in certain circumstances at little or no cost. This may make it easier for others to compete with us in such markets. In addition, even if we receive license fees or royalties in connection with the licensing of our intellectual property, we make no assurance that such license fees or royalties will compensate us adequately.

We rely on information technology systems, and failure of these systems to function properly may cause business disruptions.

We rely in part on various information technology ("IT") systems to manage our operations, including financial reporting, and we regularly make changes to improve them as necessary by periodically implementing new, or upgrading or enhancing existing, operational and IT systems, procedures, and controls. We are undergoing a significant integration and systems implementation as we integrate the operations and systems of Silicon Image into our operations and systems following the acquisition. Any delay in the implementation of, or disruption in the transition to or integration of, new or enhanced systems, procedures, or controls, could harm our ability to record and report financial and management information on a timely and accurate basis. In addition, we are presently upgrading our main enterprise resource planning system, which if not completed on time and as planned, could result in cost overruns or limit our ability to manufacture and ship products as planned. These systems are also subject to power and telecommunication outages or other general system failures. Failure of our IT systems or difficulties or delays in managing and integrating them could result in excessive cost or business disruption.

Our failure to control unauthorized access to our IT systems may cause problems with key business partners or liability.

We may be subject to unauthorized access to our IT systems through a security breach or cyber-attack. In the ordinary course of our business, we maintain sensitive data on our networks, including our intellectual property and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. We believe that companies have been increasingly subject to a wide variety of security incidents, cyber-attacks, and other attempts to gain unauthorized access. Cyber-attacks have become more prevalent and much harder to detect and defend against. Our network and storage applications may be subject to unauthorized access by hackers or breached due to operator error, malfeasance, or other system disruptions. It is often difficult to anticipate or immediately detect such incidents and to assess the damage caused by them. In the past, third parties have attempted to penetrate and/or infect our network and systems with malicious software in an effort to gain access to our network and systems.

These data breaches and any unauthorized access or disclosure of our information or intellectual property could compromise our intellectual property and expose sensitive business information. Cyber-attacks could also cause us to incur significant remediation costs, result in product development delays, disrupt key business operations, and divert attention of management and key information technology resources. Our reputation, brand, and business could be significantly harmed, and we could be subject to third party claims in the event of such a security breach.

Foreign sales, accounting for the majority of our revenue, are subject to various risks associated with selling in international markets, which could have a material adverse effect on our operations, financial condition, and results of operations.

We derive the majority of our revenue from sales outside of the United States. Accordingly, if we experience a decline in foreign sales, our operating results could be adversely affected. Our foreign sales are subject to numerous risks, including:

- changes in local economic conditions;
- currency exchange rate volatility;
- governmental stimulus packages, controls, and trade restrictions;
- governmental policies that promote development and consumption of domestic products;
- export license requirements, foreign trade compliance matters, and restrictions on the use of technology;
- political instability, war, terrorism, or pandemic disease;
- changes in tax rates, tariffs, or freight rates;
- reduced protection for intellectual property rights;
- longer receivable collection periods;
- natural or man-made disasters in the countries where we sell our products;
- interruptions in transportation;
- interruptions in the global communication infrastructure; and
- labor regulations.

Any of these factors could adversely affect our financial condition and results of operations in the future.

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We have significant international operations exposing us to various economic, regulatory, political, and business risks, which could have a material adverse effect on our operations, financial condition, and results of operations.

We have significant international operations, including foreign sales offices to support our international customers and distributors, and operational and research and development sites in China, India, the Philippines, and other Asian locations. In addition, we purchase our wafers from foreign foundries; have our commercial products assembled, packaged, and tested by subcontractors located outside of the United States; and rely on an international service provider for inventory management, order fulfillment, and direct sales logistics.

These and other integral business activities outside of the United States are subject to the risks and uncertainties associated with conducting business in foreign economic and regulatory environments including trade barriers; economic sanctions; environmental regulations; import and export regulations; duties and tariffs and other trade restrictions; changes in trade policies; anti-corruption laws; domestic and foreign governmental regulations; potential vulnerability of and reduced protection for intellectual property; disruptions or delays in production or shipments; and instability or fluctuations in currency exchange rates, any of which could have a material adverse effect on our business, financial condition, and operating results. In addition, with the acquisition of Silicon Image, we have increased the operational challenges of conducting our business in and across multiple geographic regions around the world, especially in the face of different business practices, social norms, and legal standards.

Moreover, our financial condition and results of operations could be affected in the event of political instability, terrorist activity, U.S. or other military actions, or economic crises in countries where our main wafer suppliers, end customers, contract manufacturers, and logistics providers are located.

Our global organizational structure and operations expose us to unanticipated tax consequences.

Our legal organizational structure could result in unanticipated unfavorable tax or other consequences which could have an adverse effect on our financial condition and results of operations. We have a global tax structure to more effectively align our corporate structure with our business operations including responsibility for sales and purchasing activities. We created new and realigned existing legal entities; completed intercompany sales of rights to intellectual property, inventory, and fixed assets across different tax jurisdictions; and implemented cost-sharing and intellectual property licensing and royalty agreements between our legal entities. We currently operate legal entities in countries where we conduct supply-chain management, design, and sales operations around the world. In some countries, we maintain multiple entities for tax or other purposes. In addition, we are currently conducting further restructuring activities following our acquisition of Silicon Image as we integrate Silicon Image and its subsidiaries, which include numerous foreign entities, into our existing global tax and corporate structures. These integration activities, changes in tax laws, regulations, future jurisdictional profitability of the Company and its subsidiaries, and related regulatory interpretations in the countries in which we operate may impact the taxes we pay or tax provision we record, which could adversely affect our results of operations.

We are subject to taxation in the United States, Singapore, and other countries. Future effective tax rates could be affected by changes in the composition of earnings in countries with differing tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws. We compute our effective tax rate using actual jurisdictional profits and losses. Changes in the jurisdictional mix of profits and losses may cause fluctuations in the effective tax rate. Adverse changes in tax rates, our tax assets, and tax liabilities could negatively affect our results in the future.

We make no assurance as to what taxes we pay or the ability to estimate our future effective tax rate because of, among other things, uncertainty regarding the tax policies of the jurisdictions where we operate. The U.S. government and the Organization for Economic Cooperation and Development have proposed tax policy changes with respect to the taxation of global operations of multinational companies. As a result, our actual effective tax rate or taxes paid

may vary materially from our expectations. Changes in tax laws, regulations, and related interpretations in the countries in which we operate may have an adverse effect on our business, financial condition, or operating results.

Product quality problems could lead to reduced revenue, gross margins, and net income.

In general, we warrant our products for varying lengths of time against non-conformance to our specifications and certain other defects. Because our products, including hardware, software, and intellectual property cores, are highly complex and increasingly incorporate advanced technology, our quality assurance programs may not detect all defects, whether manufacturing defects in individual products or systematic defects that could affect numerous shipments. Inability to detect a defect could result in a diversion of our engineering resources from product development efforts, increased engineering expenses to remediate the defect, and increased costs due to customer accommodation or inventory impairment charges. On occasion we have also repaired or replaced certain components, made software fixes, or refunded the purchase price or license fee paid by our customers due to product or software defects. If there are significant product defects, the costs to remediate such defects, net of reimbursed amounts from our vendors, if any, or to resolve warranty claims may adversely affect our revenue, gross margins, and net income.

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The nature of our business makes our revenue and gross margin subject to fluctuation and difficult to predict which could have an adverse impact on our business and our ability to provide forward-looking revenue and gross margin guidance.

In addition to the challenging market conditions we may face, we have limited visibility into the demand for our products, particularly new products, because demand for our products depends upon our products being designed into our end customers' products and those products achieving market acceptance. Due to the complexity of our customers' designs, the design to volume production process for many of our customers requires a substantial amount of time, frequently longer than a year. In addition, we are dependent upon "turns," orders received and turned for shipment in the same quarter. These factors make it difficult for us to forecast future sales and project quarterly revenues. The difficulty in forecasting future sales weakens our ability to project our inventory requirements, which could result, and in the past has resulted, in inventory write-downs or failure to meet customer product demands in a timely manner. The difficulty in forecasting revenues as well as the relative customer and product mix of those revenues inhibits our ability to provide forward-looking revenue and gross margin guidance.

Reductions in the average selling prices of our products could have a negative impact on our gross margins.

The average selling prices of our products generally decline as the products mature or may decline as we compete for market share or customer acceptance in competitive markets. We seek to offset the decrease in selling prices through yield improvement, manufacturing cost reductions, and increased unit sales. We also seek to continue to develop higher value products or product features that increase, or slow the decline of, the average selling price of our products. However, we do not guarantee that our ongoing efforts will be successful or that they will keep pace with the decline in selling prices of our products, which could ultimately lead to a decline in revenues and have a negative effect on our gross margins.

If we are unable to adequately protect our intellectual property rights, our financial results and our ability to compete effectively may suffer.

Our success depends in part on our proprietary technology and we rely upon patent, copyright, trade secret, mask work, and trademark laws to protect our intellectual property. We intend to continue to protect our proprietary technology, however, we may be unsuccessful in asserting our intellectual property rights or such rights may be invalidated, violated, circumvented, or challenged. From time to time, third parties, including our competitors, have asserted against us patent, copyright, and other intellectual property rights to technologies that are important to us. Third parties may attempt to misappropriate our intellectual property through electronic or other means or assert infringement claims against us in the future. Such assertions by third parties may result in costly litigation, indemnity claims, or other legal actions, and we may not prevail in such matters or be able to license any valid and infringed patents from third parties on commercially reasonable terms. This could result in the loss of our ability to import and sell our products or require us to pay costly royalties to third parties in connection with sales of our products. Any infringement claim, indemnification claim, or impairment or loss of use of our intellectual property could materially adversely affect our financial condition and results of operations.

A material change in the agreements governing encryption keys we use could place additional restrictions on us, or our distributors or contract manufacturers, which could restrict product shipment or significantly increase the cost to track products throughout the distribution chain.

Many of the components in our products contain encryption keys used in connection with High Definition Content Protection (HDCP). The regulation and distribution of these encryption keys are controlled through license agreements with Digital Content Protection (DCP), a wholly owned subsidiary of Intel Corporation. These license agreements have been modified by DCP from time to time, and such changes could impact us, our distributors, and

our customers. An important element of both HDMI and MHL is the ability to implement link protection for high definition (HD), and more recently, 4K UltraHD, content. We implement various aspects of the HDCP link protection within certain parts we sell. We also, for the benefit of our customers, include the necessary HDCP encryption keys in parts we ship to customers. These encryption keys are provided to us from DCP. We have a specific process for tracking and handling these encryption keys. If DCP changes any of the tracking or handling requirements associated with HDCP encryption keys, we may be required to change our manufacturing and distribution processes, which could adversely affect our manufacturing and distribution costs associated with these products. If we cannot satisfy new requirements for the handling and tracking of encryption keys, we may have to cease shipping or manufacturing certain products.

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Our participation in consortia for the development and promotion of industry standards in certain of our target markets, including the HDMI, MHL, and WirelessHD standards, requires us to license some of our intellectual property for free or under specified terms and conditions, which makes it easier for others to compete with us in such markets.

An element of our business strategy includes participating in consortia to establish industry standards in certain of our target markets; promoting and enhancing specifications; and developing and marketing products based on those specifications and future enhancements. We intend to continue participating in consortia that develop and promote the HDMI, MHL, and WirelessHD specifications. In connection with our participation in these consortia, we make certain commitments regarding our intellectual property, in each case with the effect of making certain of our intellectual property available to others, including our competitors, desiring to implement the specification in question. For example, we must license specific elements of our intellectual property to others for use in implementing the HDMI specification, including enhancements, as long as we remain part of the consortium. Also, we must agree not to assert certain necessary patent claims against other members of the MHL consortium, even if those members may have infringed upon those patents in implementing the MHL specification.

Accordingly, certain companies that implement these specifications in their products may use specific elements of our intellectual property to compete with us. Although in the case of the HDMI and MHL consortia, there are annual fees and royalties associated with the adopters' use of the technology, we make no assurance that our shares of such annual fees and royalties will adequately compensate us for having to license or refrain from asserting our intellectual property.

Our business depends, in part, on the continued adoption and widespread implementation of the HDMI and MHL specifications and the new implementation and adoption of the WirelessHD specifications.

Silicon Image has depended on its participation in standard setting organizations, such as the HDMI and MHL consortiums, and the widespread adoption and success of those standards. From time to time, competing standards have been established which negatively impact the success of existing standards or jeopardize the creation of new standards.

Our future success depends, in part, upon the continued adoption and widespread implementation of the HDMI, MHL, and WirelessHD specifications. A significant portion of Silicon Image's total revenue was derived from the sale of HDMI and MHL-enabled products and the licensing of our HDMI and MHL technology. Silicon Image's leadership in the market for HDMI and MHL-enabled products and intellectual property has been based on the ability to introduce first-to-market semiconductor and intellectual property solutions to customers and to continue to innovate within the standard. Our inability to continue to drive innovation in the HDMI and MHL specifications could have an adverse effect on our business going forward.

MHL has not been widely adopted and Silicon Image had a reduction in mobile design wins at one of our largest customers as a result of not including MHL. If other manufacturers who have included MHL in their designs decide that MHL is no longer necessary or cost-effective as a product feature, they too could choose to omit the MHL functionality (and our product) from their designs. Such decisions would adversely affect our revenues. Similarly, if our largest customer decides to remove MHL from other products, our revenue would be adversely affected.

We now have 60GHz wireless technology that we hope will be made widely available and adopted by the marketplace through the efforts of the WirelessHD consortium and incorporated into certain of our future products. As with our HDMI and MHL products and intellectual property, our success with this technology will depend on our ability to introduce first-to-market WirelessHD-enabled semiconductor and intellectual property solutions to our customers and to continue to innovate within the WirelessHD standard. WiGig is an example of a competing 60GHz standard that

has been created as an alternative high-bandwidth wireless connectivity solution for the personal computing industry. While the WiGig standard has not been in the market as long as the WirelessHD standard, it does represent a viable alternative to WirelessHD for 60GHz connectivity. If WiGig should gain broader adoption before WirelessHD is adopted, it could negatively impact the adoption of WirelessHD.

As successor-in-interest to Silicon Image, we have granted Intel Corporation certain rights with respect to our intellectual property, which could allow Intel to develop products that compete with ours or otherwise reduce the value of our intellectual property.

Silicon Image entered into a patent cross-license agreement with Intel in which each of them granted the other a license to use the patents filed by the grantor prior to a specified date, except for use related to identified types of products. We believe that the scope of this license to Intel excludes our current products and anticipated future products. Intel could, however, exercise its rights under this agreement to use certain of our patents received in the acquisition of Silicon Image to develop and market other products that compete with ours, without payment to us. Additionally, Intel's rights to these patents could reduce the value of the patents to any third-party who otherwise might be interested in acquiring rights to use these patents in such products. Finally, Intel could endorse competing products, including a competing digital interface, or develop its own proprietary digital interface. Any of these actions could substantially harm our business and results of operations.



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Litigation and unfavorable results of legal proceedings could adversely affect our financial condition and operating results.

From time to time we are subject to various legal proceedings and claims that arise out of the ordinary conduct of our business. Certain claims are not yet resolved, including those that are discussed under Note 20 contained in the Notes to Consolidated Financial Statements, and additional claims may arise in the future. Results of legal proceedings cannot be predicted with certainty. Regardless of merit, litigation may be both time-consuming and disruptive to our operations and cause significant expense and diversion of management attention and we may enter into material settlements to avoid these risks. Should we fail to prevail in certain matters, we may be faced with significant monetary damages or injunctive relief against us that could materially and adversely affect our financial condition and operating results and certain portions of our business.

We depend upon a third party to provide inventory management, order fulfillment, and direct sales logistics and disruption of these services could adversely impact our business and results of operations.

We rely on a third party vendor to provide cost-effective and efficient supply chain services. Among other activities, these outsourced services relate to direct sales logistics, including order fulfillment; inventory management and warehousing; and distribution of inventory to third party distributors. If our third party supply chain partner were to discontinue services for us or its operations are disrupted as a result of a fire, earthquake, act of terrorism, political unrest, governmental uncertainty, war, disease, or other natural disaster or catastrophic event, or any other reason, our ability to fulfill direct sales orders and distribute inventory timely, cost effectively, or at all, would be hindered, which could adversely affect our business.

We rely on independent software and hardware developers and disruption of these services could negatively affect our operations and financial results.

We rely on independent software and hardware developers for the design, development, supply, and support of intellectual property cores; design and development software; and certain elements of evaluation boards. As a result, failure or significant delay to complete software or deliver hardware in accordance with our plans, specifications, and agreements could disrupt the release of or introduction of new or existing products, which could be detrimental to the capability of our new or existing products to win designs. Any of these delays or inability to complete the design or development could have an adverse effect on our business, financial condition, or operating results.

We may have failed to adequately insure against certain risks, and, as a result, our financial condition and results may be adversely affected.

We carry insurance customary for companies in our industry, including, but not limited to, liability, property, and casualty; workers' compensation; and business interruption insurance. We also insure our employees for basic medical expenses. In addition, we have insurance contracts that provide director and officer liability coverage for our directors and officers. Other than the specific areas mentioned above, we are self-insured with respect to most other risks and exposures, and the insurance we carry in many cases is subject to a significant policy deductible or other limitation before coverage applies. Based on management's assessment and judgment, we have determined that it is more cost effective to self-insure against certain risks than to incur the insurance premium costs. The risks and exposures for which we self-insure include, but are not limited to, certain natural disasters, certain product defects, political risk, certain theft, patent infringement, and employment practice matters. Should there be a catastrophic loss due to an uninsured event (such as an earthquake) or a loss due to adverse occurrences in any area in which we are self-insured, our financial condition or operating results could be adversely affected.

We compete with others to attract and retain key personnel, and any loss of, or inability to attract, such personnel could adversely affect our ability to compete effectively.

We depend on the efforts and abilities of certain key members of management and other technical personnel. Our future success depends, in part, upon our ability to retain such personnel and attract and retain other highly qualified personnel, particularly product engineers who can respond to market demands and required product innovation. Competition for such personnel is intense and we may not be successful in hiring or retaining new or existing qualified personnel. From time to time we have effected restructurings which have eliminated a number of positions. Even if such personnel are not directly affected by the restructuring effort, such terminations can have a negative impact on morale and our ability to attract and hire new qualified personnel in the future. If we lose existing qualified personnel or are unable to hire new qualified personnel, as needed, we could have difficulty competing in our highly-competitive and innovative environment.

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The conflict minerals provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act could result in additional costs and liabilities.

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Securities and Exchange Commission established new disclosure and reporting requirements for those companies who use "conflict" minerals mined from the Democratic Republic of Congo and adjoining countries in their products, whether or not these products are manufactured by third parties. As these new requirements are fully implemented, they could affect the sourcing and availability of minerals used in the manufacture of our semiconductor products. There are also costs associated with complying with the disclosure requirements, including for due diligence in regard to the sources of any conflict minerals used in our products, in addition to the cost of any required remediation and other changes to products, processes, or sources of supply as a consequence of such verification activities. Although we filed the required conflict minerals reports in 2014 and 2015, it may be several years before we can fully assess the internal and external cost of compliance of the effect the rules will have on our business.

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Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

In March 2015, our corporate headquarters and executive office moved to a 23,680 square foot leased space in Portland, Oregon through March 2025. In November 2014, we sold the property where our headquarters was formerly located in Hillsboro, Oregon. We lease a 47,800 square foot portion of our former Hillsboro, Oregon property as a research and development facility through November 2022. The March 2015 acquisition of Silicon Images added 128,154, 132,771 and 22,508 square feet of leased spaces in Sunnyvale, California, Shanghai, China and Hyderabad, India through June 2018, May 2018 and December 2017, respectively.

We currently lease a 98,874 square foot research and development facility in San Jose, California through September 2026. In Alabang, Philippines, we lease a 17,114 square foot research and development facility through December 2016, an 8,648 square foot facility through May 2017, and a 2,933 square foot facility through April 2017. In Muntinlupa City, Philippines we lease an 18,148 square foot operations center. We lease a 5,296 square foot research and development facility in Bangalore, India through October 2016. We also lease office facilities in multiple metropolitan locations for our domestic and international sales staff. In connection with our integration activities, we are attempting to sublease certain properties. In Shanghai, China, we own an 18,869 square foot research and development facility. We believe that our existing facilities are suitable and adequate for our current and foreseeable future needs.

Item 3. Legal Proceedings

On or about January 29, 2015, Silicon Image, members of its Board, the Company and the Company's wholly-owned merger acquisition subsidiary were named as defendants in two complaints filed in Santa Clara Superior Court by alleged stockholders of Silicon Image in connection with the proposed merger of Silicon Image and the Company. Both complaints were dated January 29, 2015 and were captioned respectively *Molland v. George, et al.* and *Stein v. Silicon Image, Inc. et. al.* Five additional complaints were subsequently filed on January 30, 2015, February 4, 2015 and February 9, 2015 in Delaware Chancery Court by alleged stockholders of Silicon Image, Inc. in connection with the Merger, captioned respectively *Pfeiffer v. Martino et. al.*; *Lipinski v. Silicon Image, Inc. et. al.*; *Feldbaum et. al. v. Silicon Image, Inc. et. al.*; *Nelson v. Silicon Image, Inc. et. al.* and *Partansky v. Silicon Image, Inc. et. al.* The five Delaware matters were subsequently consolidated into an action captioned *In re Silicon Image Stockholders Litigation* by order of the Delaware Chancery Court on February 11, 2015, and a consolidated amended complaint was filed in the matter on February 13, 2015. Two complaints captioned *Tapia v. Silicon Image, Inc. et. al.* and *Caldwel v. Silicon Image, Inc.* were also filed on February 4, 2015 and February 9, 2015 in Santa Clara Superior Court by alleged stockholders in connection with the merger. Amended complaints were filed in the *Molland* and *Stein* actions on February 11, 2015. Each of these lawsuits were purported class actions brought on behalf of Silicon Image stockholders, asserting claims against each member of the Silicon Image Board for breach of fiduciary duty, and against various officers of the Silicon Image, the Company, and the Company's wholly-owned merger subsidiary for aiding and abetting breach of fiduciary duty. The lawsuits alleged that the Merger did not appropriately value Silicon Image, was the result of an inadequate process, and included preclusive deal devices. The amended complaints also asserted that the Silicon Image's disclosures regarding the Merger in its Schedule 14D-9 omitted material information regarding the Merger. Each of these complaints purported to seek unspecified damages. The Delaware cases have been settled and this settlement has been approved by the court. The settlement did not have a material adverse effect on our financial position. The California cases were dismissed with prejudice on February 29, 2016.

In November 2014, a patent infringement lawsuit was filed by Papst Licensing GmbH & Co., KG ("Papst") against us in the U.S. District Court for the District of Delaware. On September 21, 2015, the parties entered into a settlement agreement. Under that agreement, we received a non-exclusive, irrevocable, fully paid up, perpetual, worldwide license for use of the asserted patents. The license fully exhausts and includes all claims of the asserted patents. The settlement did not have a material adverse effect on our financial position. On October 22, 2015, the case was dismissed with prejudice.

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In March 2014, the China National Development and Reform Commission ("NDRC") notified HDMI Licensing, LLC ("HDMI LLC"), a wholly-owned subsidiary of the Company and the agent for an entity charged with administering the HDMI specification, that the NDRC was investigating HDMI LLC's licensing activities in China under the Chinese Anti-Monopoly Law ("AML"). The NDRC has available a broad range of remedies with respect to business practices it deems to violate the AML, including the ability to issue an order to cease conduct deemed illegal, confiscate gains deemed illegally obtained, impose a fine and require modifications to business practices. In July 2015, the NDRC concluded its investigation and informed HDMI LLC that it did not intend to impose monetary penalties on HDMI LLC, subject to HDMI LLC entering into a settlement agreement with the China Video Industry Association ("CVIA") relating to various issues arising in connection with HDMI LLC licensing to Chinese companies. HDMI LLC is negotiating the specific implementation terms of this agreement with CVIA. Lattice cannot predict the outcome of this matter because administrative proceedings and negotiations with industry associations are inherently uncertain. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to the Company.

In January 2016 the Company commenced a suit against Technicolor SA and its affiliates in the United States District Court for the Northern District of California alleging that Technicolor had infringed certain patents relating to the HDMI specification. Technicolor has informed the Company that it will attempt to raise as a counterclaim a claim for payment to Technicolor and other HDMI founders their respective share of any HDMI adopters' fees not used by Lattice and its predecessor in interest Silicon Image in the marketing and other activities in furtherance of the HDMI standard. Technicolor previously has indicated its belief that the HDMI founders enjoy a right to these funds but has never pursued such claims. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to the Company.

We are exposed to certain other asserted and unasserted potential claims. There can be no assurance that, with respect to potential claims made against us, we could resolve such claims under terms and conditions that would not have a material adverse effect on our business, our liquidity or our financial results. Periodically, we review the status of each significant matter and assess its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and a range of possible losses can be estimated, we then accrue a liability for the estimated loss based on the provisions of FASB ASC 450, "Contingencies" ("ASC 450"). Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation and may revise estimates.

Item 4. Mine Safety Disclosures

Not applicable.

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## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters &amp; Issuer Purchases of Equity Securities

## Market Information

Our common stock is traded on the NASDAQ Global Select Market under the symbol "LSCC". The following table sets forth the low and high intraday sale prices for our common stock for the last two fiscal years, as reported by NASDAQ.

	Low	High
2015:		
First Quarter	\$5.87	\$7.66
Second Quarter	5.76	6.98
Third Quarter	3.25	6.10
Fourth Quarter	3.68	7.07
2014:		
First Quarter	\$5.30	\$8.00
Second Quarter	7.37	9.19
Third Quarter	6.03	8.50
Fourth Quarter	5.94	7.66

## Holders

As of February 26, 2016, we had approximately 265 stockholders of record.

## Dividends

The payment of dividends on our common stock is within the discretion of our Board of Directors. We intend to retain earnings to finance the growth of our business. We have never paid cash dividends.

## Recent Sales of Unregistered Securities

None.

## Issuer Purchases of Equity Securities

On March 3, 2014, our Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock could be repurchased from time to time. The duration of the repurchase program was twelve months. Under this program during fiscal 2014, approximately 1.9 million shares were repurchased for \$13.1 million. The 2014 program completed during the first quarter of fiscal 2015, during which approximately 1.1 million shares were repurchased for approximately \$7.0 million. All shares repurchased under the 2014 program were retired by the end of the fiscal year in which they were repurchased. All repurchases were open market transactions funded from available working capital.

## Comparison of Total Cumulative Stockholder Return

The following graph shows the five-year comparison of cumulative stockholder return on our common stock, the Standard and Poor's ("S&P") 500 Index and the Philadelphia Semiconductor Index ("PHLX") from December 2010

through December 2015. Cumulative stockholder return assumes \$100 invested at the beginning of the period in our common stock, the S&P and PHLX. Historical stock price performance is not necessarily indicative of future stock price performance.



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Lattice Cumulative Stockholder Return

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## Item 6. Selected Financial Data

(In thousands, except per share data)	Year Ended *				
	January 2, 2016 **	January 3, 2015	December 28, 2013	December 29, 2012	December 31, 2011
<b>STATEMENT OF OPERATIONS:</b>					
Revenue					
Product	\$369,200	\$366,127	\$332,525	\$279,256	\$318,366
Licensing and services	36,766	—	—	—	—
Total Revenue	405,966	366,127	332,525	279,256	318,366
Costs and expenses:					
Cost of products sold	184,914	159,940	154,281	128,499	129,769
Cost of licensing and services revenue	1,143	—	—	—	—
Research and development	136,868	88,079	80,966	77,610	71,855
Selling, general, and administrative	97,349	73,527	67,144	72,317	68,838
Acquisition related charges	22,450	2,948	2,960	4,178	536
Restructuring charges	19,239	17	388	6,018	6,079
Amortization of acquired intangible assets	29,580	—	—	—	—
Impairment of goodwill and intangible assets	21,655	—	—	—	—
	513,198	324,511	305,739	288,622	277,077
(Loss) Income from operations	(107,232)	) 41,616	26,786	(9,366)	) 41,289
Interest expense	(18,389)	) (172)	) (152)	) —	) —
Other (expense) income, net	(832)	) 1,497	(148)	) 505	1,434
(Loss) income before income taxes and equity in net loss of an unconsolidated affiliate	(126,453)	) 42,941	26,486	(8,861)	) 42,723
Income tax expense (benefit)	32,540	(5,639)	) 4,165	20,745	(35,509)
Equity in net loss of an unconsolidated affiliate, net of tax	(492)	) —	—	—	—
Net (loss) income	(159,485)	) 48,580	22,321	(29,606)	) 78,232
Net loss attributable to noncontrolling interest	252	—	—	—	—
Net (loss) income attributable to stockholders	\$(159,233)	) \$48,580	\$22,321	\$(29,606)	) \$78,232
Basic net income (loss) per share					
	\$(1.36)	) \$0.41	\$0.19	\$(0.25)	) \$0.66
Diluted net income (loss) per share					
	\$(1.36)	) \$0.40	\$0.19	\$(0.25)	) \$0.65
Shares used in per share calculations:					
Basic	117,387	117,708	115,701	117,194	117,875
Diluted	117,387	120,245	117,081	117,194	121,139

\* The year ended January 3, 2015 was a 53-week year as compared to the other years presented, which were based on our standard 52-week year.

\*\* Our results for the year ended January 2, 2016 include the results of Silicon Image for the approximately 10-month period from March 11, 2015 through January 2, 2016. Results presented for prior fiscal years are those historically reported for Lattice only.

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(In thousands)	January 2, 2016	At January 3, 2015	December 28, 2013	December 29, 2012	December 31, 2011
<b>BALANCE SHEET:</b>					
Cash, cash equivalents and short-term marketable securities	\$ 102,574	\$ 254,844	\$ 215,815	\$ 183,401	\$ 210,134
Total assets	\$ 785,920	\$ 510,530	\$ 447,876	\$ 414,619	\$ 453,784
Long term liabilities	\$ 369,223	\$ 8,809	\$ 3,588	\$ 3,976	\$ 8,247
Total liabilities	\$ 480,400	\$ 69,555	\$ 62,196	\$ 57,069	\$ 60,223
Total stockholders' equity	\$ 305,520	\$ 440,975	\$ 385,680	\$ 357,550	\$ 393,561

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

#### Overview

Lattice Semiconductor ("Lattice," the "Company," "we," "us," or "our") engages in smart connectivity solutions, providing intellectual property and low-power, small form-factor devices that enable global customers to quickly deliver innovative and differentiated cost and power efficient products. The Company's broad end-market exposure extends from consumer electronics to industrial equipment, communications infrastructure, and licensing.

Lattice was founded in 1983 and is headquartered in Portland, Oregon. The Company acquired Silicon Image, Inc. ("Silicon Image") in March 2015. Silicon Image is engaged in setting industry standards including the HDMI®, DVI®, MHL® and WirelessHD® standards. Our results for the year ended January 2, 2016 include the results of Silicon Image for the approximately 10-month period from March 11, 2015 through January 2, 2016. Results presented for prior fiscal years are those historically reported for Lattice only.

#### Critical Accounting Policies and Estimates

Critical accounting policies are those that are both most important to the portrayal of a company's financial condition and results and require management's most difficult, subjective, and complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. A description of our critical accounting policies follows.

#### Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, goodwill (including the assessment of reporting unit), intangible assets, current and deferred income taxes, accrued liabilities (including restructuring charges and bonus arrangements), deferred income and allowances on sales to sell-through distributors, disclosure of contingent assets and liabilities at the date of the financial statements, amounts used in acquisition valuations and purchase accounting, and the reported amounts of product revenue, licensing and services revenue, and expenses during the fiscal periods presented. Actual results could differ from those estimates.

#### Revenue Recognition and Deferred Income

##### Product Revenue

We sell our products directly to end customers, through a network of independent manufacturers' representatives, and indirectly through a network of independent sell-in and sell-through distributors. Distributors provide periodic data regarding the product, price, quantity, and end customer when products are resold, as well as the quantities of our products they still have in stock.

Revenue from sales to original equipment manufacturers ("OEMs") and sell-in distributors is generally recognized upon shipment. Reserves for sell-in stock rotations, where applicable, are estimated primarily from historical experience and provided for at the time of shipment. Revenue from sales by our sell-through distributors is recognized at the time of reported resale. Under both types of revenue recognition, persuasive evidence of an arrangement exists, the price is fixed or determinable, title has transferred, collection of resulting receivables is reasonably assured, and there are no remaining customer acceptance requirements and no remaining significant performance obligations.

Orders from our sell-through distributors are initially recorded at published list prices; however, for a majority of our sales, the final selling price is determined at the time of resale and in accordance with a distributor price agreement. In certain circumstances, we allow sell-through distributors to return unsold products. At times, we protect our sell-through distributors against reductions in published list prices. For these reasons, we do not recognize revenue until products are resold by sell-through distributors to an end customer.

For sell-through distributors, at the time of shipment to distributors, we (a) record Accounts receivable at published list price since there is a legally enforceable obligation from the distributor to pay us currently for product delivered, (b) relieve inventory for the carrying value of goods shipped since legal title has passed to the distributor, and (c) record deferred revenue and deferred cost of sales in Deferred income and allowances on sales to sell-through distributors in the liability section of our Consolidated Balance Sheets. The final price is set at the time of resale and is determined in accordance with a distributor price agreement. Revenue and cost of sales to sell-through distributors are deferred until either the product is resold by the distributor

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or, in certain cases, return privileges terminate, at which time Revenue and Cost of products sold are reflected in Net (loss) income, and Accounts receivable, net are adjusted to reflect the final selling price.

We must use estimates and apply judgment to reconcile sell-through distributors' reported inventories to their activities. Errors in our estimates or judgments could result in inaccurate reporting of our Revenue, Cost of products sold, Deferred income and allowances on sales to sell-through distributors, and Net (loss) income.

### Licensing and Services Revenue

Our licensing and services revenue is comprised of revenue from our intellectual property ("IP") core licensing activity, patent monetization activities, device management system and remote support services, and royalty and adopter fee revenue from our standards activities. These activities are complementary to our product sales and help us monetize our intellectual property and accelerate market adoption curves associated with our technology and standards.

From time to time we enter into patent sale and licensing agreements to monetize and license a broad portfolio of our patented inventions. Such licensing agreements may include upfront license fees and ongoing royalties. The contractual terms of the agreements generally provide for payments of upfront license fees over an extended period of time. Revenue from such license fees is recognized when payments become due and payable as long as all other revenue recognition criteria are met, while revenue from royalties is recognized when reported.

We enter into IP licensing agreements that generally provide licensees the right to incorporate our IP components into their products pursuant to terms and conditions that vary by licensee. Revenue earned under these agreements is classified as Licensing and services revenue. Our IP licensing agreements generally include multiple elements, which may include one or more off-the-shelf or customized IP licenses bundled with support services covering a fixed period of time, generally one year. If the different elements of a multiple-element arrangement qualify as separate units of accounting, we allocate the total arrangement consideration to each element based on relative selling price.

Amounts allocated to off-the-shelf IP licenses are recognized at the time of sale provided the other conditions for revenue recognition have been met. Amounts allocated to the support services are deferred and recognized on a straight-line basis over the support period, generally one year. Certain licensing agreements provide for royalty payments based on agreed-upon royalty rates, which may be fixed or variable depending on the terms of the agreement. The amount of revenue we recognize is based on a specified time period or on the agreed-upon royalty rate multiplied by the number of units shipped by the customer.

From time to time, we enter into IP licensing agreements that involve significant modification, customization or engineering services. Revenues derived from these contracts are accounted for using the percentage-of-completion method or completed contract method. The completed contract method is used for contracts where there is a risk of final acceptance by the customer or for short-term contracts. HDMI royalty revenue is determined by a contractual allocation formula agreed to by the members of the HDMI consortium. Evidence of an arrangement, as to HDMI royalty revenue, is deemed complete when all of the members of the HDMI consortium agree on the royalty sharing formula.

### Fair Value of Financial Instruments

We invest in various financial instruments including corporate and government bonds, notes, and commercial paper. We were also invested in auction rate securities until June 2014. We value these instruments at their fair value and monitor our portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other than temporary, we record an impairment charge and

establish a new carrying value. We assess other-than-temporary impairment of marketable securities in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 820, “Fair Value Measurements.” The framework under the provisions of ASC 820 establishes three levels of inputs that may be used to measure fair value. Each level of input has different levels of subjectivity and difficulty involved in determining fair value.

Level 1 instruments are characterized generally by quoted prices for identical assets or liabilities in active markets. Therefore, determining fair value for Level 1 instruments generally does not require significant management judgment, and the estimation is not difficult.

Level 2 instruments include inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices for identical instruments in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 instruments include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Our auction rate securities were classified as Level 3 instruments. Management used a combination of the market and income approach to derive the fair value of auction rate securities, which included third party valuation results, investment broker provided market information and available information on the credit quality of the underlying collateral. As a result, the determination of fair value for Level 3 instruments requires significant management judgment and subjectivity. Our Level 3 instruments were classified as Long-term marketable securities on our Consolidated Balance Sheets



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and were entirely made up of auction rate securities that consisted of student loan asset-backed notes. During fiscal 2014 we sold all of our Level 3 instruments, which consisted entirely of auction rate securities.

### Inventory

Inventories are recorded at the lower of actual cost determined on a first-in-first-out basis or market. We establish provisions for inventory if it is obsolete or we hold quantities which are in excess of projected customer demand. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of products sold.

### Property and Equipment

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method for financial reporting purposes over the estimated useful lives of the related assets, generally three to five years for equipment and software, one to three years for tooling and thirty years for buildings. Upon disposal of Property and equipment, the accounts are relieved of the costs and related accumulated depreciation and amortization, and resulting gains or losses are reflected in the Consolidated Statements of Operations for recognized gains and losses, or in the Consolidated Balance Sheets for deferred gains and losses. Repair and maintenance costs are expensed as incurred.

### Impairment of Long-Lived Assets

Long-lived assets, including amortizable intangible assets, are carried on our financial statements based on their cost less accumulated depreciation or amortization. We monitor the carrying value of our long-lived assets for potential impairment and test the recoverability of such assets whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. These events or changes in circumstances, including management decisions pertaining to such assets, are referred to as impairment indicators. If an impairment indicator occurs, we perform a test of recoverability by comparing the carrying value of the asset group to its undiscounted expected future cash flows. If the carrying values are in excess of undiscounted expected future cash flows, we measure any impairment by comparing the fair value of the asset group to its carrying value. Fair value is generally determined by considering (i) internally developed discounted projected cash flow analysis of the asset group; (ii) actual third-party valuations; and/or (iii) information available regarding the current market for similar asset groups. If the fair value of the asset group is determined to be less than the carrying amount of the asset group, an impairment in the amount of the difference is recorded in the period that the impairment indicator occurs and is included in our Consolidated Statements of Operations. Estimating future cash flows requires significant judgment and projections may vary from the cash flows eventually realized, which could impact our ability to accurately assess whether an asset has been impaired.

### Valuation of Goodwill

Goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. We review goodwill for impairment annually during the fourth quarter and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. When evaluating whether goodwill is impaired, we make a qualitative assessment to determine if it is more likely than not that the reporting unit's fair value is less than the carrying amount. If the qualitative assessment determines that it is more likely than not that the fair value is less than the carrying amount, the fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, an indication of goodwill impairment exists for the reporting unit and we must measure the impairment loss. The impairment loss, if any, is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of the goodwill. The implied fair value of goodwill is

determined by allocating the fair value of the reporting unit in a manner similar to purchase price allocation and the residual fair value after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit is determined using a discounted cash flow analysis. If the fair value of the reporting unit exceeds its carrying value, no further impairment analysis is needed. For purposes of testing goodwill for impairment, the Company operates as two reporting units: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure. Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment.

#### Restructuring Charges

Expenses associated with exit or disposal activities are recognized when incurred under ASC 420, "Exit or Disposal Cost Obligations" for everything but severance. However, because we have a history of paying severance benefits, the cost of severance benefits associated with a restructuring charge is recorded when such costs are probable and the amount can be reasonably estimated in accordance with ASC 712, "Compensation - Nonretirement Postemployment Benefits." When leased facilities are vacated, an amount equal to the total future lease obligations from the date of vacating the premises through the expiration of the lease, net of estimated sublease income, is recorded as a part of restructuring charges.

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### Accounting for Income Taxes

Our provision for income tax is comprised of our current tax liability and changes in deferred tax assets and liabilities. Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts in the financial statements using enacted tax rates and laws that will be in effect when the difference is expected to reverse. Valuation allowances are provided to reduce deferred tax assets to an amount that in management's judgment is more-likely-than-not to be recoverable against future taxable income. At January 2, 2016, U.S. income taxes were not provided on approximately \$3.2 million of the undistributed earnings of our Chinese subsidiary as we intend to reinvest these earnings indefinitely. If these earnings were distributed to the U.S. in the form of dividends or otherwise, these earnings would be subject to Chinese withholding taxes and would be subject to additional U.S. income taxes but offset by net operating loss carryforwards which have been fully reserved.

Our income tax calculations are based on application of the respective U.S. federal, state or foreign tax law. Our tax filings, however, are subject to audit by the relevant tax authorities. Accordingly, we recognize tax liabilities based upon our estimate of whether, and the extent to which, additional taxes will be due when such estimates are more-likely-than-not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. To the extent the final tax liabilities are different than the amounts originally accrued, the increases or decreases as well as any interest or penalties are recorded as income tax expense or benefit in the Consolidated Statements of Operations.

In assessing the realizability of deferred tax assets, we evaluate both positive and negative evidence that may exist and consider whether it is more-likely-than-not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible.

Any adjustment to the net deferred tax asset valuation allowance is recorded in the Consolidated Statements of Operations in the period that the adjustment is determined to be required.

### Stock-Based Compensation

We use the Black-Scholes option pricing model to estimate the fair value of substantially all share-based awards consistent with the provisions of ASC 718, "Compensation - Stock Compensation." Option pricing models, including the Black-Scholes model, require the use of input assumptions, including expected volatility, expected term, expected dividend rate, and expected risk-free rate of return. The assumptions for expected volatility and expected term most significantly affect the grant date fair value.

We have also used a lattice-based option-pricing model to determine and fix the fair value of stock options with a market condition granted to certain executives. This valuation model incorporates a Monte-Carlo simulation, and considered the likelihood that we would achieve the market condition. The options have a two year vesting and vest between 0% and 200% of the target amount, based on the Company's relative Total Shareholder Return ("TSR") when compared to the TSR of a component of companies of the PHLX Semiconductor Sector Index over a two year period. TSR is a measure of stock price appreciation plus dividends paid, if any, in the performance period.

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## Results of Operations\*

Key elements of our Consolidated Statements of Operations were as follows:

(In thousands)	Year Ended**		January 3, 2015		December 28, 2013			
	January 2, 2016							
Revenue	\$405,966	100.0	% \$366,127	100.0	% \$332,525	100.0	%	
Gross margin	219,909	54.2	206,187	56.3	178,244	53.6		
Research and development	136,868	33.7	88,079	24.1	80,966	24.3		
Selling, general, and administrative	97,349	24.0	73,527	20.1	67,144	20.2		
Acquisition related charges	22,450	5.5	—	—	—	—		
Restructuring charges	19,239	4.7	17	—	388	0.1		
Amortization of acquired intangible assets	29,580	7.3	2,948	0.8	2,960	0.9		
Impairment of goodwill and intangible assets	21,655	5.3	—	—	—	—		
(Loss) income from operations	\$(107,232)	(26.4)	% \$41,616	11.4	% \$26,786	8.1	%	

\* Lattice acquired Silicon Image on March 10, 2015. Results of Operations include the financial results of Silicon Image for the period from March 11, 2015 through January 2, 2016. Silicon Image's revenue and net loss attributable to stockholders for that period were approximately \$135.6 million and \$77.0 million, respectively. Acquisition related charges, which were expensed as incurred, were approximately \$8.2 million.

\*\* The year ended January 3, 2015 (fiscal 2014) was a 53-week year as compared to the current and previous years (fiscal 2015 and fiscal 2013, respectively) which were based on our standard 52-week year.

## Revenue

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Revenue	\$405,966	\$366,127	\$332,525	11	10

Revenue increased \$39.8 million, or 11%, in fiscal 2015 compared to fiscal 2014, primarily driven by the acquisition of Silicon Image during the first quarter of fiscal 2015. The contribution by the addition of Silicon Image products was primarily in Consumer silicon products and licensing fees associated with certain IP and royalties and license fees from HDMI and MHL branded products. These increases were offset by a 26% decrease in revenue from programmable logic devices primarily in the Consumer and Communications end markets.

No individual end customer accounted for more than 10% of total revenue in fiscal 2015. One Consumer end market customer, Samsung Electronics Co., Ltd., accounted for 19% of total revenue in 2014 and 22% of revenue in 2013. Additionally, one Communications end market customer, Huawei Technologies Co. Ltd., accounted for 12% of total revenue in 2014. No other individual end customers accounted for more than 10% of total revenue in either of fiscal years 2014 or 2013.

Revenue increased \$33.6 million, or 10%, in fiscal 2014 compared to fiscal 2013, primarily driven by volume increases in certain of our ECP3 products in the Communications end market, largely in continued support of the Chinese telecommunications infrastructure build out which began in 2013. Stronger demand in the second half of

2014 from the Industrial end market also contributed to the increase in revenue. These increases were partially offset by lower demand for certain of our iCE40 products at a major OEM in the Consumer end market.

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## Revenue by End Market

The end market data below is derived from data provided to us by our distributors and end customers. With a diverse base of customers who may manufacture end products spanning multiple end markets, the assignment of revenue to a specific end market requires the use of estimates and judgment. Therefore, actual results may differ from those reported. With our acquisition of Silicon Image, we added a Licensing end market to report Licensing and services revenue, which includes the licensing of our intellectual property, the collection of certain royalties, patent sales, the revenue related to our participation in consortia and standard-setting activities, and services. While Licensing products are primarily sold into the Consumer market, Licensing and services revenue is reported separately as it has characteristics that differ from other categories, most notably its high gross margin.

The following are examples of end market applications:

Communications	Consumer	Industrial	Licensing
Computing	Smartphones	Security & Surveillance	IP Royalties
Wireless	Cameras	Machine Vision	Adopter Fees
Wireline	Displays	Industrial Automation	IP Licenses
Data Backhaul	Tablets	Human Machine Interface	Patent Sales
	Wearables	Automotive	
	Televisions	Drones	
	Home Theater	Servers	
		Data Storage	

The composition of our revenue by end market for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended							% Change in	
	January 2, 2016		January 3, 2015		December 28, 2013		2015	2014	
Communications	\$113,938	28 %	\$153,167	42 %	\$126,566	38 %	(26 )	21	
Consumer	126,028	31	91,813	25	99,569	30	37	(8 )	
Industrial	129,234	32	121,147	33	106,390	32	7	14	
Licensing	36,766	9	—	—	—	—	—	—	
Total revenue	\$405,966	100 %	\$366,127	100 %	\$332,525	100 %	11	10	

Our revenue in the Communications end market is largely dependent on a small number of large telecommunications equipment providers. For fiscal 2015, Communications end market revenue decreased 26% primarily driven by a decrease in demand from Communications customers supporting 4G-LTE infrastructure build out in China as that program returned to more normal volumes for Lattice. For fiscal 2014, Communications end market revenue increased 21% primarily driven by demand to support the telecommunications infrastructure build out in China, largely in the first half of 2014.

Consumer end market revenue increased 37% in fiscal 2015, after decreasing 8% in fiscal 2014. Consumer end market revenue increased in fiscal 2015 primarily due to the acquisition of Silicon Image, offset by a 60% decline in our FPGA product revenue due primarily to lower demand at a major OEM for certain of our iCE40 products. The products acquired are currently concentrated in the DTV, home theater, and mobile communications markets. Consumer end market revenue decreased in fiscal 2014 primarily due to lower demand at a major OEM for certain of our iCE40 products.

For fiscal 2015, Industrial end market revenue increased 7% when compared to fiscal 2014. This is primarily due to Industrial end market growth in Asia and the acquisition of Silicon Image. For fiscal 2014, Industrial end market revenue increased 14% when compared to fiscal 2013. This increase was primarily due to broad market strengthening in the second half of fiscal 2014, largely in Europe and Japan.

Licensing and services revenue of \$36.8 million was recognized in fiscal 2015 following the acquisition of Silicon Image in March 2015. Previously, we did not have Licensing and services revenue. This revenue is expected to fluctuate, sometimes significantly, from period to period as a result of the timing of completion of IP license arrangements, IP sales, patent sales, and settlement of royalty audits.

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## Revenue by Geography

We assign revenue to geographies based on customer ship-to address at the point where revenue is recognized. In the case of sell-in distributors and OEM customers, revenue is typically recognized, and geography is assigned, when products are shipped. In the case of sell-through distributors, revenue is recognized when resale to the end customer occurs and geography is assigned based on the end customer location on the resale reports provided by the distributor. Both foreign and domestic sales are denominated in U.S. dollars, with the exception of sales in Japan, where sales to certain customers are denominated in yen.

The composition of our revenue by geography, based on ship-to location, is as follows:

(In thousands)	Year Ended									% Change in	
	January 2, 2016			January 3, 2015			December 28, 2013			2015	2014
Asia	\$308,534	76	%	\$266,831	73	%	\$245,689	74	%	16	9
Europe	55,596	14		59,041	16		47,459	14		(6 )	24
Americas	41,836	10		40,255	11		39,377	12		4	2
Total revenue	\$405,966	100	%	\$366,127	100	%	\$332,525	100	%	11	10

Revenue increased 16% in Asia in fiscal 2015 and 9% in fiscal 2014. In fiscal 2015, revenue growth in Asia was due primarily to the acquisition of Silicon Image, a high concentration of whose products are in the Consumer market with the end products they serve heavily manufactured in Asia. In fiscal 2014, revenue growth in Asia was due primarily to strong volume growth of products in the Communications end market, driven largely by demand to support the telecommunications infrastructure build out in China in the first half of 2014. We believe the Asia Pacific region will remain the primary source of our revenue due to relatively more favorable business conditions in Asia and a continuing trend towards the migration of manufacturing by North American and European customers to the Asia Pacific region.

Revenue decreased 6% in Europe in fiscal 2015 primarily due to the finalizing of a specific program at a large Communications customer and a decrease in volume at an Industrial customer. Revenue increased 24% in Europe in fiscal 2014 on generally improving macroeconomic conditions and increased demand from customers in the Industrial and Communications end markets.

Americas revenue increased 4% in fiscal 2015 due to the addition of Silicon Image which contributed revenue both in devices and Licensing and services enough to offset a decline in programmable products revenue in the region. Revenue from Americas increased 2% in fiscal 2014 due to increased sales volumes of late life-cycle products in the Industrial end market, largely in the fourth quarter of 2014.

Revenue from foreign sales as a percentage of total revenue was 92%, 92%, and 91% for fiscal 2015, 2014 and 2013, respectively.

## Revenue by Distributors

Our largest customers are often distributors and sales through distributors have historically made up a significant portion of our total revenue. Revenue attributable to the resale of products by our primary sell-through distributors was as follows:

	% of Total Revenue					
	2015		2014		2013	
Arrow Electronics Inc. (including Nu Horizons Electronics)	20	%	24	%	23	%
Weikeng Group	12		10		12	
All others	13		11		10	



All sell-through distributors	45	%	45	%	45	%
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Revenue from sell-through distributors as a percent of total revenue has been flat over the three-year period from fiscal 2015 through fiscal 2013.

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## Gross margin

The composition of our gross margin, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended				
	January 2, 2016	January 3, 2015	December 28, 2013		
Gross margin	\$219,909	\$206,187	\$178,244		
Percentage of revenue	54.2	% 56.3	% 53.6	%	%
Product gross margin %	49.9	% 56.3	% 53.6	%	%
Licensing and services gross margin %	96.9	% —	% —	%	%

Gross margin and Product gross margin, as a percentage of revenue, declined 2.1 and 6.4 percentage points, respectively, from fiscal 2014 to fiscal 2015, primarily due to purchase accounting adjustments (now substantially completed) from the acquisition of Silicon Image in March 2015 associated with the sell-through of acquired inventory and deferred revenue combined with a degradation of product mix. The unfavorable product mix was mainly driven by the acquired mobile communications and DTV product groups in our Consumer end market slightly offset by the high margins from the acquired Licensing and services revenue. Because of its high margin, the Licensing and services portion of our overall revenue can have a disproportionate impact on Gross margin and profitability. In general, we do not expect Product gross margin to vary substantially due to the inclusion of Silicon Image products; however, we expect that product and customer mix, as well as downward pressure on average selling price, will continue to affect our Gross margin in the future. If we are unable to realize additional or sufficient product cost reductions in the future to balance changes in product and customer mix, we may experience degradation in our Product gross margin.

In fiscal 2014, Gross margin, as a percentage of revenue, increased 2.7 percentage points as compared to fiscal 2013. Product cost improvements, driven by high volume manufacturing and strategic inventory builds in the first half of the year, combined to improve our gross margin in fiscal 2014. Those product cost improvements were partially offset, however, by less favorable product and customer mix resulting from increased revenue from products in both the Consumer and Communications end markets. Less sell-through of fully reserved inventory and, to a lesser extent, increased expense from excess and obsolete inventory also degraded our gross margin in fiscal 2014.

## Operating Expenses

## Research and development expense

The composition of our research and development expenses, including as a percentage of revenue, for fiscal years 2015, 2014, and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Research and development	\$136,868	\$88,079	\$80,966	55.4 %	8.8 %
Percentage of revenue	33.7	% 24.1	% 24.3	%	%
Mask costs included in Research and development	\$5,770	\$2,877	\$2,381	100.6 %	20.8 %

Research and development expenses include costs for compensation and benefits, development masks, engineering wafers, depreciation, licenses, and outside engineering services. These expenditures are for the design of new products, intellectual property cores, processes, packaging, and software to support new products.

We believe that a continued commitment to research and development is essential to maintain product leadership and provide innovative new product offerings, and therefore we expect to continue to make significant future investments in research and development.

The increase in research and development expense for fiscal 2015 compared to fiscal 2014 was the result of increased headcount, masks costs, and outside service expenses primarily from the inclusion of Silicon Image research and development, partially offset by decreased variable compensation expense.

The increase in expense in fiscal 2014, compared to fiscal 2013, was primarily due to project-based outside engineering services, variable compensation and amortization costs, and increased engineering mask costs partially offset by lower facility costs.

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## Selling, general, and administrative expense

The composition of our selling, general and administrative expenses, including as a percentage of revenue, for fiscal years 2015, 2014, and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Selling, general, and administrative	\$97,349	\$73,527	\$67,144	32.4 %	9.5 %
Percentage of revenue	24.0	% 20.1	% 20.2	%	

Selling, general, and administrative expenses include costs for compensation and benefits related to selling, general, and administrative employees, commissions, depreciation, professional services, and travel expenses.

The increase in selling, general, and administrative expense for fiscal 2015 compared to fiscal 2014 was primarily due to increased headcount and outside service expenses driven primarily by the inclusion of Silicon Image, partially offset by decreased variable compensation expense.

The increase in expense in fiscal 2014 compared to fiscal 2013 was primarily due to increases in commissions as a result of improved revenue, increased stock compensation expense largely driven by performance based awards, and increased legal and professional services expenses partially offset by a decrease in variable compensation expense.

## Acquisition related charges

The composition of our acquisition related charges, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Acquisition related charges	\$22,450	\$—	\$—	100+%	—
Percentage of revenue	5.5	% —	% —	%	

Acquisition related charges includes severance and professional fees directly related to acquisitions. For fiscal 2015, Acquisition related charges were entirely attributable to our acquisition of Silicon Image in March 2015 and were comprised of professional services including legal, accounting, licenses and fees, and severance and stock compensation costs related to change of control payments to departing executives. As of January 2, 2016, charges related to the acquisition of Silicon Image have been substantially completed. There were no Acquisition related charges in fiscal 2014 or 2013.

## Restructuring charges

The composition of our restructuring charges, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Restructuring charges	\$19,239	\$17	\$388	100+%	(96 %)
Percentage of revenue	4.7	% —	% 0.1	%	

Restructuring charges include expenses resulting from reductions in our worldwide workforce and consolidation of our facilities, systems, and engineering tools.

In March 2015, our Board of Directors approved an internal restructuring plan (the "March 2015 Plan"), in connection with our acquisition of Silicon Image. The March 2015 Plan was designed to realize synergies from the acquisition by eliminating redundancies created as a result of combining the two companies. This included reductions in our worldwide workforce and consolidation of facilities, systems, and engineering tools. We expected the total cost of the March 2015 Plan to be in the range of approximately \$14.0 million to \$19.0 million and to be substantially completed by the end of second quarter of fiscal 2016. A substantial portion of the March 2015 Plan was completed in the first half of fiscal 2015 and the actual expenses have been in

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the estimated range. We expect a small amount of restructuring expense under this plan to continue into fiscal 2016, primarily related to charges associated with the consolidation of facilities.

In September 2015, we implemented a further reduction of our worldwide workforce (the "September 2015 Reduction") separate from the March 2015 Plan. The September 2015 Reduction was designed to resize the company in line with the market environment and to better balance our workforce with the long-term strategic needs of our business. We expect the total cost of the September 2015 Reduction to be in the range of approximately \$6.0 million to \$6.5 million and to be substantially completed by the end of the second quarter of 2016.

The increase in Restructuring charges for fiscal 2015 compared to fiscal 2014 was driven by the combination of both the March 2015 Plan and the September 2015 Reduction in fiscal 2015 versus only residual restructuring activity in fiscal 2014 related to past restructuring plans.

## Amortization of Acquired Intangible Assets

The composition of our Amortization of acquired intangible assets, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Amortization of acquired intangible assets	\$29,580	\$2,948	\$2,960	100+%	(0.4 )%
Percentage of revenue	7.3	% 0.8	% 0.9	%	

For fiscal 2015 compared to fiscal 2014, Amortization of acquired intangible assets increased primarily due to additional amortization expense from intangible assets acquired in connection with our acquisition of Silicon Image in March 2015. For fiscal 2014 compared to fiscal 2013, Amortization of acquired intangible assets was essentially flat as expense in both of these years derived from the same underlying intangible assets.

## Impairment of goodwill and intangible assets

The composition of our Impairment of goodwill and intangible assets, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Impairment of goodwill and intangible assets	\$21,655	\$—	\$—	100+%	—
Percentage of revenue	5.3	% —	% —	%	

For fiscal 2015, the Impairment of goodwill and intangible assets is related to Qterics, Inc., which was acquired in the March 2015 acquisition of Silicon Image. During the fourth quarter of fiscal 2015, we determined that we experienced an impairment indicator related to the long-lived assets of the Qterics operating segment. For purposes of testing for impairment, the Company operates as two reporting units: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure. Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment. Following this assessment, we concluded that goodwill and intangible assets had been impaired in the Qterics segment as of January 2, 2016. As a result, we recorded impairment charges amounting to \$21.7 million, or approximately 92% of the previous value of goodwill and intangible assets, in the Consolidated Statements of Operations for the year ended January 2, 2016, comprising \$12.7 million pertaining to goodwill, \$3.9 million

pertaining to developed technology, and \$5.1 million pertaining to customer relationships. The valuation was based on our best estimate of fair value as of year end. No impairment charges were recorded for the Core segment in fiscal 2015, and we had no impairment charges in either fiscal 2014 or 2013.

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## Interest Expense

The composition of our Interest expense, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Interest expense	(18,389 )	(172 )	(152 )	100+%	13.2 %
Percentage of revenue	(4.5 )%	— %	— %	%	

For fiscal 2015, the \$18.2 million increase in Interest expense from fiscal 2014 was primarily driven by the issuance of debt to partially fund the Silicon Image acquisition in fiscal 2015. The acquisition is further discussed in the Credit Arrangements section under Liquidity and Capital Resources. The interest expense related to this debt is comprised of contractual interest and amortization of original issue discount and debt issuance costs based on the effective interest method. Interest expense changed by an immaterial dollar amount between fiscal 2014 and 2013.

## Other (expense) income, net

The composition of our Other (expense) income, net, including as a percentage of revenue, for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2015	2014
Other (expense) income, net	(832 )	1,497	(148 )	(100+)%	(100+)%
Percentage of revenue	(0.2 )%	0.4 %	— %	%	

The \$0.8 million other expense in fiscal 2015 was primarily driven by a loss on sale of assets in the third quarter, combined with foreign exchange losses, as compared to the \$1.6 million other income in fiscal 2014, which resulted primarily from the realization of a gain on the sale of auction rate securities.

The increase in Other (expense) income, net in fiscal 2014, as compared to fiscal 2013, resulted primarily from the realization of a gain on the sale of auction rate securities in 2014 combined with reduced foreign exchange losses relative to fiscal 2013.

## Income taxes

The composition of our income taxes for fiscal years 2015, 2014 and 2013 was as follows:

(In thousands)	Year Ended			% Change in	
	January 2, 2016	January 3, 2015	December 28, 2013	2014	2013
(Benefit) provision for income taxes	\$32,540	\$(5,639 )	\$4,165	100+%	(100+)%

In the first quarter of 2015, we completed the acquisition of Silicon Image, Inc. At the time of the acquisition, we evaluated the combined entity's net deferred income taxes, which included an assessment of the cumulative income or loss over the prior three-year period and future periods, to determine if a valuation allowance is required. After considering the impact of the acquisition including interest expense and other restructuring expenses, we recorded a valuation allowance on our net federal and state deferred tax assets.



During the fourth quarter of 2014, we concluded that it was more-likely-than-not that we would be able to realize the benefit of a portion of our remaining deferred tax assets, resulting in a tax benefit of \$11.5 million. We based this conclusion on improved operating results over the previous two years and our expectations about generating taxable income in the foreseeable future. We exercised significant judgment and considered estimates about our ability to generate revenue, gross profits, operating income and taxable income in future periods under our global tax structure in reaching this decision.

We are not currently paying federal income taxes and do not expect to pay such taxes until the benefits of our tax net operating loss and credit carryforwards are fully utilized. We expect to pay a nominal amount of state income tax. We accrue interest and penalties related to uncertain tax positions in the provision for income taxes. We are paying foreign income taxes, which are primarily related to the cost of operating offshore research and development, marketing and sales subsidiaries.

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The inherent uncertainties related to the geographical distribution and relative level of profitability among various high and low tax jurisdictions make it difficult to estimate the impact of the global tax structure on our future effective tax rate.

### Equity in net loss of an unconsolidated affiliate

As of January 2, 2016, we held a 22.7% preferred stock ownership interest in a privately-held company that designs human-computer interaction technology for a total investment of \$5.0 million. Due to the level of our ownership interest and after considering the nature of our participation in the management and interaction with the investee, we have determined that we have the ability to exert significant influence on the investee. Accordingly, we have accounted for the investment using the equity method and have recognized our proportionate share of the investee's net loss in the Consolidated Statements of Operations for the year ended January 2, 2016. Through January 2, 2016, we have reduced the value of our investment by approximately \$0.5 million, representing our proportionate share of the privately-held company's net loss.

### Net loss attributable to noncontrolling interest

With the acquisition of Silicon Image on March 10, 2015, we assumed a redeemable noncontrolling interest which comprised a 7% investment in Qterics Inc. amounting to \$7.0 million invested by the noncontrolling interest holder initially entered into on December 4, 2014. For the year ended January 2, 2016, the net loss attributable to the noncontrolling interest amounted to \$0.5 million. This amount has been presented as an offset in arriving at Net (loss) income attributable to stockholders in the Consolidated Statements of Operations and as a reduction to additional-paid-in-capital as the carrying value of the noncontrolling interest had not been previously increased by earnings sufficient to absorb this share of loss.

During the fourth quarter of fiscal 2015, we entered into an agreement with the noncontrolling interest holder pursuant to which the entire interest was redeemed. Net (loss) income occurring after this redemption was fully attributable to stockholders.

### Liquidity and Capital Resources

The following sections discuss the effects of changes in our Consolidated Balance Sheets and the effects of our share repurchase program, credit arrangements, and contractual obligations on our liquidity and capital resources, as well as our non-GAAP measures.

We classify our marketable securities as short-term based on their nature and availability for use in current operations. Our cash equivalents and short-term marketable securities consist primarily of high quality, investment-grade securities.

We have historically financed our operating and capital resource requirements through cash flows from operations. Cash provided by or used in operating activities will fluctuate from period to period due to fluctuations in operating results, the timing and collection of accounts receivable, and required inventory levels, among other things.

We believe that our financial resources will be sufficient to meet our working capital needs through the next 12 months. As of January 2, 2016, we did not have significant long-term commitments for capital expenditures. In the future, and to the extent our Credit Agreement permits, we may continue to consider acquisition opportunities to further extend our product or technology portfolios and further expand our product offerings. In connection with funding capital expenditures, completing other acquisitions, securing additional wafer supply, or increasing our

working capital, we may seek to obtain equity or additional debt financing, or advance purchase payments or similar arrangements with wafer manufacturers. We may also need to obtain equity or additional debt financing if we experience downturns or cyclical fluctuations in our business that are more severe or longer than we anticipated when determining our current working capital needs, which financing may now be more difficult to obtain in light of our indebtedness related to the Credit Agreement.

Liquidity

Cash and cash equivalents and Short-term marketable securities

(In thousands)	January 2, 2016	January 3, 2015	\$ Change
Cash and cash equivalents	\$84,606	\$115,611	\$(31,005 )
Short-term marketable securities	17,968	139,233	(121,265 )
Total Cash and cash equivalents and Short-term marketable securities	\$102,574	\$254,844	\$(152,270 )

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As of January 2, 2016, we had total Cash and cash equivalents and Short-term marketable securities of \$102.6 million, of which approximately \$42.4 million in Cash and cash equivalents was held by our foreign subsidiaries. We manage our global cash requirements considering (i) available funds among the subsidiaries through which we conduct business, (ii) the geographic location of our liquidity needs, and (iii) the cost to access international cash balances. The repatriation of non-U.S. earnings may have adverse tax consequences as we may be required to pay and record income tax expense on those funds to the extent they were previously considered permanently reinvested. As of January 2, 2016, we could access all cash held by our foreign subsidiaries without incurring significant additional expense.

The decrease in Cash and cash equivalents and Short-term investments of \$152.3 million as compared to January 3, 2015, was primarily the result of \$22.9 million of cash used in operations, \$431.1 million in cash paid to acquire Silicon Image, net of cash acquired, capital expenditures of \$18.2 million, and cash paid for software licenses of \$9.5 million, offset by \$346.5 million of net proceeds from the issuance of long-term debt in connection with the acquisition.

Accounts receivable, net (In thousands)	January 2, 2016	January 3, 2015	\$Change	%Change	
Accounts receivable, net	\$88,471	\$62,372	\$26,099	41.8	%
Days sales outstanding - Overall	80	67	13		
Days sales outstanding - Product	70	67	3		
Days sales outstanding - Licensing and services	149	n/a	n/a		

Accounts receivable, net increased \$26.1 million or 42% as of January 2, 2016 compared to January 3, 2015, driven by the additional Accounts receivable and Revenue assumed in the Silicon Image acquisition. As a result, days sales outstanding at January 2, 2016 was 80, an increase of 13 days from 67 days at January 3, 2015. Days sales outstanding at January 2, 2016 related to Product revenue was 70, an increase of 3 days from 67 days at January 3, 2015. Days outstanding at January 2, 2016 related to Licensing and services revenue was 149 driven by inclusion of gross receivables for HDMI and MHL royalties while revenue is reported net of Founder's share.

Inventories (In thousands)	January 2, 2016	January 3, 2015	\$Change	%Change	
Inventories	\$75,896	\$64,925	\$10,971	16.9	%
Months of inventory on hand	4.8	5.2	(0.4	)	

Inventory increased \$11.0 million, or 16.9%, as of January 2, 2016 compared to January 3, 2015 primarily due to the acquisition of Silicon Image in March 2015 accounting for \$15.5 million of the increase, which was partially offset by a reduction of safety stocks. Months of inventory on hand decreased to 4.8 months at the end of fiscal 2015 from 5.2 months at the end of fiscal 2014.

## Share Repurchase Program

On March 3, 2014, our Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock could be repurchased from time to time. The duration of the repurchase program was twelve months. Under this program during fiscal 2014, approximately 1.9 million shares were repurchased for \$13.1 million. The 2014 program completed during the first quarter of fiscal 2015, during which approximately 1.1 million shares were repurchased for approximately \$7.0 million. All shares repurchased under the 2014 program were retired by the end of the fiscal year in which they were repurchased. All repurchases were open market transactions funded from available working capital.

On February 27, 2013, our Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock may be repurchased from time to time. The duration of the repurchase program was twelve months. Under this program during fiscal 2013, approximately 0.8 million shares were repurchased for \$3.7 million. At December 28, 2013, we had approximately \$16.3 million remaining under the approved program. The 2013 program completed during the first quarter of fiscal 2014. No shares were repurchased during those three months. All shares repurchased under the 2013 program were retired by December 28, 2013. All repurchases were open market transactions funded from available working capital.

#### Credit Arrangements

On March 10, 2015, we entered into a secured credit agreement (the "Credit Agreement") with Jefferies Finance, LLC and certain other lenders for purposes of funding, in part, our acquisition of Silicon Image. The Credit Agreement provided for a \$350 million term loan (the "Term Loan") maturing on March 10, 2021 (the "Term Loan Maturity Date"). We received \$346.5 million net of an original issue discount of \$3.5 million and we paid debt issuance costs of \$8.3 million. The Term Loan bears variable

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interest equal to the LIBOR, subject to a 1.00% floor, plus a spread of 4.25%. The current effective interest rate on the Term Loan is 6.14%.

The Term Loan is payable through a combination of quarterly installments of approximately \$0.9 million, which began on July 4, 2015, and annual excess cash flow payments, as defined in the Credit Agreement, which are due 95 days after the last day of our fiscal year. Currently, no such annual excess cash flow payment is required for fiscal 2016 under the Credit Agreement. Payments could also become due upon certain issuances of additional indebtedness and certain asset dispositions, with any remaining outstanding principal amount due and payable on the Term Loan Maturity Date. In the fourth quarter of 2015, we signed a contract to sell IP and expect to receive payment in 2016. Because the Credit Agreement requires us to make repayment on the debt, related to such asset dispositions, as payments are received, a debt repayment of \$7.0 million will become due in fiscal 2016 and as such has been included in Current portion of long-term debt on our Consolidated Balance Sheets. The percentage of excess cash flow we are required to pay ranges from 0% to 75%, depending on our leverage and other factors as defined in the Credit Agreement. Currently, the Credit Agreement would require a 75% excess cash flow payment. The Credit Agreement also contains informational covenants and certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and indebtedness. The Credit Agreement does not contain financial covenants.

As of January 2, 2016, we had no significant long-term purchase commitments for capital expenditures.

## Contractual Cash Obligations

The following table summarizes our contractual cash obligations at January 2, 2016:

(In thousands)

Fiscal year	Operating leases (1)	Long-term Debt (2)
2016	\$8,964	\$28,527
2017	9,025	71,889
2018	6,859	94,448
2019	4,587	113,697
2020	4,533	71,167
Thereafter	23,541	21,669
	\$57,509	\$401,397

(1) Certain of our facilities and equipment are leased under operating leases, which expire at various times through 2026.

(2) Cash payments due for long-term debt include estimated interest payments, which are based on outstanding principal amounts, currently effective interest rates as of January 2, 2016, timing of scheduled payments and the debt term. See Liquidity section of Item 7 for further discussion pertaining to our Credit Arrangements.

Our significant operating leases are for our facilities in Hillsboro and Portland Oregon; San Jose and Sunnyvale, California; Muntinlupa City, Philippines; and Shanghai, China. In November 2014 we entered into a lease for a new corporate headquarters facility in Portland, Oregon which expires in March 2025. Annual rental costs are estimated at \$0.6 million with average annual increases of approximately 5%. We commenced operations at the new headquarters location in March 2015. In November 2014, we sold the property where our headquarters was formerly located in Hillsboro, Oregon for net proceeds of \$14.6 million. We leased back the majority of this facility from November 2014 until March 2015, after which we have leased a smaller portion of the facility until November 2022. Annual rental costs are estimated at \$0.5 million with 3% annual increases.

Our leases in San Jose and Sunnyvale, California expire September 2026 and June 2018 with total annual rental costs estimated to be \$2.2 million and \$1.7 million and annual increases approximately 3% and 7%, respectively. Our leases in Muntinlupa City, Philippines expire in December 2016, April 2017 and May 2017, with total annual rental costs estimated to be \$0.4 million, \$0.1 million and \$0.1 million, respectively, and annual increases approximately 3% for all three leases. Our lease in Shanghai expires in May 2018, with remaining rental costs estimated to be \$4.7 million. Leasehold improvements are amortized over the shorter of the non-cancelable lease term or the estimated useful life of the assets.

#### New Accounting Pronouncements

The information contained under the heading "New Accounting Pronouncements" in Note 1 - Nature of Operations and Significant Accounting Policies to our Consolidated Financial Statements in Part II, Item 8 is incorporated by reference into this Part II, Item 7.

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## Off-Balance Sheet Arrangements

As of January 2, 2016, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

## Non-GAAP Financial Measures

To supplement our consolidated financial results presented in accordance with U.S. GAAP, we also present non-GAAP financial measures which are adjusted from the most directly comparable U.S. GAAP financial measures. The non-GAAP measures set forth below exclude charges and adjustments primarily related to stock-based compensation, restructuring charges, acquisition-related charges, amortization of acquired intangible assets, impairment of goodwill and intangible assets, and purchase accounting adjustments. Management believes that these non-GAAP financial measures reflect an additional and useful way of viewing aspects of our performance that, when viewed in conjunction with our U.S. GAAP results, provide a more comprehensive understanding of the various factors and trends affecting our business and operations. In particular, investors may find the non-GAAP measures useful in reviewing our operating performance without the significant accounting charges resulting from the Silicon Image acquisition, alongside the comparably adjusted prior year results. Management also uses these non-GAAP measures for strategic and business decision-making, internal budgeting, forecasting, and resource allocation processes. In addition, these non-GAAP financial measures facilitate management's internal comparisons to our historical operating results and comparisons to competitors' operating results. The table below summarizes our key non-GAAP financial measures:

(In thousands, except per share data) (unaudited)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Non-GAAP Revenue	\$411,153	\$366,127	\$332,525
Non-GAAP Cost of products sold	180,059	159,125	153,654
Non-GAAP Gross margin	231,094	207,002	178,871
Non-GAAP Operating expenses	218,283	149,619	139,215
Non-GAAP Income from operations	12,811	57,383	39,656
Non-GAAP (Loss) income before income taxes and equity in net loss of an unconsolidated affiliate	(6,410 )	58,708	39,356
Non-GAAP Income tax expense	8,339	1,599	1,370
Non-GAAP Net (loss) income attributable to stockholders	\$(14,989 )	\$57,109	\$37,986
Non-GAAP Net (loss) income per share - Basic	\$(0.13 )	\$0.49	\$0.33
Non-GAAP Net (loss) income per share - Diluted	\$(0.13 )	\$0.47	\$0.32

Pursuant to the requirements of Regulation S-K and to make clear to our investors the adjustments we make to U.S. GAAP measures, we have provided the following reconciliations of the non-GAAP measures to the most directly comparable U.S. GAAP financial measures.



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## Reconciliation of U.S. GAAP to Non-GAAP Financial Measures

(In thousands, except per share amounts) (unaudited)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
GAAP Revenue	\$405,966	\$366,127	\$332,525
Acquisition related deferred revenue effect (1)	5,187	—	—
Non-GAAP Revenue	\$411,153	\$366,127	\$332,525
GAAP Cost of products sold	\$186,057	\$159,940	\$154,281
Acquisition related deferred cost of sales effect (2)	1,496	—	—
Acquisition related inventory fair value effect (3)	(6,078 )	—	—
Stock-based compensation expense - gross margin	(1,416 )	(815 )	(627 )
Non-GAAP Cost of products sold	\$180,059	\$159,125	\$153,654
GAAP Gross margin	\$219,909	\$206,187	\$178,244
Acquisition related net deferred revenue effect (1) (2)	3,691	—	—
Acquisition related inventory fair value effect (3)	6,078	—	—
Stock-based compensation expense - gross margin	1,416	815	627
Non-GAAP Gross margin	\$231,094	\$207,002	\$178,871
Non-GAAP Gross margin %	56.2 %	56.5 %	53.8 %
GAAP Operating expenses	\$327,141	\$164,571	\$151,458
Restructuring charges	(19,239 )	(17 )	(388 )
Acquisition related charges (4)	(22,450 )	—	—
Amortization of acquired intangible assets	(29,580 )	(2,948 )	(2,960 )
Impairment of goodwill and intangible assets	(21,655 )	—	—
Stock-based compensation expense - operations	(15,934 )	(11,987 )	(8,895 )
Non-GAAP Operating expenses	\$218,283	\$149,619	\$139,215
GAAP (Loss) income from operations	\$(107,232 )	\$41,616	\$26,786
Acquisition related net deferred revenue effect (1) (2)	3,691	—	—
Acquisition related inventory fair value effect (3)	6,078	—	—
Stock-based compensation expense - gross margin	1,416	815	627
Restructuring charges	19,239	17	388
Acquisition related charges (4)	22,450	—	—
Amortization of acquired intangible assets	29,580	2,948	2,960
Impairment of goodwill and intangible assets	21,655	—	—
Stock-based compensation expense - operations	15,934	11,987	8,895

Non-GAAP Income from operations	\$12,811	\$57,383	\$39,656
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(1) Fair value adjustment to deferred revenue from purchase accounting

(2) Fair value adjustment to deferred cost of sales from purchase accounting

(3) Fair value adjustment for inventory step-up from purchase accounting

(4) Includes stock-based compensation and severance costs related to change in control

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## Reconciliation of U.S. GAAP to Non-GAAP Financial Measures

(In thousands, except per share amounts) (unaudited)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
GAAP (Loss) income before income taxes and equity in net loss of an unconsolidated affiliate	\$(126,453 )	\$42,941	\$26,486
Acquisition related net deferred revenue effect (1) (2)	3,691	—	—
Acquisition related inventory fair value effect (3)	6,078	—	—
Stock-based compensation expense - gross margin	1,416	815	627
Restructuring charges	19,239	17	388
Acquisition related charges (4)	22,450	—	—
Amortization of acquired intangible assets	29,580	2,948	2,960
Impairment of goodwill and intangible assets	21,655	—	—
Stock-based compensation expense - operations	15,934	11,987	8,895
Non-GAAP (Loss) income before income taxes and equity in net loss of an unconsolidated affiliate	\$(6,410 )	\$58,708	\$39,356
GAAP Income tax expense (benefit)	\$32,540	\$(5,639 )	\$4,165
Non-cash income tax expense adjustment (5)	(24,201 )	7,238	(2,795 )
Non-GAAP Income tax expense	\$8,339	\$1,599	\$1,370
GAAP Net (loss) income attributable to stockholders	\$(159,233 )	\$48,580	\$22,321
Acquisition related net deferred revenue effect (1) (2)	3,691	—	—
Acquisition related inventory fair value effect (3)	6,078	—	—
Stock-based compensation expense - gross margin	1,416	815	627
Restructuring charges	19,239	17	388
Acquisition related charges (4)	22,450	—	—
Amortization of acquired intangible assets	29,580	2,948	2,960
Impairment of goodwill and intangible assets	21,655	—	—
Stock-based compensation expense - operating expense	15,934	11,987	8,895
Non-cash Income tax expense (benefit)	24,201	(7,238 )	2,795
Non-GAAP Net (loss) income attributable to stockholders	\$(14,989 )	\$57,109	\$37,986

- (1) Fair value adjustment to deferred revenue from purchase accounting
- (2) Fair value adjustment to deferred cost of sales from purchase accounting
- (3) Fair value adjustment for inventory step-up from purchase accounting
- (4) Includes stock-based compensation and severance costs related to change in control
- (5) Reverses the change in tax valuation allowance and aligns tax expense to cash taxes paid

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## Reconciliation of U.S. GAAP to Non-GAAP Financial Measures

(In thousands, except per share amounts) (unaudited)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
GAAP Net (loss) income per share - Basic	\$(1.36 )	\$0.41	\$0.19
Cumulative effect of Non-GAAP adjustments	1.23	0.08	0.14
Non-GAAP Net (loss) income per share - Basic	\$(0.13 )	\$0.49	\$0.33
GAAP Net (loss) income per share - Diluted	\$(1.36 )	\$0.40	\$0.19
Cumulative effect of Non-GAAP adjustments	1.23	0.07	0.13
Non-GAAP Net (loss) income per share - Diluted	\$(0.13 )	\$0.47	\$0.32
Shares used in per share calculations:			
Basic	117,387	117,708	115,701
Diluted - non-GAAP (6)	117,387	120,245	117,081

(6) Non-GAAP diluted shares calculated using GAAP treasury stock method, except in a loss position, in which case diluted shares equal basic shares.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

## Foreign Currency Exchange Rate Risk

A portion of our silicon wafer and other purchases are denominated in Japanese yen, we bill our Japanese customers in yen, and we collect a Japanese consumption tax refund in yen. As a result of this, as well as having various international subsidiary and branch operations, our financial position and results of operations are subject to foreign currency exchange rate risk.

We mitigate the resulting foreign currency exchange rate exposure by entering into foreign currency forward exchange contracts. Although these hedges mitigate our foreign currency exchange rate exposure from an economic perspective, they were not designated as "effective" hedges under U.S. GAAP and as such are adjusted to fair value through Other (expense) income, net. We do not engage in speculative trading in any financial or capital market.

At January 2, 2016 and January 3, 2015, we had forward contracts for Japanese yen of \$3.3 million and \$4.2 million, respectively. The net fair value of these contracts was unfavorable by less than \$0.1 million at January 2, 2016 and favorable by approximately \$0.4 million at January 3, 2015. A hypothetical 10% unfavorable exchange rate change in the yen against the U.S. dollar would have resulted in an unfavorable change in net fair value of \$0.4 million and less than \$0.1 million at January 2, 2016 and January 3, 2015, respectively. Changes in fair value resulting from foreign exchange rate fluctuations would be substantially offset by the change in value of the underlying hedged transactions.

## Interest Rate Risk

At January 2, 2016, we had \$347.4 million outstanding on the \$350.0 million gross term loan outstanding under our Credit Agreement, with a variable contractual interest rate based on the LIBOR, subject to a 1.00% floor, plus a spread of 4.25%. A hypothetical 10% increase in the LIBOR would not have increased the LIBOR above this 1.00% floor used in the interest rate calculation, and thus would not have had an impact on Interest expense for the twelve month period ended January 2, 2016.



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Item 8. Financial Statements and Supplementary Data

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CONSOLIDATED BALANCE SHEETS

(In thousands, except share and par value data)	January 2, 2016	January 3, 2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$84,606	\$115,611
Short-term marketable securities	17,968	139,233
Accounts receivable, net of allowance for doubtful accounts	88,471	62,372
Inventories	75,896	64,925
Prepaid expenses and other current assets	18,922	16,281
Total current assets	285,863	398,422
Property and equipment, less accumulated depreciation of \$118,943 at January 2, 2016 and \$154,078 at January 3, 2015	51,852	27,796
Intangible assets, net of amortization	162,583	9,537
Goodwill	267,549	44,808
Deferred income taxes	578	20,105
Other long-term assets	17,495	9,862
Total assets	\$785,920	\$510,530
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses (includes restructuring)	\$74,298	\$32,171
Accrued payroll obligations	9,463	13,629
Current portion of long-term debt	7,557	—
Deferred income and allowances on sales to sell-through distributors	17,866	14,946
Deferred licensing and services revenue	1,993	—
Total current liabilities	111,177	60,746
Long-term debt	330,870	—
Other long-term liabilities	38,353	8,809
Total liabilities	480,400	69,555
Commitments and contingencies (Notes 13 and 20)		
Stockholders' equity:		
Preferred stock, \$.01 par value, 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, \$.01 par value, 300,000,000 shares authorized; 118,651,000 shares issued and outstanding as of January 2, 2016 and 117,288,000 shares issued and outstanding as of January 3, 2015	1,187	1,173
Additional paid-in capital	660,089	635,299
Accumulated deficit	(352,846)	(193,613)
Accumulated other comprehensive loss	(2,910)	(1,884)
Total stockholders' equity	305,520	440,975
Total liabilities and stockholders' equity	\$785,920	\$510,530

The accompanying notes are an integral part of these Consolidated Financial Statements.





Table of ContentsLATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Revenue			
Product	\$369,200	\$366,127	\$332,525
Licensing and services	36,766	—	—
Total revenue	405,966	366,127	332,525
Costs and expenses:			
Cost of product revenue	184,914	159,940	154,281
Cost of licensing and services revenue	1,143	—	—
Research and development	136,868	88,079	80,966
Selling, general, and administrative	97,349	73,527	67,144
Acquisition related charges	22,450	—	—
Restructuring charges	19,239	17	388
Amortization of acquired intangible assets	29,580	2,948	2,960
Impairment of goodwill and intangible assets	21,655	—	—
	513,198	324,511	305,739
(Loss) income from operations	(107,232)	) 41,616	26,786
Interest expense	(18,389)	) (172)	) (152)
Other (expense) income, net	(832)	) 1,497	(148)
(Loss) income before income taxes and equity in net loss of an unconsolidated affiliate	(126,453)	) 42,941	26,486
Income tax expense (benefit)	32,540	(5,639)	) 4,165
Equity in net loss of an unconsolidated affiliate, net of tax	(492)	) —	—
Net (loss) income	(159,485)	) 48,580	22,321
Net loss attributable to noncontrolling interest	252	—	—
Net (loss) income attributable to stockholders	\$(159,233)	) \$48,580	\$22,321
Net (loss) income per share			
Basic	\$(1.36)	) \$0.41	\$0.19
Diluted	\$(1.36)	) \$0.40	\$0.19
Shares used in per share calculations:			
Basic	117,387	117,708	115,701
Diluted	117,387	120,245	117,081

The accompanying notes are an integral part of these Consolidated Financial Statements

Table of ContentsLATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

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(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Net (loss) income	\$(159,485	)	\$48,580
Other comprehensive (loss) income:			\$22,321
Unrealized (loss) gain related to marketable securities, net	(69	)	(373
Less: Reclassification adjustment for losses included in other (expense) income, net	442		170
Realized gain on sale of auction rate securities, previously unrealized, net of tax	—	(1,147	)
Translation adjustment loss, net of tax	(1,243	)	(330
Defined benefit pension, net of actuarial losses	(156	)	(59
Comprehensive (loss) income	(160,511	)	46,841
Less: Comprehensive loss attributable to noncontrolling interest	252		—
Comprehensive (loss) income attributable to stockholders	\$(160,259	)	\$46,841
			\$22,437

The accompanying notes are an integral part of these Consolidated Financial Statements

Table of ContentsLATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(In thousands, except par value data)	Common Stock (\$01 par value)		Paid-in capital	Treasury stock	Accumulated deficit	Accumulated other comprehensive loss	Total
	Shares	Amount					
Balances, December 29, 2012	115,500	\$ 1,155	\$621,170	\$—	\$(264,514 )	\$(261 )	\$357,550
Net income attributable to stockholders for 2013	—	—	—	—	22,321	—	22,321
Unrealized gain related to marketable securities, net of tax	—	—	—	—	—	284	284
Recognized loss on redemption of marketable securities, previously unrealized	—	—	—	—	—	337	337
Translation adjustments, net of tax	—	—	—	—	—	(505 )	(505 )
Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs, net of tax	1,580	16	2,316	—	—	—	2,332
Stock repurchase	—	—	—	(6,161 )	—	—	(6,161 )
Retirement of treasury stock	(1,409 )	(14 )	(6,147 )	6,161	—	—	—
Stock-based compensation expense related to options, ESPP and RSUs	—	—	9,522	—	—	—	9,522
Balances, December 28, 2013	115,671	\$ 1,157	\$626,861	\$—	\$(242,193 )	\$(145 )	\$385,680
Net income attributable to stockholders for 2014	—	—	—	—	48,580	—	48,580
Unrealized loss related to marketable securities, net of tax	—	—	—	—	—	(373 )	(373 )
Realized gain on sale of auction rate securities, previously unrealized, net of tax	—	—	—	—	—	(1,147 )	(1,147 )
Recognized loss on redemption of marketable securities, previously unrealized	—	—	—	—	—	170	170
Translation adjustments, net of tax	—	—	—	—	—	(330 )	(330 )
Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs, net of tax	3,560	35	8,706	—	—	—	8,741
Stock repurchase	—	—	—	(13,089)	—	—	(13,089 )
Retirement of treasury stock	(1,943 )	(19 )	(13,070 )	13,089	—	—	—
Stock-based compensation expense related to options, ESPP and RSUs	—	—	12,802	—	—	—	12,802
	—	—	—	—	—	(59 )	(59 )

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Defined benefit pension, net of actuarial losses							
Balance, January 3, 2015	117,288	\$ 1,173	\$ 635,299	\$—	\$(193,613 )	\$(1,884 )	\$ 440,975
Net loss attributable to stockholders for 2015	—	—	—	—	(159,233 )	—	(159,233 )
Unrealized loss related to marketable securities, net of tax	—	—	—	—	—	(69 )	(69 )
Recognized loss on redemption of marketable securities, previously unrealized	—	—	—	—	—	442	442
Translation adjustments, net of tax	—	—	—	—	—	(1,243 )	(1,243 )
Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs, net of tax	2,415	25	2,161	—	—	—	2,186
Stock repurchase	—	—	—	(6,970 )	—	—	(6,970 )
Retirement of treasury stock	(1,052 )	(11 )	(6,959 )	6,970	—	—	—
Stock-based compensation expense related to options, ESPP and RSUs	—	—	18,396	—	—	—	18,396
Fair value of partially vested stock options and RSUs assumed in acquisition	—	—	5,139	—	—	—	5,139
Defined benefit pension, net of actuarial losses	—	—	—	—	—	(156 )	(156 )
Redemption of noncontrolling interest	—	—	6,053	—	—	—	6,053
Balance, January 2, 2016	118,651	\$ 1,187	\$ 660,089	\$—	\$(352,846 )	\$(2,910 )	\$ 305,520

The accompanying notes are an integral part of these Consolidated Financial Statements

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CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Cash flows from operating activities:			
Net (loss) income	\$(159,485 )	\$48,580	\$ 22,321
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:			
Depreciation and amortization	60,808	22,248	20,807
Impairment of goodwill and intangible assets	21,655	—	—
Amortization of debt issuance costs and discount	2,835	—	—
Change in deferred income tax provision	21,367	(7,222 )	2,358
Loss (gain) on sale or maturity of marketable securities	333	(1,698 )	—
Stock-based compensation expense	18,396	12,802	9,522
Equity in net loss of an unconsolidated affiliate	492	—	—
Changes in assets and liabilities:			
Accounts receivable, net	4,578	(12,287 )	(3,138 )
Inventories	9,868	(18,703 )	(2,028 )
Prepaid expenses and other assets	(6,710 )	(3,200 )	(1,339 )
Accounts payable and accrued expenses (includes restructuring)	6,553	(7,819 )	3,549
Accrued payroll obligations	(10,202 )	(30 )	7,510
Income taxes payable	1,749	—	—
Deferred income and allowances on sales to sell-through distributors	2,920	7,451	(3,058 )
Deferred licensing and services revenue	1,958	—	—
Net cash (used in) provided by operating activities	(22,885 )	40,122	56,504
Cash flows from investing activities:			
Proceeds from sales or maturities of marketable securities	142,956	101,861	67,318
Purchase of marketable securities, net	(15,982 )	(139,792 )	(103,861 )
Proceeds from sale of auction rate securities	—	5,488	—
Cash paid for business acquisition, net of cash acquired	(431,068 )	—	—
Proceeds from sale of land and building	—	14,625	—
Capital expenditures, net	(18,209 )	(10,267 )	(12,500 )
Cash paid for a non-marketable equity-method investment	(5,000 )	—	—
Cash paid for software licenses	(9,515 )	(6,059 )	(7,353 )
Net cash used in investing activities	(336,818 )	(34,144 )	(56,396 )
Cash flows from financing activities:			
Net share settlement upon issuance of restricted stock units	(3,493 )	(3,427 )	(744 )
Purchase of treasury stock	(6,970 )	(13,089 )	(6,161 )
Net proceeds from issuance of common stock	5,679	12,168	3,076
Net proceeds from issuance of long-term debt	346,500	—	—
Cash paid for debt issuance costs	(8,283 )	—	—
Repayment of debt	(2,625 )	—	—
Cash paid to redeem noncontrolling interest	(867 )	—	—
Net cash provided by (used in) financing activities	329,941	(4,348 )	(3,829 )
Effect of exchange rate change on cash	(1,243 )	(329 )	(505 )
Net (decrease) increase in cash and cash equivalents	(31,005 )	1,301	(4,226 )
Beginning cash and cash equivalents	115,611	114,310	118,536

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Ending cash and cash equivalents	\$84,606	\$115,611	\$114,310
Supplemental cash flow information:			
Change in unrealized (loss) gain related to marketable securities, net of tax, included in Accumulated other comprehensive loss	\$(69)	) \$(373)	) \$284
Income taxes paid, net of refunds	\$8,339	\$1,599	\$1,370
Interest paid	\$11,071	\$—	\$—
Accrued purchases of plant and equipment	\$799	\$(34)	) \$122
Transfer of residual temporary equity to additional paid-in capital on redemption of noncontrolling interest	\$6,773	\$—	\$—

The accompanying notes are an integral part of these Consolidated Financial Statements

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LATTICE SEMICONDUCTOR CORPORATION  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Nature of Operations and Significant Accounting Policies

Nature of Operations

Lattice Semiconductor (“Lattice,” the “Company,” “we,” “us,” or “our”) is a Delaware company that engages in smart connectivity solutions, providing intellectual property and low-power, small form-factor devices that enable global customers to quickly deliver innovative and differentiated cost and power efficient products. The Company's broad end-market exposure extends from consumer electronics to industrial equipment, communications infrastructure, and licensing.

We do not manufacture our own silicon wafers. We maintain strategic relationships with large semiconductor foundries to source our finished silicon wafers in Asia. In addition, all of our assembly operations and most of our test and logistics operations are performed by outside suppliers in Asia. We perform certain test operations and reliability and quality assurance processes internally.

We place substantial emphasis on new product development and believe that continued investment in this area is required to maintain and improve our competitive position. Our product development activities emphasize new proprietary products, advanced packaging, enhancement of existing products and process technologies, and improvement of software development tools. Research and development activities occur primarily in: Hillsboro, Oregon; San Jose and Sunnyvale, California; Shanghai, China; Alabang, Philippines; and Hyderabad, India.

Fiscal Reporting Period

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our fiscal 2015 was a 52-week year that ended January 2, 2016. Our fiscal 2014 was a 53-week year, with a 14-week fourth quarter, that ended January 3, 2015. Our fiscal 2013, 2012, and 2011 were 52-week years that ended December 28, 2013, December 29, 2012, December 31, 2011, respectively. Our fiscal 2016 will be a 52-week year and will end on December 31, 2016. All references to quarterly or yearly financial results are references to the results for the relevant fiscal period.

Principles of Consolidation and Presentation

The accompanying Consolidated Financial Statements include the accounts of Lattice and its subsidiaries after the elimination of all intercompany balances and transactions. Our results for the year ended January 2, 2016 include the results of Silicon Image for the approximately 10-month period from March 11, 2015 through January 2, 2016. Results presented for prior fiscal years are those historically reported for Lattice only. Certain balances in prior fiscal years have been reclassified to conform to the presentation adopted in the current year. Interest expense has been reclassified to be reported separately from Other (expense) income, net.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, goodwill (including the assessment of reporting unit), intangible assets, current and deferred income taxes, accrued liabilities (including restructuring charges and bonus arrangements), deferred income and allowances on sales to sell-through distributors, disclosure of



contingent assets and liabilities at the date of the financial statements, amounts used in acquisition valuations and purchase accounting, and the reported amounts of product revenue, licensing and services revenue, and expenses during the fiscal periods presented. Actual results could differ from those estimates.

#### Cash Equivalents and Marketable Securities

We consider all investments that are readily convertible into cash and have original maturities of three months or less, to be cash equivalents. Cash equivalents consist primarily of highly liquid investments in time deposits or money market accounts and are carried at cost. We account for marketable securities as available-for-sale investments, as defined by U.S. GAAP, and record unrealized gains or losses to Accumulated other comprehensive loss on our Consolidated Balance Sheets, unless losses are considered other than temporary, in which case, those are recorded directly to the Consolidated Statements of Operations and Statements of Comprehensive (Loss) Income. Deposits with financial institutions at times exceed Federal Deposit Insurance Corporation insurance limits.

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### Fair Value of Financial Instruments

We invest in various financial instruments including corporate and government bonds, notes, and commercial paper. In the past we have also invested in auction rate securities. We value these instruments at their fair value and monitor the portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other than temporary, we record an impairment charge and establish a new carrying value. We assess other than temporary impairment of marketable securities in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 820, “Fair Value Measurements.” The framework under the provisions of ASC 820 establishes three levels of inputs that may be used to measure fair value. Each level of input has different levels of subjectivity and difficulty involved in determining fair value.

Level 1 instruments are characterized generally by quoted prices for identical assets or liabilities in active markets. Therefore, determining fair value for Level 1 instruments generally does not require significant management judgment, and the estimation is not difficult.

Level 2 instruments include inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices for identical instruments in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 instruments include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Our auction rate securities were classified as Level 3 instruments. Management used a combination of the market and income approach to derive the fair value of auction rate securities, which included third party valuation results, investment broker provided market information and available information on the credit quality of the underlying collateral. As a result, the determination of fair value for Level 3 instruments requires significant management judgment and subjectivity. Our Level 3 instruments were classified as Long-term marketable securities on our Consolidated Balance Sheets and were entirely made up of auction rate securities that consisted of student loan asset-backed notes. During fiscal 2014 we sold our Level 3 instruments, which consisted entirely of auction rate securities.

### Foreign Exchange and Translation of Foreign Currencies

We have international subsidiary and branch operations. In addition, a portion of our silicon wafer and other purchases are denominated in Japanese yen, we bill certain Japanese customers in yen and collect a Japanese consumption tax refund in yen. Gains or losses from foreign exchange rate fluctuations on balances denominated in foreign currencies are reflected in Other (expense) income, net. Realized and unrealized gains or losses on foreign currency transactions were not significant for the periods presented. We translate accounts denominated in foreign currencies in accordance with ASC 830, “Foreign Currency Matters,” using the current rate method under which asset and liability accounts are translated at the current rate, while stockholders' equity accounts are translated at the appropriate historical rates, and revenue and expense accounts are translated at average monthly exchange rates. Translation adjustments related to the consolidation of foreign subsidiary financial statements are reflected in Accumulated other comprehensive loss in Stockholders' equity.

### Derivative Financial Instruments

We mitigate foreign currency exchange rate risk by entering into foreign currency forward exchange contracts. We had forward contracts for Japanese yen of \$3.3 million and \$4.2 million at January 2, 2016 and January 3, 2015, respectively. Two contracts outstanding at January 2, 2016 settled in January 2016 and the other four contracts will

settle in June 2016. One of the contracts outstanding at January 3, 2015 settled in January 2015 and the other five contracts settled in June 2015. Although such hedges mitigate our foreign currency exchange rate exposure from an economic perspective they were not designated as "effective" hedges for accounting purposes and are adjusted to fair value through Other (expense) income, net, with an impact of less than \$0.1 million and approximately \$0.4 million for the years end January 2, 2016 and January 3, 2015, respectively.

#### Concentration Risk

Potential exposure to concentration risk may impact revenue, trade receivables, marketable securities, and supply of wafers for our new products.

Customer concentration risk may impact revenue. For fiscal years 2015, 2014, and 2013, our top five end customers constituted approximately 32%, 45%, and 44%, respectively, of our revenue. Our largest end customer in fiscal year 2015 accounted for 9% of total revenue. Our two largest end customers in fiscal year 2014 and our largest end customer in fiscal year 2013 accounted for 19%, 12%, and 22%, respectively, of total revenue. No other end customers accounted for more than 10% of total revenue during these periods.

Sales through distributors have historically accounted for a significant portion of our total revenue. For each of the fiscal years 2015, 2014 and 2013, revenue attributable to resale of products by sell-through distributors as a percentage of our total revenue was 45%. Our two largest distributor groups also account for a substantial portion of our trade receivables. At January 2, 2016

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and January 3, 2015, one distributor group accounted for 29% and 45%, respectively, and the other accounted for 15% and 16%, respectively, of gross trade receivables. No other distributor groups or end customers accounted for more than 10% of gross trade receivables at these dates.

Concentration of credit risk with respect to trade receivables is mitigated by our credit and collection process including active management of collections, credit limits, routine credit evaluations for essentially all customers and secure transactions with letters of credit or advance payments where appropriate. Accounts receivable do not bear interest and are shown net of allowances for doubtful accounts of \$0.6 million and \$0.9 million at January 2, 2016 and January 3, 2015, respectively. We regularly review our allowance for doubtful accounts and the aging of our accounts receivable. Write-offs for uncollected trade receivables have not been significant to date.

We place our investments primarily through one financial institution and mitigate the concentration of credit risk by limiting the maximum portion of the investment portfolio which may be invested in any one instrument. Our investment policy defines approved credit ratings for investment securities. Investments on-hand in marketable securities consisted primarily of money market instruments, "AA" or better corporate notes and bonds and commercial paper, and U.S. government agency obligations. See Note 3 for a discussion of the liquidity attributes of our marketable securities.

We rely on a limited number of foundries for our wafer purchases including Fujitsu Limited, Seiko Epson Corporation, Taiwan Semiconductor Manufacturing Company, Ltd, and United Microelectronics Corporation.

## Revenue Recognition and Deferred Income

### Product Revenue

We sell our products directly to end customers, through a network of independent manufacturers' representatives, and indirectly through a network of independent sell-in and sell-through distributors. Distributors provide periodic data regarding the product, price, quantity, and end customer when products are resold, as well as the quantities of our products they still have in stock.

Revenue from sales to original equipment manufacturers ("OEMs") and sell-in distributors is generally recognized upon shipment. Reserves for sell-in stock rotations, where applicable, are estimated primarily from historical experience and provided for at the time of shipment. Revenue from sales by our sell-through distributors is recognized at the time of reported resale. Under both types of revenue recognition, persuasive evidence of an arrangement exists, the price is fixed or determinable, title has transferred, collection of resulting receivables is reasonably assured, and there are no remaining customer acceptance requirements and no remaining significant performance obligations.

Orders from our sell-through distributors are initially recorded at published list prices; however, for a majority of our sales, the final selling price is determined at the time of resale and in accordance with a distributor price agreement. In certain circumstances, we allow sell-through distributors to return unsold products. At times, we protect our sell-through distributors against reductions in published list prices. For these reasons, we do not recognize revenue until products are resold by sell-through distributors to an end customer.

For sell-through distributors, at the time of shipment to distributors, we (a) record Accounts receivable at published list price since there is a legally enforceable obligation from the distributor to pay us currently for product delivered, (b) relieve inventory for the carrying value of goods shipped since legal title has passed to the distributor, and (c) record deferred revenue and deferred cost of sales in Deferred income and allowances on sales to sell-through distributors in the liability section of our Consolidated Balance Sheets. The final price is set at the time of resale and is determined in accordance with a distributor price agreement. Revenue and cost of sales to sell-through distributors are

deferred until either the product is resold by the distributor or, in certain cases, return privileges terminate, at which time Revenue and Cost of products sold are reflected in Net (loss) income, and Accounts receivable, net are adjusted to reflect the final selling price.

The components of Deferred income and allowances on sales to sell-through distributors are presented in the following table:

(In thousands)	January 2, 2016	January 3, 2015
Inventory valued at published list price and held by sell-through distributors with right of return	\$47,086	\$50,854
Allowance for distributor advances	(22,290)	(29,490)
Deferred cost of sales related to inventory held by sell-through distributors	(6,930)	(6,418)
Total Deferred income and allowances on sales to sell-through distributors	\$17,866	\$14,946

A significant portion of our revenue in fiscal 2015 was from sell-through distributors. For the fiscal years 2015, 2014 and 2013, resale of products by sell-through distributors as a percentage of our total revenue was 45% in each year.

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We must use estimates and apply judgment to reconcile sell-through distributors' reported inventories to their activities. Errors in our estimates or judgments could result in inaccurate reporting of our Revenue, Cost of product revenue, Deferred income and allowances on sales to sell-through distributors, and Net (loss) income.

### Licensing and Services Revenue

Our licensing and services revenue is comprised of revenue from our intellectual property ("IP") core licensing activity, patent monetization activities, device management system and remote support services, and royalty and adopter fee revenue from our standards activities. These activities are complementary to our product sales and help us monetize our intellectual property and accelerate market adoption curves associated with our technology and standards.

From time to time we enter into patent sale and licensing agreements to monetize and license a broad portfolio of our patented inventions. Such licensing agreements may include upfront license fees and ongoing royalties. The contractual terms of the agreements generally provide for payments of upfront license fees over an extended period of time. Revenue from such license fees is recognized when payments become due and payable as long as all other revenue recognition criteria are met, while revenue from royalties is recognized when reported.

We enter into IP licensing agreements that generally provide licensees the right to incorporate our IP components into their products pursuant to terms and conditions that vary by licensee. Revenue earned under these agreements is classified as Licensing and services revenue. Our IP licensing agreements generally include multiple elements, which may include one or more off-the-shelf or customized IP licenses bundled with support services covering a fixed period of time, generally one year. If the different elements of a multiple-element arrangement qualify as separate units of accounting, we allocate the total arrangement consideration to each element based on relative selling price.

Amounts allocated to off-the-shelf IP licenses are recognized at the time of sale provided the other conditions for revenue recognition have been met. Amounts allocated to the support services are deferred and recognized on a straight-line basis over the support period, generally one year. Certain licensing agreements provide for royalty payments based on agreed-upon royalty rates, which may be fixed or variable depending on the terms of the agreement. The amount of revenue we recognize is based on a specified time period or on the agreed-upon royalty rate multiplied by the number of units shipped by the customer.

From time to time, we enter into IP licensing agreements that involve significant modification, customization or engineering services. Revenues derived from these contracts are accounted for using the percentage-of-completion method or completed contract method. The completed contract method is used for contracts where there is a risk of final acceptance by the customer or for short-term contracts. HDMI royalty revenue is determined by a contractual allocation formula agreed to by the members of the HDMI consortium. Evidence of an arrangement, as to HDMI royalty revenue, is deemed complete when all of the members of the HDMI consortium agree on the royalty sharing formula.

### Inventories

Inventories are recorded at the lower of actual cost determined on a first-in-first-out basis or market. We establish provisions for inventory if it is obsolete or we hold quantities which are in excess of projected customer demand. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to Cost of product revenue.

### Property and Equipment

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method for financial reporting purposes over the estimated useful lives of the related assets, generally three to five years for equipment and software, one to three years for tooling and thirty years for buildings. Upon disposal of Property and equipment, the accounts are relieved of the costs and related accumulated depreciation and amortization, and resulting gains or losses are reflected in the Consolidated Statements of Operations for recognized gains and losses, or in the Consolidated Balance Sheets for deferred gains and losses. Repair and maintenance costs are expensed as incurred.

#### Equity Investments in Privately Held Companies

Equity investments in privately-held companies are reviewed on a quarterly basis to determine if their values have been impaired and adjustments are recorded as necessary. We assess the potential impairment of these investments by considering available evidence such as the investee's historical and projected operating results, progress towards meeting business milestones, ability to meet expense forecasts, and the prospects for industry or market in which the investee operates. Upon disposition of these investments, the specific identification method is used to determine the cost basis in computing realized gains or losses. Declines in value that are judged to be other-than-temporary are reported in interest income and other, net in the accompanying Consolidated Statements of Operations.

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The accounting method for equity investments in privately-held companies is assessed under ASC 323-10, Equity Method and Joint Ventures. Investments for which we have the ability to exert significant influence on the investee are accounted for under the equity method with our proportionate share of the investee's operating results recognized through the Consolidated Statements of Operations, along with a commensurate increase or decrease in the carrying value of the investment.

### Impairment of Long-Lived Assets

Long-lived assets, including amortizable intangible assets, are carried on our financial statements based on their cost less accumulated depreciation or amortization. We monitor the carrying value of our long-lived assets for potential impairment and test the recoverability of such assets whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. These events or changes in circumstances, including management decisions pertaining to such assets, are referred to as impairment indicators. If an impairment indicator occurs, we perform a test of recoverability by comparing the carrying value of the asset group to its undiscounted expected future cash flows. If the carrying values are in excess of undiscounted expected future cash flows, we measure any impairment by comparing the fair value of the asset group to its carrying value. Fair value is generally determined by considering (i) internally developed discounted projected cash flow analysis of the asset group; (ii) actual third-party valuations; and/or (iii) information available regarding the current market for similar asset groups. If the fair value of the asset group is determined to be less than the carrying amount of the asset group, an impairment in the amount of the difference is recorded in the period that the impairment indicator occurs and is included in our Consolidated Statements of Operations. Estimating future cash flows requires significant judgment and projections may vary from the cash flows eventually realized, which could impact our ability to accurately assess whether an asset has been impaired. The results of our current year assessment are detailed in Note 9.

### Valuation of Goodwill

Goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. We review goodwill for impairment annually during the fourth quarter and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. When evaluating whether goodwill is impaired, we make a qualitative assessment to determine if it is more likely than not that the reporting unit's fair value is less than the carrying amount. If the qualitative assessment determines that it is more likely than not that the fair value is less than the carrying amount, the fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, an indication of goodwill impairment exists for the reporting unit and we must measure the impairment loss. The impairment loss, if any, is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of the goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to purchase price allocation and the residual fair value after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit is determined using a discounted cash flow analysis. If the fair value of the reporting unit exceeds its carrying value, no further impairment analysis is needed. For purposes of testing goodwill for impairment, the Company operates as two reporting units: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure. Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment. The results of our current year assessment are detailed in Note 9.

### Leases



We lease office space and classify our leases as either operating or capital lease arrangements in accordance with the criteria of ASC 840, "Leases." Certain of our office space operating leases contain provisions under which monthly rent escalates over time and certain leases may also contain provisions for reimbursement of a specified amount of leasehold improvements. When lease agreements contain escalating rent clauses, we recognize expense on a straight-line basis over the term of the lease. When lease agreements provide allowances for leasehold improvements, we capitalize the leasehold improvement assets and amortize them on a straight-line basis over the lesser of the lease term or the estimated useful life of the asset, and reduce rent expense on a straight-line basis over the term of the lease by the amount of the asset capitalized.

#### Restructuring Charges

Expenses associated with exit or disposal activities are recognized when incurred under ASC 420, "Exit or Disposal Cost Obligations," for everything but severance. Because the Company has a history of paying severance benefits, the cost of severance benefits associated with a restructuring plan is recorded when such costs are probable and the amount can be reasonably estimated in accordance with ASC 712, "Compensation - Nonretirement Postemployment Benefits." When leased facilities are vacated, an amount equal to the total future lease obligations from the date of vacating the premises through the expiration of the lease, net of any future sublease income, is recorded as a part of restructuring charges.

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### Research and Development

Research and development expenses include costs for compensation and benefits, development masks, engineering wafers, depreciation, licenses, and outside engineering services. These expenditures are for the design of new products, intellectual property cores, processes, packaging, and software to support new products. Research and development costs are expensed as incurred.

### Accounting for Income Taxes

Our provision for income tax is comprised of our current tax liability and changes in deferred tax assets and liabilities. Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts in the financial statements using enacted tax rates and laws that will be in effect when the difference is expected to reverse. Valuation allowances are provided to reduce deferred tax assets to an amount that in management's judgment is more-likely-than-not to be recoverable against future taxable income. At January 2, 2016, U.S. income taxes were not provided on approximately \$3.2 million of the undistributed earnings of our Chinese subsidiary as we intend to reinvest these earnings indefinitely. If these earnings were distributed to the U.S. in the form of dividends or otherwise, these earnings would be subject to Chinese withholding taxes and would be subject to additional U.S. income taxes but offset by net operating loss carryforwards which have been fully reserved.

Our income tax calculations are based on application of the respective U.S. federal, state or foreign tax law. Our tax filings, however, are subject to audit by the relevant tax authorities. Accordingly, we recognize tax liabilities based upon our estimate of whether, and the extent to which, additional taxes will be due when such estimates are more-likely-than-not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. To the extent the final tax liabilities are different than the amounts originally accrued, the increases or decreases as well as any interest or penalties are recorded as income tax expense or benefit in the Consolidated Statements of Operations.

In assessing the ability to realize deferred tax assets, the Company evaluates both positive and negative evidence that may exist and consider whether it is more-likely-than-not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible.

Any adjustment to the net deferred tax asset valuation allowance is recorded in the Consolidated Statements of Operations for the period that the adjustment is determined to be required.

### Stock-Based Compensation

We use the Black-Scholes option pricing model to estimate the fair value of substantially all share-based awards consistent with the provisions of ASC 718, "Compensation - Stock Compensation." Option pricing models, including the Black-Scholes model, require the use of input assumptions, including expected volatility, expected term, expected dividend rate, and expected risk-free rate of return. The assumptions for expected volatility and expected term most significantly affect the grant date fair value.

We have also used a lattice-based option-pricing model to determine and fix the fair value of stock options with a market condition granted to certain executives. This valuation model incorporates a Monte-Carlo simulation, and considered the likelihood that we would achieve the market condition. The options have a two year vesting and vest between 0% and 200% of the target amount, based on the Company's relative Total Shareholder Return ("TSR") when compared to the TSR of a component of companies of the PHLX Semiconductor Sector Index over a two year period.

TSR is a measure of stock price appreciation plus dividends paid, if any, in the performance period.

#### Redeemable Noncontrolling Interests

Noncontrolling interests that are redeemable at the option of the holder are classified as temporary equity in the Consolidated Balance Sheets. Differences between the carrying value and the estimated redemption value are accreted through a charge to additional paid-in capital over the redemption period using the effective interest method.

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### New Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance under U.S. GAAP when it becomes effective. While ASU 2014-09 was to be effective for annual periods and interim periods beginning after December 15, 2016, in August 2015, the FASB issued ASU 2015-14 deferring the effective date of ASU 2014-09 to periods beginning on or after December 15, 2017, with early adoption permitted for annual reporting periods beginning after December 15, 2016, and interim periods within that year. With the deferral, we intend to adopt ASU 2014-09 on December 31, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. We are currently evaluating the impact of ASU 2014-09 on our consolidated financial statements and related disclosures and have not yet selected a transition method.

In February 2015, the FASB issued ASU No. 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis, which focuses on the consolidation evaluation for reporting organizations and requires the evaluation of whether or not certain legal entities should be consolidated. All legal entities are subject to reevaluation under the revised consolidation model. The new standard will become effective for us on January 3, 2016. Early adoption is permitted, including adoption in an interim period. We do not expect the adoption of this accounting standard update to impact our consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03, Simplifying the Presentation of Debt Issuance Cost. The ASU requires debt issuance costs associated with a recognized debt liability to be presented on the balance sheet as a direct deduction from the carrying amount of the corresponding debt liability. This new guidance is effective for interim and annual reporting periods beginning after December 15, 2015, with early adoption permitted. An entity should apply the new guidance on a retrospective basis. We adopted this ASU effective with the first quarter of fiscal year 2015. The adoption of this accounting standard update did not have a material impact to our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory. Under this ASU, inventory will be measured at the “lower of cost and net realizable value” and options that currently exist for “market value” will be eliminated. The ASU defines net realizable value as the “estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.” No other changes were made to the current guidance on inventory measurement. ASU 2015-11 is effective for interim and annual periods beginning after December 15, 2016. Early application is permitted and should be applied prospectively. We do not expect the adoption of this accounting standard update to impact our consolidated financial statements.

In September 2015, the FASB issued ASU 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments. This ASU eliminates the requirement to restate prior period financial statements for measurement period adjustments following a business combination. The new guidance requires that the cumulative impact of a measurement period adjustment (including the impact on prior periods) be recognized in the reporting period in which the adjustment is determined. The prior period impact of the adjustment should be either presented separately on the face of the income statement or disclosed in the notes. The guidance is effective for interim and annual periods beginning after December 15, 2015. Early application is permitted and should be applied prospectively. We do not expect the adoption of this accounting standard update to impact our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes, to eliminate the current requirements to classify deferred income tax assets and liabilities between current and noncurrent. To simplify the presentation of deferred income taxes, the amendments in this update require that deferred tax liabilities and assets

be classified as noncurrent in a classified statement of financial position. For public business entities, the amendments in this update are effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Earlier application is permitted for all entities as of the beginning of an interim or annual reporting period. We have elected to adopt this standard early and have implemented the change prospectively as of the fourth quarter of fiscal 2015; prior periods were not adjusted. The impact of early adoption on prior years is not significant due to our valuation allowance.

In January 2016, the FASB issued ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, to mainly change the accounting for investments in equity securities and financial liabilities carried at fair value as well as to modify the presentation and disclosure requirements for financial instruments. The ASU is effective for interim and annual periods beginning after December 15, 2017, with early adoption permitted. Adoption of the ASU is retrospective with a cumulative adjustment to retained earnings or accumulated deficit as of the adoption date. We do not expect the adoption of this accounting standard update to impact our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), aimed at making leasing activities more transparent and comparable. The new standard requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including today's operating leases. For public business entities, the standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. For all other entities, the standard is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early application is permitted for all entities. We are currently evaluating the impact of ASU 2016-02 on our consolidated financial statements and related disclosures.

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## Note 2 - Net (Loss) Income Per Share

We compute basic Net (loss) income per share by dividing Net (loss) income available to stockholders by the weighted average number of common shares outstanding during the period. To determine diluted share count, we apply the treasury stock method to determine the dilutive effect of outstanding stock option shares, restricted stock units ("RSUs"), Employee Stock Purchase Plan ("ESPP") shares, and treasury stock. Our application of the treasury stock method includes, as assumed proceeds, the average unamortized stock-based compensation expense for the period and the impact of the pro forma deferred tax benefit or cost associated with stock-based compensation expense. When we are in a net loss position, the treasury stock method is not used.

A reconciliation of basic and diluted Net (loss) income per share is presented below:

(in thousands, except per share data)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Net (loss) income attributable to stockholders	\$(159,233 )	\$48,580	\$22,321
Shares used in basic Net (loss) income per share	117,387	117,708	115,701
Dilutive effect of stock options, RSUs and ESPP shares	—	2,537	1,380
Shares used in diluted Net (loss) income per share	117,387	120,245	117,081
Basic Net (loss) income per share	\$(1.36 )	\$0.41	\$0.19
Diluted Net (loss) income per share	\$(1.36 )	\$0.40	\$0.19

The computation of diluted Net (loss) income per share for fiscal year 2015 excludes the effects of stock options, RSUs, and ESPP shares, aggregating approximately 9.2 million which are antidilutive. The computation of diluted Net (loss) income per share for fiscal years 2014 and 2013, respectively, includes the effects of stock options, RSUs and ESPP shares aggregating approximately 2.5 million and 1.4 million, respectively, as they are dilutive, and excludes the effects of stock options, RSUs and ESPP shares aggregating approximately 2.6 million and 7.8 million shares, for fiscal years 2014 and 2013, respectively, as they are antidilutive. Stock options, RSUs and ESPP shares are considered antidilutive when the aggregate of exercise price, unrecognized stock-based compensation expense and excess tax benefit are greater than the average market price for our common stock during the period or when the Company is in a net loss position, as the effects would reduce the loss per share. Stock options and RSUs that are antidilutive at January 2, 2016 could become dilutive in the future.

## Note 3 - Marketable Securities

Our short-term marketable securities have contractual maturities of up to two years. The following table summarizes the remaining maturities of our marketable securities at fair value:

(In thousands)	January 2, 2016	January 3, 2015
Short-term marketable securities:		
Maturing within one year	\$12,144	\$60,965
Maturing between one and two years	5,824	78,268
Total marketable securities	\$17,968	\$139,233

The following table summarizes the composition of our marketable securities at fair value:

(In thousands)	January 2, 2016	January 3, 2015
Short-term marketable securities:		
Corporate and government bonds and notes	\$17,888	\$139,233

Certificates of deposit	80	—
Total marketable securities	\$17,968	\$139,233

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## Note 4 - Fair Value of Financial Instruments

(In thousands)	Fair value measurements as of January 2, 2016				Fair value measurements as of January 3, 2015			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Short-term marketable securities	\$17,968	\$17,888	\$80	\$—	\$139,233	\$139,233	\$—	\$—
Foreign currency forward exchange contracts, net	(12 )	—	(12 )	—	414	—	414	—
Total fair value of financial instruments	\$17,956	\$17,888	\$68	\$—	\$139,647	\$139,233	\$414	\$—

We invest in various financial instruments including corporate and government bonds and notes, and commercial paper. In the past we have also invested in auction rate securities. In addition, we enter into foreign currency forward exchange contracts to mitigate our foreign currency exchange rate exposure. We carry these instruments at their fair value in accordance with ASC 820. The framework under the provisions of ASC 820 establishes three levels of inputs that may be used to measure fair value. Each level of input has different levels of subjectivity and difficulty involved in determining fair value.

Level 1 instruments generally represent quoted prices for identical assets or liabilities in active markets. Therefore, determining fair value for Level 1 instruments generally does not require significant management judgment, and the estimation is not difficult. Our Level 1 instruments consist of U.S. Government agency, corporate notes and bonds, and commercial paper that are traded in active markets and are classified as Short-term marketable securities on our Consolidated Balance Sheets.

Level 2 instruments include inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices for identical instruments in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our Level 2 instruments consist of certificates of deposit and foreign currency exchange contracts, entered into to hedge against fluctuation in the Japanese yen.

Level 3 instruments include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Our auction rate securities were classified as Level 3 instruments. Management used a combination of the market and income approach to derive the fair value of auction rate securities, which included third party valuation results, investment broker provided market information, and available information on the credit quality of the underlying collateral. As a result, the determination of fair value for Level 3 instruments requires significant management judgment and subjectivity. Our Level 3 instruments were entirely made up of auction rate securities that consisted of student loan asset-backed notes and were classified as Long-term marketable securities on our Consolidated Balance Sheets.

There were no transfers between any of the levels during fiscal 2015, 2014, and 2013.

During the fiscal years ended January 2, 2016 and January 3, 2015, the following changes occurred in our Level 3 instruments:

(In thousands)	Year Ended	
	January 2, 2016	January 3, 2015
Beginning fair value of Long-term marketable securities	\$—	\$5,241



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Fair value of securities sold or redeemed	—	(5,488	)
Realized gain from increase in fair value	—	247	
Ending fair value of Long-term marketable securities	\$—	\$—	

In the second quarter of the fiscal year ended January 3, 2015, we sold our remaining auction rate securities with a par value of \$5.7 million with an estimated fair value of \$5.2 million, for \$5.5 million. As a result, we reported a gain of \$1.7 million in the Consolidated Statements of Operations and relieved \$1.1 million of previously unrealized gain, net of taxes, from Accumulated other comprehensive loss in fiscal 2014.

In accordance with ASC 320, “Investments-Debt and Equity Securities,” we recorded an unrealized loss of less than \$0.1 million during the fiscal year ended January 2, 2016, and an unrealized loss of \$0.4 million during the fiscal year ended January 3, 2015 on certain Short-term marketable securities (Level 1 instruments), which have been recorded in Accumulated other comprehensive loss. Future fluctuations in fair value related to these instruments that the Company deems to be temporary, including any recoveries of previous write-downs, would be recorded to Accumulated other comprehensive loss. If we were to determine in the future that any further decline in fair value is other-than-temporary, we would record an impairment charge,

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which could have a materially adverse effect on our operating results. If we were to liquidate our position in these securities, it is likely that the amount of any future realized gain or loss would be different from the unrealized gain or loss reported in Accumulated other comprehensive loss.

## Note 5 - Inventories

(In thousands)	January 2, 2016	January 3, 2015
Work in progress	\$57,865	\$49,554
Finished goods	18,031	15,371
Total inventories	\$75,896	\$64,925

## Note 6 - Property and Equipment

(In thousands)	January 2, 2016	January 3, 2015
Buildings	\$3,554	\$3,516
Computer and test equipment	148,995	158,117
Office furniture and equipment	3,880	7,028
Leasehold and building improvements	14,366	13,213
	170,795	181,874
Accumulated depreciation and amortization	(118,943 )	(154,078 )
	\$51,852	\$27,796

Depreciation and amortization expense for Property and equipment was \$18.1 million, including \$1.5 million of restructuring expense, \$11.4 million, and \$11.2 million for fiscal years 2015, 2014, and 2013, respectively.

In November 2014, we sold land and buildings, comprising the former location of our corporate headquarters and executive office in Hillsboro, Oregon, for net proceeds of approximately \$14.6 million. This property had a historical cost of \$30.9 million and accumulated depreciation of \$17.9 million, resulting in a net gain on sale of \$1.6 million. We leased back a portion of the facilities for a lease term of eight years, resulting in deferral of the gain, which is being amortized over the life of the lease.

## Note 7 - Business Combinations and Goodwill

On March 10, 2015, we acquired 100% of the outstanding equity of Silicon Image, Inc. ("Silicon Image"), a provider of video, audio, and data connectivity solutions for the mobile, consumer electronics, and personal computer markets.

The fair value of the purchase price consideration consisted of the following:

(In thousands)	Estimated Fair Value
Cash paid to Silicon Image shareholders	\$575,955
Cash paid for options and RSUs	7,383
Fair value of partially vested stock options and RSUs assumed	5,139
Total purchase consideration	\$588,477

There is no contingent consideration included in the determination of the purchase consideration.

Purchase consideration was allocated to the tangible and intangible assets and liabilities assumed on the basis of the respective estimated fair values on the acquisition date. The purchase price allocation has been substantially completed, but may be subject to revision as we perform and complete more detailed analysis of certain tax matters. The allocation of the total purchase price is as follows:



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(In thousands)	Estimated Fair Value
Assets acquired:	
Cash, cash equivalents and short-term investments	\$ 157,923
Accounts receivable	30,677
Inventory	20,839
Other current assets	7,183
Property, plant and equipment	23,429
Other non-current assets	1,573
Intangible assets	192,079
Goodwill	235,401
Total assets acquired	669,104
Liabilities assumed	
Accounts payable and other accrued liabilities	47,735
Other current liabilities	1,252
Long-term liabilities	24,468
Redeemable noncontrolling interest	7,172
Total liabilities assumed	80,627
Fair value of net assets acquired	\$ 588,477

The following table presents details of the identified intangible assets acquired through the acquisition of Silicon Image:

(In thousands)	Asset Life in Years	Fair Value
Developed technology	3-5	\$ 125,000
Customer relationships	4-7	29,458
Licensed technology	3-5	1,852
Patents	5	769
Total identified finite-lived intangible assets		157,079
In-process research and development	indefinite	35,000
Total identified intangible assets		\$ 192,079

We do not believe there is any significant residual value associated with these intangible assets. We are amortizing the intangible assets using the straight-line method over their estimated useful lives. The estimation of the fair values of the intangible assets required the use of valuation techniques including the income approach and the cost approach, and entailed consideration of all the relevant factors that might affect the fair value such as present value factors, and estimates of future revenues and costs.

Silicon Image's results of operations and the estimated fair value of the assets acquired and liabilities assumed are included in Lattice's unaudited consolidated financial statements effective March 11, 2015. Silicon Image's revenue and net loss attributable to stockholders for the period from March 11, 2015 through January 2, 2016 were approximately \$135.6 million and \$77.0 million, respectively. Acquisition related charges, which were expensed as incurred, were approximately \$8.2 million.

### Goodwill

Goodwill represents the excess of the purchase price over the fair value of the underlying net tangible and intangible assets. The goodwill recognized in the acquisition of Silicon Image was derived from expected benefits from cost synergies and knowledgeable and experienced workforce who joined the Company after the acquisition. Goodwill will not be amortized, but will instead be tested for impairment annually or more frequently if certain indicators of

impairment are present. We do not expect goodwill impairment to be tax deductible for income tax purposes. A \$12.7 million charge to fully impair the goodwill in the Qterics operating segment was recorded for fiscal 2015 (Note 9). No impairment charges relating to goodwill or intangible assets were recorded for fiscal 2014 or 2013 as no indicators of impairment were present. The goodwill balance of \$267.5 million at January 2, 2016 is comprised of \$44.8 million from prior acquisitions combined with the \$235.4 million from the acquisition of Silicon Image, reduced by the fiscal 2015 goodwill impairment charge of \$12.7 million.

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## Unaudited Pro Forma Financial Information

The unaudited pro forma financial information in the table below summarizes the combined results of operations for the Company and Silicon Image as if the merger occurred on December 29, 2013, the first day of our 2014 fiscal year. The pro forma financial information for the periods presented includes adjustments to amortization and depreciation for intangible assets and property, plant, and equipment acquired; adjustments to share-based compensation expense; and interest expense for the additional indebtedness incurred as part of the acquisition. The total of nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings for the year ended January 3, 2015 and excluded from the reported pro forma revenue and earnings for the year ended January 2, 2016 was \$30.6 million related to acquisition-related charges. The pro forma financial information as presented below is for informational purposes only, is based on certain assumptions and estimates, and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of the first period presented.

The unaudited pro forma financial information for the fiscal year ended January 2, 2016 combined the historical results of the Company for the fiscal year ended January 2, 2016, the historical results of Silicon Image for the fiscal year ended January 2, 2016, and the effects of the pro forma adjustments described above.

The unaudited pro forma financial information for the fiscal year ended January 3, 2015 combined the historical results of the Company for the fiscal year ended January 3, 2015, the historical results of Silicon Image for the fiscal year ended January 3, 2015, and the effects of the pro forma adjustments described above.

(Dollars in thousands, except per share data)	Year Ended	
	January 2, 2016	January 3, 2015
Total revenues	\$450,867	\$624,179
Net (loss) income attributable to stockholders	\$(147,436)	) \$10,376
Basic net (loss) income per share	\$(1.26)	) \$0.09
Diluted net (loss) income per share	\$(1.26)	) \$0.09

The pro forma adjustments did not have any impact on the pro forma combined provision for income taxes for fiscal 2015 and 2014 due to net loss positions and valuation allowances on deferred income tax assets in those periods.

## Note 8 - Intangible Assets

In connection with our acquisitions of Silicon Image in March 2015 and SiliconBlue in December 2011 we recorded identifiable intangible assets related to developed technology, customer relationships, licensed technology, patents, and in-process research and development based on guidance for determining fair value under the provisions of ASC 820. Additionally, during fiscal 2015, we licensed additional third-party technology.

During the fourth quarter of 2015, we recorded a \$9.0 million impairment charge to the intangible assets of the Qterics operating segment comprising developed technology of \$3.9 million, and customer relationships of \$5.1 million (Note 9).

The following table summarizes the details of our total purchased intangible assets:

(In thousands)	Weighted	Gross	Impairment	Accumulated	Intangible
	Average Amortization Period (in years)				
					January 2, 2016

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Developed technology	4.7	\$135,700	\$(3,856	) \$(28,384	) \$103,460
Customer relationships	5.5	37,258	(5,139	) (10,156	) 21,963
Licensed technology	2.5	2,127	—	(610	) 1,517
Patents	5	769	—	(126	) 643
Total identified finite-lived intangible assets		175,854	(8,995	) (39,276	) 127,583
In-process research and development	indefinite	35,000	—	—	35,000
Total identified intangible assets		\$210,854	\$(8,995	) \$(39,276	) \$162,583

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We recorded amortization expense associated with these intangible assets on the Consolidated Statements of Operations as follows:

(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Research and development	\$ 731	\$ —	\$ —
Amortization of acquired intangible assets	28,849	2,948	2,960
	\$ 29,580	\$ 2,948	\$ 2,960

The annual expected amortization expense of acquired intangible assets with finite lives is as follows:

(In thousands)	Amount
2016	\$ 34,892
2017	33,275
2018	26,793
2019	24,009
2020	6,248
Thereafter	2,366
Total	\$ 127,583

#### Note 9 - Impairment of Goodwill and Intangible Assets

For fiscal 2015, the Impairment of goodwill and intangible assets is related to Qterics, Inc., which was acquired in the March 2015 acquisition of Silicon Image. During the fourth quarter of fiscal 2015, we determined that we experienced an impairment indicator related to the long-lived assets of the Qterics operating segment. For purposes of testing for impairment, the Company operates as two reporting units: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure. Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment. Following this assessment, we concluded that goodwill and intangible assets has been impaired in the Qterics segment as of January 2, 2016. As a result we recorded an impairment charge amounting to \$21.7 million, or approximately 92% of the previous value of goodwill and intangible assets, in the Consolidated Statements of Operations for the year ended January 2, 2016, comprising \$12.7 million pertaining to goodwill, \$3.9 million pertaining to developed technology, and \$5.1 million pertaining to customer relationships. The valuation was based on the market approach and is our best estimate of fair value as of year end. No impairment charges were recorded for the Core segment in fiscal 2015, and we had no impairment charges in either fiscal 2014 or 2013.

#### Note 10 - Equity Method Investment

In the first and third quarters of fiscal 2015, we purchased a preferred stock ownership interest in a privately-held company that designs human-computer interaction technology for a total consideration of \$3.0 million. This investment accounted for a 15.8% ownership interest by the end of the third quarter of fiscal 2015 and was accounted for under the cost method as we did not have the ability to exert significant influence over the investee.

In the fourth quarter of fiscal 2015, we increased our ownership interest to 22.7% by making an additional investment of \$2.0 million. This increased our gross investment in the investee to \$5.0 million. As a result of the change in ownership interest and after considering the changes in the level of our participation in the management and interaction with the investee, we determined that we have the ability to exert significant influence on the investee.



Accordingly, we changed our accounting for the investment from the cost method to the equity method and will hence recognize our proportionate share of the investee's operating results. As a result of this change, we recognized our proportionate share of the investee's net loss in the Consolidated Statements of Operations for the year ended January 2, 2016. Through January 2, 2016, we have reduced the value of our investment by approximately \$0.5 million, representing our proportionate share of the privately-held company's net loss. The net balance of our investment amounting to \$4.5 million has been included in Other long-term assets in the Consolidated Balance Sheets as of January 2, 2016.

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## Note 11 - Accounts Payable and Accrued Expenses

As an agent of the HDMI and MHL consortia, we administer royalty reporting and distributions to the members of these consortia. Included in Accounts payable and accrued liabilities as of January 2, 2016 is \$16.6 million payable to consortia members. This excludes amounts payable to us, and is payable quarterly based on collections from HDMI and MHL customers.

## Note 12 - Redeemable Noncontrolling Interest

With the acquisition of Silicon Image on March 10, 2015, we also assumed a redeemable noncontrolling interest which comprised a 7% investment in Qterics amounting to \$7.0 million invested by the noncontrolling interest holder initially entered into on December 4, 2014. The investment was redeemable at fair market value at the third-party holder's option on the third, fourth, or fifth year anniversaries. If the fair market value at the redemption date, as negotiated and agreed to by the parties, does not exceed \$21 million, the redemption price will be 130% of the fair market value.

As of the acquisition date, the fair value of the noncontrolling interest was determined to be \$7.2 million (Note 7), recorded as temporary equity and reported as Redeemable noncontrolling interest in the Consolidated Balance Sheets. The Company elected to accrete the carrying value to the estimated redemption value over the three-year redemption period and reported the accretion charge as a reduction to additional-paid-in-capital. During fiscal 2015, we recorded cumulative accretion charges amounting to \$0.4 million bringing the value of the redeemable noncontrolling interest to \$7.6 million.

During the fourth quarter of fiscal 2015, we entered into an agreement with the holder pursuant to which the entire interest was redeemed for a cash payment of approximately \$0.9 million. The difference between the carrying value and the redemption amount totaling approximately \$6.7 million has been recorded as additional-paid-in-capital during the year ended January 2, 2016.

## Note 13 - Lease Obligations

Certain of our facilities are leased under operating leases, which expire at various times through 2026. Rental expense under operating leases was \$7.4 million, \$4.5 million and \$4.6 million for fiscal years 2015, 2014 and 2013, respectively. Future minimum lease commitments at January 2, 2016 were as follows:

Fiscal year (In thousands)	Amount
2016	\$8,964
2017	9,025
2018	6,859
2019	4,587
2020	4,533
Thereafter	23,541
	\$57,509

## Note 14 - Income Taxes

The domestic and foreign components of (Loss) income before income taxes were as follows:

(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013

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Domestic	\$(92,989	) \$6,292	\$6,293
Foreign	(33,464	) 36,649	20,193
(Loss) income before taxes	\$(126,453	) \$42,941	\$26,486

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The components of the income tax expense (benefit) are as follows:

(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Current:			
Federal	\$968	\$329	\$251
State	80	5	(527
Foreign	10,634	1,944	1,616
	11,682	2,278	1,340
Deferred:			
Federal	18,713	(7,416	) 2,549
State	2,318	(513	) 342
Foreign	(173	) 12	(66
	20,858	(7,917	) 2,825
Income tax expense (benefit)	\$32,540	\$(5,639	) \$4,165

Income tax expense (benefit) differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pretax income as a result of the following differences:

	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
	%	%	%
Statutory federal rate	(35)	35	35
Adjustments for tax effects of:			
State taxes, net	(6)	1	2
Research and development credits	(3)	(9)	(11)
Stock compensation	1	1	3
Foreign rate differential	12	(25)	(20)
Foreign dividends	5	1	—
Foreign withholding taxes	3	—	—
Capital loss expiration	—	7	2
Other permanent	4	—	—
Goodwill impairment	4	—	—
Valuation allowance	46	(23)	6
Change in uncertain tax benefit accrual	(8)	1	(1)
Tax rate change	3	(4)	(1)
Other	—	2	1
Effective income tax rate	26	(13)	16

ASC 740, "Income Taxes", provides for the recognition of deferred tax assets if realization of these assets is more-likely-than-not. We evaluate both positive and negative evidence to determine if some or all of our deferred tax assets should be recognized on a quarterly basis.

During the fourth quarter of 2014, we concluded that it was more-likely-than-not that we would be able to realize the benefit of a portion of our remaining deferred tax assets, resulting in a tax benefit of \$11.5 million and a federal and state net deferred tax asset of \$21.3 million. We based this conclusion on improved operating results over the past two years and our expectations about generating taxable income in the foreseeable future. We exercised significant

judgment and considered estimates about our ability to generate revenue, gross profits, operating income and jurisdictional taxable income in future periods under our tax structure in reaching this decision.

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In 2015, we completed the acquisition of Silicon Image, Inc. At the time of the acquisition, we evaluated the combined entity's net deferred income taxes, which included an assessment of the cumulative income or loss over the prior three-year period, to determine if a valuation allowance is required. After considering the significant loss for 2015, the Company recorded a valuation allowance on its net federal and state deferred tax assets.

We will continue to evaluate both positive and negative evidence in future periods to determine if more deferred tax assets should be recognized. We don't have a valuation allowance in any foreign jurisdictions as it has been concluded it is more likely than not that we will realize the net deferred tax assets in future periods. The net increase in the total valuation allowance affecting the effective tax rate for the year ended January 2, 2016 was approximately \$58.7 million.

The components of our net deferred tax assets are as follows:

(In thousands)	January 2, 2016	January 3, 2015
Deferred tax assets:		
Accrued expenses and reserves	\$5,690	\$5,416
Inventory	303	—
Deferred Revenue	3,177	—
Stock-based and deferred compensation	7,674	5,530
Intangible assets	16,959	9,841
Fixed assets	—	983
Net operating loss carry forwards	131,829	96,543
Tax credit carry forwards	87,909	40,588
Capital loss carry forwards	1,262	4,142
Other	2,458	220
	257,261	163,263
Less: valuation allowance	(252,578)	(141,215)
Net deferred tax assets	4,683	22,048
Deferred tax liabilities:		
Fixed Assets	791	—
Other	3,734	717
Total deferred tax liabilities	4,525	717
Net deferred tax assets	\$158	\$21,331

At January 2, 2016, we had federal net operating loss carryforwards (pretax) of approximately \$339.9 million that expire at various dates between 2023 and 2035. We had state net operating loss carryforwards (pretax) of approximately \$239.9 million that expire at various dates from 2016 through 2035. We also had federal and state credit carryforwards of \$48.2 million and \$55.9 million of which \$53.4 million do not expire. The remaining credits expire at various dates from 2016 through 2035.

Future utilization of federal and state net operating losses and tax credit carry forwards may be limited if cumulative changes to ownership exceed 50% within any three-year period, which has not occurred through fiscal 2015. However, if there is a significant change in ownership, the future utilization may be limited and the deferred tax asset would be reduced to the amount available.

At January 2, 2016, U.S. income taxes were not provided for approximately \$3.2 million of the undistributed earnings of our Chinese subsidiary. We intend to reinvest these earnings indefinitely. If these earnings were distributed to the U.S. in the form of dividends or otherwise, we would be subject to additional U.S. income taxes and foreign

withholding taxes.

At January 2, 2016, our unrecognized tax benefits associated with uncertain tax positions were \$48.2 million, of which \$45.1 million, if recognized, would affect the effective tax rate, subject to valuation allowance. As of January 2, 2016, interest and penalties associated with unrecognized tax benefits were \$5.3 million.

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The following table summarizes the changes to unrecognized tax benefits for fiscal years 2015, 2014 and 2013:

(In thousands)	Amount
Balance at December 29, 2012	\$21,680
Additions based on tax positions related to the current year	1,600
Additions based on tax positions of prior years	68
Reduction for tax positions of prior years	—
Settlements	(338 )
Reduction as a result of lapse of applicable statute of limitations	(367 )
Balance at December 28, 2013	22,643
Additions based on tax positions related to the current year	770
Additions based on tax positions of prior years	—
Reduction for tax positions of prior years	(4,673 )
Settlements	—
Reduction as a result of lapse of applicable statute of limitations	(67 )
Balance at January 3, 2015	18,673
Additions based on tax positions related to the current year	4,381
Additions based on tax positions of prior years	—
Additions due to acquisition	41,083
Reductions for tax positions of prior years	(14,958 )
Reduction as a result of lapse of applicable statute of limitations	(972 )
Balance at January 2, 2016	48,207

At January 2, 2016, it is reasonably possible that \$1.8 million of unrecognized tax benefits and less than \$0.1 million of associated interest and penalties could significantly change during the next twelve months.

Our French income tax returns are currently under examination for 2011 and 2012, as well as our Singapore income tax return for 2012. We are not under examination in any state jurisdictions or any other foreign jurisdictions.

We are subject to federal and state income tax as well as income tax in the various foreign jurisdictions in which we operate. Additionally, the years that remain subject to examination are 2012 for federal income taxes, 2011 for state income taxes, and 2009 for foreign income taxes, including years ending thereafter. However, to the extent allowed by law, the tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward, and make adjustments up to the amount of the net operating losses or credit carryforward amount.

The American Taxpayer Relief Act of 2012, which reinstated the United States federal research and development tax credit retroactively from January 1, 2012 through December 31, 2013, was not enacted into law until the first quarter of 2013. The Tax Increase Prevention Tax Act of 2014 was enacted into law in the fourth quarter of 2014 and extended the research and development tax credit through December 31, 2014. On December 18, 2015, the Protecting Americans from Tax Hikes Act of 2015 was enacted. The Act included several business tax provisions including the permanent extension of the credit for qualified research and development. The tax benefit in each year resulting from these reinstatements of the federal research and development tax credit was offset by a valuation allowance and therefore did not impact our annual effective tax rate.



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## Note 15 - Restructuring

In March 2015, our Board of Directors approved an internal restructuring plan (the "March 2015 Plan"), in connection with our acquisition of Silicon Image. The March 2015 Plan was designed to realize synergies from the acquisition by eliminating redundancies created as a result of combining the two companies. This included reductions in our worldwide workforce and consolidation of facilities, systems, and engineering tools. We expect the total cost of the March 2015 Plan to be in the range of approximately \$14.0 million to \$19.0 million and to be substantially completed by the end of second quarter of fiscal 2016. For fiscal year 2015, approximately \$13.3 million of expense was incurred under the March 2015 plan. A substantial portion of the March 2015 Plan was completed in the first half of fiscal 2015 and the actual expenses have been in the estimated range. We expect a small amount of restructuring expense under this plan to continue into fiscal 2016, primarily related to charges associated with the consolidation of facilities.

In September 2015, we implemented a further reduction of our worldwide workforce (the "September 2015 Reduction") separate from the March 2015 Plan. The September 2015 Reduction was designed to resize the company in line with the market environment and to better balance our workforce with the long-term strategic needs of our business. We expect the total cost of the September 2015 Reduction to be in the range of approximately \$6.0 million to \$6.5 million and to be substantially completed by the end of the second quarter of 2016. For fiscal year 2015, approximately \$5.9 million of expense was incurred under the September 2015 Reduction plan.

Less than \$0.1 million was incurred in the fiscal year 2015 relating to a prior restructuring plan.

These expenses were recorded to Restructuring charges on the Statements of Operations. The restructuring accrual balance is presented in Accounts payable and accrued expenses (includes restructuring) on the Consolidated Balance Sheets.

The following table displays the activity related to the restructuring plans described above:

(In thousands)	Severance and related	Lease termination	Systems & Engineering Tools*	Other	Total
Balance at December 29, 2012	\$2,373	\$793	\$—	\$258	\$3,424
Restructuring charges	109	224	—	253	586
Costs paid or otherwise settled	(2,315)	(740)	—	(225)	(3,280)
Adjustments to prior restructuring costs	(150)	91	—	(139)	(198)
Balance at December 28, 2013	\$17	\$368	—	\$147	\$532
Restructuring charges	—	1	—	9	10
Costs paid or otherwise settled	(8)	(341)	—	(18)	(367)
Adjustments to prior restructuring costs	(9)	15	—	1	7
Balance at January 3, 2015	\$—	\$43	—	\$139	\$182
Restructuring charges	12,861	2,667	3,040	671	19,239
Costs paid or otherwise settled	(9,165)	(1,705)	(2,663)	(810)	(14,343)
Adjustments to prior restructuring costs	—	—	—	—	—
Balance at January 2, 2016	\$3,696	\$1,005	\$377	\$—	\$5,078

\* Includes cancellation of contracts and accelerated depreciation of ERP systems

## Note 16 - Long-Term Debt

On March 10, 2015, we entered into a secured credit agreement (the "Credit Agreement") with Jefferies Finance, LLC and certain other lenders for purposes of funding, in part, our acquisition of Silicon Image. The Credit Agreement provided for a \$350 million term loan (the "Term Loan") maturing on March 10, 2021 (the "Term Loan Maturity

Date"). We received \$346.5 million net of an original issue discount of \$3.5 million and we paid debt issuance costs of \$8.3 million. The Term Loan bears variable interest equal to the LIBOR, subject to a 1.00% floor, plus a spread of 4.25%. The current effective interest rate on the Term Loan is 6.14%.

The Term Loan is payable through a combination of quarterly installments of approximately \$0.9 million, which began on July 4, 2015, annual excess cash flow payments as defined in the Credit Agreement, which are due 95 days after the last day of our fiscal year, and any payments due upon certain issuances of additional indebtedness and certain asset dispositions, with any remaining outstanding principal amount due and payable on the Term Loan Maturity Date. The percentage of excess cash flow we are required to pay ranges from 0% to 75%, depending on our leverage and other factors as defined in the Credit

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Agreement. Currently, the Credit Agreement would require a 75% excess cash flow payment. As of year end, we expect to be required to make principal payments of \$7.0 million, in addition to required quarterly payments, in 2016. While the Credit Agreement does not contain financial covenants, it does contain informational covenants and certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and indebtedness. We were in compliance with all such covenants at January 2, 2015.

The original issue discount and the debt issuance costs have been accounted for as a reduction to the carrying value of the Term Loan on our Consolidated Balance Sheets and are being amortized to Interest expense in our Consolidated Statements of Operations over the contractual term, using the effective interest method.

The carrying value of the Term Loan is reflected in our Consolidated Balance Sheets as follows:

(in thousands)	January 2, 2016		January 3, 2015
Principal amount	\$347,375		\$—
Unamortized original issue discount and debt issuance costs	(8,948	)	—
Less: Current portion of long-term debt	(7,557	)	—
Long-term debt	\$330,870		\$—

Interest expense related to the Term Loan was included in Interest expense on the Consolidated Statements of Operations as follows:

(in thousands)	January 2, 2016	Year Ended	
		January 3, 2015	December 28, 2013
Contractual interest	\$15,225	—	—
Amortization of debt issuance costs and discount	2,835	—	—
Total Interest expense related to the Term Loan	\$18,060	\$—	\$—

As of January 2, 2016, expected future principal payments on the Term Loan were as follows:

Fiscal year	(in thousands)
2016	\$10,500
2017	56,173
2018	82,773
2019	107,396
2020	69,040
Thereafter	21,493
	\$347,375

#### Note 17 - Common Stock Repurchase Program

On March 3, 2014, our Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock may be repurchased from time to time. The duration of the repurchase program was twelve months. Under this program during fiscal 2014, approximately 1.9 million shares were repurchased for \$13.1 million. The 2014 program completed during the first quarter of fiscal 2015, during which approximately 1.1 million shares were repurchased for approximately \$7.0 million. All shares repurchased under the 2014 program were retired by the end of the fiscal year in which they were repurchased. All repurchases were open market transactions funded from available working capital.

On February 27, 2013, our Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock may be repurchased from time to time. The duration of the repurchase program was twelve months. Under this program during fiscal 2013, approximately 0.8 million shares were repurchased at \$3.7 million. At December 28, 2013, we had approximately \$16.3 million remaining under the approved program. The 2013 program expired during the first quarter of fiscal 2014. No shares were repurchased during those three months. All shares repurchased under the 2013 program were retired by December 28, 2013. All repurchases were open market transactions funded from available working capital.

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## Note 18 - Stockholders' Equity

## Employee and Director Stock Options, Restricted Stock and ESPP

We have four equity incentive plans (the "1996 Stock Incentive Plan," the "2001 Stock Plan," the "2013 Incentive Plan" and the "2011 Non-Employee Director Equity Incentive Plan"). Awards granted under the 1996 Stock Incentive Plan and the 2001 Stock Plan remain outstanding, but no shares are available for future awards under these plans. Shares remain available for grants to employees and non-employee directors only under the 2013 Incentive Plan and the 2011 Non-Employee Director Equity Incentive Plan. "Incentive stock options" under Section 422 of the U.S. Internal Revenue Code and restricted stock unit ("RSU") grants are part of our equity compensation practices for employees who receive equity grants. Options and RSUs generally vest quarterly over a four-year period beginning on the grant date. The contractual terms of options granted do not exceed ten years.

In May 2012, the Company's stockholders approved the 2012 Employee Stock Purchase Plan ("2012 ESPP"). The Plan authorizes the issuance of 3,000,000 shares of common stock to eligible employees to purchase shares of common stock through payroll deductions, which cannot exceed 10% of an employee's compensation. The purchase price of the shares is the lower of 85% of the fair market value of the stock at the beginning of each six-month offering period or 85% of the fair market value at the end of such period. Employees are required to hold purchased shares for six months. We have treated the 2012 ESPP as a compensatory plan, and recorded related compensation expense of \$0.4 million, \$0.3 million and \$0.2 million for the fiscal years 2015, 2014 and 2013, respectively.

At January 2, 2016, a total of 5.2 million shares of our common stock were available for future grants under the Plans. Shares subject to stock option grants that expire or are canceled, without delivery of such shares, generally become available for re-issuance under the Plans. At January 2, 2016, a total of 2.3 million shares of our common stock were available for future purchases under the 2012 ESPP. On March 10, 2015, in conjunction with the acquisition of Silicon Image, we assumed certain outstanding stock option and RSU grants of the Silicon Image Equity Incentive Plan. We assumed all outstanding unvested RSU grants, and all stock option grants that were unvested or vested and out-of-the-money. The exchange ratio for the conversion was 1.098160 for all grants. The conversion ratio was determined by the weighted average closing price of Lattice stock for the ten days prior to the acquisition date divided by the offer price of \$7.30. The converted outstanding option grants totaled 2,087,605 shares and converted RSU grants totaled 2,025,255 shares as of March 10, 2015. As of the year ended January 2, 2016, 1,622,007 options and 1,056,368 RSU shares arising from this conversion remained outstanding.

## Stock-Based Compensation

Total stock-based compensation expense included in our Consolidated Statements of Operations was as follows:

(In thousands)	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Line item:			
Cost of products sold	\$1,416	\$819	\$627
Research and development	9,141	5,176	3,916
Selling, general, and administrative	6,793	6,807	4,979
Acquisition related charges	4,293	—	—
Total stock-based compensation	\$21,643	\$12,802	\$9,522

Total stock-based compensation for the twelve months ended January 2, 2016 was \$21.6 million of which \$3.9 million was paid during the period.

ASC 718, "Compensation-Stock Compensation ("ASC 718")," requires that we recognize compensation expense for only the portion of employee and director options and ESPP rights that are expected to vest.

The fair value of each option award is estimated on the date of grant using the Black-Scholes valuation model and the assumptions noted in the following table. The expected term is based on historical vested option exercises and includes an estimate of the expected term for options that are fully vested and outstanding. The expected volatility of both stock options and ESPP shares is based on the daily historical volatility of our stock price, measured over the expected term of the option or the ESPP purchase period. The risk-free interest rate is based on the implied yield on a U.S. Treasury zero-coupon issue with a remaining term closest to the expected term of the option. The dividend yield reflects that we have not paid any cash dividends since inception and do not intend to pay any cash dividends in the foreseeable future.

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The following table summarizes the assumptions used in the valuation of stock option and ESPP compensation for fiscal years 2015, 2014, and 2013:

	Year Ended		
	January 2, 2016	January 3, 2015	December 28, 2013
Employee and Director Stock Options			
Expected volatility	43.6% to 47.3%	45.4% to 50.4%	51.4% to 54.3%
Risk-free interest rate	1.4% to 1.7%	1.5% to 1.7%	0.7% to 1.0%
Expected term (years)	4.08 to 4.75	4.1 to 4.7 years	4.1 to 4.5 years
Dividend yield	—%	—%	—%
Employee Stock Purchase Plan			
Weighted average expected volatility	33.6%	38.7%	48.0%
Weighted average risk-free interest rate	0.12%	0.08%	0.11%
Expected term (years)	6 months	6 months	6 months
Dividend yield	—%	—%	—%

At January 2, 2016, there was \$10.8 million of total unrecognized compensation cost related to unvested employee and director stock options, which is expected to be recognized over a weighted average period of 4.2 years. Our current practice is to issue new shares to satisfy option exercises. Compensation expense for all stock-based compensation awards is recognized using the straight-line method.

The following table summarizes our stock option activity and related information for the year ended January 2, 2016:

(Shares and aggregate intrinsic value in thousands)	Shares	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate Intrinsic Value
Balance, January 3, 2015	9,369	\$5.45		
Grants as a result of Acquisition	2,087	4.63		
Granted	2,348	5.68		
Exercised	(1,159)	) 3.95		
Forfeited or expired	(1,201)	) 5.77		
Balance, January 2, 2016	11,444	\$5.46		
Vested and expected to vest at January 2, 2016	11,444	\$5.46	4.26	\$12,719
Exercisable, January 2, 2016	6,692	\$5.32	3.26	\$8,256

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (the difference between the Company's closing stock price on the last trading day of the fiscal year and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on that day. This amount changes based on the fair market value of the Company's stock. Total intrinsic value of options exercised for fiscal 2015, 2014 and 2013, and was \$2.5 million, \$7.8 million and \$2.5 million, respectively. The total fair value of options and RSUs vested and expensed in fiscal 2015, 2014 and 2013 and was \$18.0 million, \$12.8 million and \$9.3 million, respectively.

The resultant grant date weighted-average fair values calculated using the Black-Scholes option pricing model and the noted assumptions for stock options granted were \$2.35, \$2.93 and \$2.10 for fiscal years 2015, 2014 and 2013, respectively. The weighted average fair values calculated using the Black-Scholes option pricing model for the ESPP were \$1.51, \$1.73 and \$1.29 for fiscal years 2015, 2014 and 2013, respectively.

During fiscal year 2015, we granted approximately 327,200 stock options and 70,000 RSUs with a market condition to certain executives. The options and RSUs have a two year vesting and vest between 0% and 200% of the target amount, based on the Company's relative Total Shareholder Return (TSR) when compared to the TSR of a component of companies of the PHLX Semiconductor Sector Index over a two year period. The fair values of the options were determined and fixed on the date of grant using a lattice-based option-pricing valuation model, which incorporates a Monte-Carlo simulation, and considered the likelihood that we would achieve the market condition. TSR is a measure of stock price appreciation plus dividends paid, if any, in the performance period. As of January 2, 2016, 327,200 stock options and 70,000 RSUs with a market condition were outstanding. In 2015, we incurred stock compensation expense of \$0.6 million related to these market condition awards.



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During fiscal year 2014, we granted approximately 98,600 market-based RSUs in two equal tranches, each of which vest upon achievement of certain market-based conditions. The fair values of the market-based RSUs were determined and fixed on the date of grant using a lattice-based option-pricing valuation model, which incorporates a Monte-Carlo simulation, and considered the likelihood that we would achieve the market-based conditions. Both tranches vested and we incurred total stock compensation expense related to performance based awards of \$0.7 million for the fiscal year ended January 3, 2015.

The following table summarizes the assumptions used in the valuation of stock options and RSUs with a market condition for fiscal years 2015 and 2014. No stock options or RSUs with a market condition were granted in fiscal year 2013:

	Year Ended	
	January 2, 2016	January 3, 2015
Executive stock options with a market condition		
Expected volatility	44% to 46%	n/a
Risk-free interest rate	1.4%	n/a
Expected term (years)	4.5	n/a
Dividend yield	—%	n/a
Executive RSUs with a market condition		
Expected volatility	36.9%	53.5%
Risk-free interest rate	0.6%	2.2%
Expected term (years)	2.0	0.24
Dividend yield	—%	—%

The following table summarizes our RSU activity for the year ended January 2, 2016:

(Shares in thousands)	Shares	Weighted average grant date fair value
Balance at January 3, 2015	2,021	\$6.66
Grants as a result of Acquisition	2,025	5.37
Granted	3,203	5.92
Vested	(1,624	) 6.04
Forfeited	(868	) 6.02
Balance at January 2, 2016	4,757	\$5.95

At January 2, 2016 there was \$24.4 million of total unrecognized compensation cost related to unvested RSUs. Our current practice is to issue new shares when RSUs vest. Compensation expense for RSUs is recognized using the straight-line method over the related vesting period.

## Note 19 - Employee Benefit Plans

## Qualified Investment Plan

In 1990, we adopted a 401(k) plan, which provides participants with an opportunity to accumulate funds for retirement. The plan does not allow investments in the Company's common stock. The plan allows for the Company to make discretionary matching contributions in cash. We recorded matching contributions of \$0.9 million in fiscal 2015. No matching contributions were recorded in fiscal 2014 or 2013.



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### 2013 Cash Incentive Plan

On February 4, 2013, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the 2013 Cash Incentive Plan (the “2013 Cash Plan”). The Chief Executive Officer, other executive officers, and other members of senior management, including vice presidents and director-level employees, together with all other employees of the Company not on the Company's sales incentive plan are eligible to participate in the 2013 Cash Plan. Under the 2013 Cash Plan, individual cash incentive payments for the eligible employees will be based both on Company financial performance, as measured by achievement of operating income (before incentive plan accruals) and revenue goals within specified ranges established by the Compensation Committee, and Company performance, as measured by the achievement of personal management objectives. The Compensation Committee determines the performance of the chief executive officer, the chief financial officer and other participants based on the achievement of the management objectives established by the committee during the first fiscal quarter of 2013. There was \$11.3 million of expense recorded under this plan in fiscal 2013.

### 2014 Cash Incentive Plan

On February 3, 2014, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the 2014 Cash Incentive Plan (the “2014 Cash Plan”). The Chief Executive Officer, other executive officers, and other members of senior management, including vice presidents and director-level employees, together with all other employees of the Company not on the Company's sales incentive plan are eligible to participate in the 2014 Cash Plan. Under the 2014 Cash Plan, individual cash incentive payments for the eligible employees will be based both on Company financial performance, as measured by achievement of operating income (before incentive plan accruals) and revenue goals within specified ranges established by the Compensation Committee, and Company performance, as measured by the achievement of personal management objectives. The Compensation Committee determines the performance of the chief executive officer, the chief financial officer and other participants based on the achievement of the management objectives established by the committee during the first fiscal quarter of 2014. There was \$11.6 million of expense recorded under this plan in fiscal 2014.

### 2015 Cash Incentive Plan

On December 4, 2014, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the 2015 Cash Incentive Plan (the “2015 Cash Plan”). The Chief Executive Officer, other executive officers, and other members of senior management, including vice presidents and director-level employees, together with all other employees of the Company not on the Company's sales incentive plan are eligible to participate in the 2015 Cash Plan. Under the 2015 Cash Plan, individual cash incentive payments for the eligible employees will be based both on Company financial performance, as measured by achievement of operating income (before incentive plan accruals) and revenue goals within specified ranges established by the Compensation Committee, and Company performance, as measured by the achievement of personal management objectives. The Compensation Committee determines the performance of the chief executive officer, the chief financial officer and other participants based on the achievement of the management objectives established by the committee during the first fiscal quarter of 2015. There was \$1.0 million of expense recorded under this plan in fiscal 2015.

### Note 20 - Contingencies

#### Legal Matters

On or about January 29, 2015, Silicon Image, members of its Board, the Company and the Company's wholly-owned merger acquisition subsidiary were named as defendants in two complaints filed in Santa Clara Superior Court by alleged stockholders of Silicon Image in connection with the proposed merger of Silicon Image and the Company.

Both complaints were dated January 29, 2015 and were captioned respectively *Molland v. George, et al.* and *Stein v. Silicon Image, Inc. et. al.* Five additional complaints were subsequently filed on January 30, 2015, February 4, 2015 and February 9, 2015 in Delaware Chancery Court by alleged stockholders of Silicon Image, Inc. in connection with the Merger, captioned respectively *Pfeiffer v. Martino et. al.*; *Lipinski v. Silicon Image, Inc. et. al.*; *Feldbaum et. al. v. Silicon Image, Inc. et. al.*; *Nelson v. Silicon Image, Inc. et. al.* and *Partansky v. Silicon Image, Inc. et. al.* The five Delaware matters were subsequently consolidated into an action captioned *In re Silicon Image Stockholders Litigation* by order of the Delaware Chancery Court on February 11, 2015, and a consolidated amended complaint was filed in the matter on February 13, 2015. Two complaints captioned *Tapia v. Silicon Image, Inc. et. al.* and *Caldwel v. Silicon Image, Inc.* were also filed on February 4, 2015 and February 9, 2015 in Santa Clara Superior Court by alleged stockholders in connection with the merger. Amended complaints were filed in the *Molland* and *Stein* actions on February 11, 2015. Each of these lawsuits were purported class actions brought on behalf of Silicon Image stockholders, asserting claims against each member of the Silicon Image Board for breach of fiduciary duty, and against various officers of the Silicon Image, the Company, and the Company's wholly-owned merger subsidiary for aiding and abetting breach of fiduciary duty. The lawsuits alleged that the Merger did not appropriately value Silicon Image, was the result of an inadequate process, and included preclusive deal devices. The amended complaints also asserted that the Silicon Image's disclosures regarding the Merger in its Schedule 14D-9 omitted material information regarding the Merger. Each of these complaints purported to seek unspecified damages. The Delaware cases have been settled and this settlement has been approved by the court. The settlement did not have a material adverse effect on our financial position. The California cases were dismissed with prejudice on February 29, 2019.

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In November 2014, a patent infringement lawsuit was filed by Papst Licensing GmbH & Co., KG ("Papst") against us in the U.S. District Court for the District of Delaware. On September 21, 2015, the parties entered into a settlement agreement. Under that agreement, we received a non-exclusive, irrevocable, fully paid up, perpetual, worldwide license for use of the asserted patents. The license fully exhausts and includes all claims of the asserted patents. The settlement did not have a material adverse effect on our financial position. On October 22, 2015, the case was dismissed with prejudice.

In March 2014, the China National Development and Reform Commission ("NDRC") notified HDMI Licensing, LLC ("HDMI LLC"), a wholly-owned subsidiary of the Company and the agent for an entity charged with administering the HDMI specification, that the NDRC was investigating HDMI LLC's licensing activities in China under the Chinese Anti-Monopoly Law ("AML"). The NDRC has available a broad range of remedies with respect to business practices it deems to violate the AML, including the ability to issue an order to cease conduct deemed illegal, confiscate gains deemed illegally obtained, impose a fine and require modifications to business practices. In July 2015, the NDRC concluded its investigation and informed HDMI LLC that it did not intend to impose monetary penalties on HDMI LLC, subject to HDMI LLC entering into a settlement agreement with the China Video Industry Association ("CVIA") relating to various issues arising in connection with HDMI LLC licensing to Chinese companies. HDMI LLC is negotiating the specific implementation terms of this agreement with CVIA. Lattice cannot predict the outcome of this matter because administrative proceedings and negotiations with industry associations are inherently uncertain. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to the Company.

In January 2016 the Company commenced a suit against Technicolor SA and its affiliates in the United States District Court for the Northern District of California alleging that Technicolor had infringed certain patents relating to the HDMI specification. Technicolor has informed the Company that it will attempt to raise as a counterclaim a claim for payment to Technicolor and other HDMI founders their respective share of any HDMI adopters' fees not used by Lattice and its predecessor in interest Silicon Image in the marketing and other activities in furtherance of the HDMI standard. Technicolor previously has indicated its belief that the HDMI founders enjoy a right to these funds but has never pursued such claims. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to the Company.

We are exposed to certain other asserted and unasserted potential claims. There can be no assurance that, with respect to potential claims made against us, we could resolve such claims under terms and conditions that would not have a material adverse effect on our business, our liquidity or our financial results. Periodically, we review the status of each significant matter and assess its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and a range of possible losses can be estimated, we then accrue a liability for the estimated loss based on the provisions of FASB ASC 450, "Contingencies" ("ASC 450"). Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation and may revise estimates.

## Note 21 - Valuation and Qualifying Accounts

The following table displays the activity related to changes in our valuation and qualifying accounts:

(In thousands)	Balance at beginning of period	Balance received through acquisition	Charged (Credit) to costs and expenses	Charged to other accounts	Write-offs net of recoveries	Balance at end of period
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Fiscal year ended January 2, 2016

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Allowance for deferred taxes	141,215	52,481	58,658	224	—	252,578
Allowance for doubtful accounts	875	—	(438	) 189	(5	) 621
Allowance for warranty expense	81	136	153	—	—	370
	142,171	52,617	58,373	413	(5	) 253,569
Fiscal year ended January 3, 2015						
Allowance for deferred taxes	150,528	—	(9,958	) 645	—	141,215
Allowance for doubtful accounts	878	—	—	—	(3	) 875
Allowance for warranty expense	—	—	81	—	—	81
	151,406	—	(9,877	) 645	(3	) 142,171
Fiscal year ended December 28, 2013:						
Allowance for deferred taxes	149,209	—	1,636	(317	) —	150,528
Allowance for doubtful accounts	1,122	—	41	—	(285	) 878
Allowance for warranty expense	—	—	—	—	—	—
	150,331	—	1,677	(317	) (285	) 151,406

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## Note 22 - Segment and Geographic Information

## Segment Information

We have two operating segments: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices, and Qterics, a discrete software-as-a-service business unit in the Lattice legal entity structure.

Although these two operating segments constitute two reportable segments, we combine Qterics with our Core business and report them together as one reportable segment due to the immaterial nature of the Qterics segment. For the twelve months ended January 2, 2016, revenue generated by Qterics comprised 0.3% of Total revenue. For the twelve months ended January 2, 2016, Qterics accounted for 16.3% of the total Net loss attributable to stockholders, due primarily to a \$21.7 million impairment of goodwill and intangible assets related to this segment (Note 9). As of January 2, 2016, the Total assets of Qterics comprised 0.8% of the Total assets of the company.

## Geographic Information

Our revenue by major geographic area based on ship-to location was as follows:

(In thousands)	Year Ended					
	January 2, 2016		January 3, 2015		December 28, 2013	
United States:	\$33,677	8%	\$30,848	8%	\$28,506	9%
China	147,688	36	159,155	43	148,018	45
Europe	55,596	14	59,041	16	47,459	14
Japan	44,067	11	31,207	9	26,538	8
Taiwan	31,181	8	6,691	2	6,708	2
Other Asia	85,598	21	69,778	19	64,425	19
Other Americas	8,159	2	9,407	3	10,871	3
Total foreign revenue	372,289	92	335,279	92	304,019	91
Total revenue	\$405,966	100%	\$366,127	100%	\$332,525	100%

We assign revenue to geographies based on the customer ship-to address at the point where revenue is recognized. In the case of sell-in distributors and OEM customers, revenue is typically recognized, and geography is assigned, when products are shipped to our distributor or customer. In the case of sell-through distributors, revenue is recognized when resale occurs and geography is assigned based on the customer location on the resale reports provided by the distributor.

Our property and equipment, net by country at the end of each period was as follows:

(In thousands)	January 2, 2016	January 3, 2015
United States	25,615	14,250
China	14,998	5,626
Philippines	3,948	3,658
Taiwan	3,677	405
India	1,470	248
Japan	1,211	1,732
Other	933	1,877
Total foreign property and equipment, net	26,237	13,546
Total property and equipment, net	51,852	27,796





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## Revenue by Distributors

Our largest customers are often distributors and sales through distributors have historically made up a significant portion of our total revenue. Revenue attributable to resales of products by our primary distributors are as follows:

	% of Total Revenue					
	2015		2014		2013	
Arrow Electronics Inc. (including Nu Horizons Electronics)	20	%	24	%	23	%
Weikeng Group	12		10		12	
All others	13		11		10	
All sell-through distributors	45	%	45	%	45	%

Orders from our sell-through distributors are initially recorded at published list prices; however, for a majority of our sales, the final selling price is determined at the time of resale and in accordance with a distributor price agreement. In certain circumstances, we allow sell-through distributors to return unsold products. At times, we protect our sell-through distributors against reductions in published list prices. For these reasons, we do not recognize revenue until products are resold by sell-through distributors to an end customer.

## Note 23 - Quarterly Financial Data (Unaudited)

A summary of the Company's consolidated quarterly results of operations is as follows:

(In thousands, except per share data)	2015 *				2014			
	Q4	Q3	Q2	Q1	Q4 **	Q3	Q2	Q1
Revenue	\$101,194	\$109,715	\$106,460	\$88,597	\$83,600	\$86,570	\$99,320	\$96,637
Gross margin	54,102	59,849	58,126	47,832	46,263	50,811	54,975	54,138
Restructuring charges	3,459	6,818	4,068	4,894	1	2	3	11
Net (loss) income attributable to stockholders	(45,454 )	(24,862 )	(35,570 )	(53,347 )	15,419	9,406	11,771	11,984
Basic net (loss) income per share	\$(0.38 )	\$(0.21 )	\$(0.30 )	\$(0.46 )	\$0.13	\$0.08	\$0.10	\$0.10
Diluted net (loss) income per share	\$(0.38 )	\$(0.21 )	\$(0.30 )	\$(0.46 )	\$0.13	\$0.08	\$0.10	\$0.10

\* Our results for the year ended January 2, 2016 include the results of Silicon Image for the approximately 10-month period from March 11, 2015 through January 2, 2016. The first quarter of fiscal 2015 ended on April 4, 2015. Results presented for prior fiscal quarters are those historically reported for Lattice only.

\*\* The fourth quarter of 2014 was a 14-week quarter as compared to the other quarters in 2015 and 2014, which were based on our standard 13-week quarter.

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Lattice Semiconductor Corporation:

We have audited the accompanying consolidated balance sheets of Lattice Semiconductor Corporation and subsidiaries (the Company) as of January 2, 2016 and January 3, 2015, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three year period ended January 2, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company and subsidiaries as of January 2, 2016 and January 3, 2015, and the results of their operations and their cash flows for each of the years in the three year period ended January 2, 2016, 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), the Company's internal control over financial reporting as of January 2, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 2, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting. Our report on the effectiveness of internal control over financial reporting as of January 2, 2016, contains an explanatory paragraph that states that management's assessment of the effectiveness of internal control over financial reporting and our audit of internal control over financial reporting of the Company excludes an evaluation of internal control over financial reporting of the acquired Silicon Image, Inc.

/s/ KPMG LLP  
Portland, Oregon  
March 2, 2016

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Lattice Semiconductor Corporation:

We have audited Lattice Semiconductor Corporation and subsidiaries (the Company) internal control over financial reporting as of January 2, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). 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 appearing under Item 9A. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 2, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

The Company acquired Silicon Image, Inc. (Silicon Image) during fiscal 2015, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of January 2, 2016, Silicon Image's internal control over financial reporting associated with total assets of \$129.2 million and total revenues of \$135.6 million included in the consolidated financial statements of the Company and subsidiaries as of and for the year ended January 2, 2016. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Silicon Image.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company and subsidiaries as of January 2, 2016 and January 3, 2015, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended January 2, 2016, and our report dated March 2, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP  
Portland, Oregon  
March 2, 2016

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Item 9. Changes in and Disagreements with Accountants On Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Based on management's evaluation (with the participation of our principal executive officer and principal financial officer), as of the end of the period covered by this annual report, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")) are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding reliability of financial reporting and the preparation and fair presentation of published financial statements for external purposes in accordance with generally accepted accounting principles.

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.

Management assessed the effectiveness of the company's internal control over financial reporting as of January 2, 2016. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework (2013). Based on this assessment, management concluded that, as of January 2, 2016, the Company's internal control over financial reporting was effective.

The Company acquired Silicon Image, Inc. on March 10, 2015 (the Acquisition). Management has excluded the Acquisition from its assessment of internal controls over financial reporting as of January 2, 2016. The acquisition represents total assets of \$129.2 million and total revenues of \$135.6 million included in the consolidated financial statements of the Company and subsidiaries as of and for the year ended January 2, 2016. The acquisition's assets constitute approximately 16% of the Company's total assets as of January 2, 2016 and the acquisition's revenues constitute approximately 33% of the Company's revenues for fiscal 2015 covered by this report.

KPMG LLP, an independent registered public accounting firm, has audited the Company's financial statements in this report on Form 10-K and issued its report on the effectiveness of the Company's internal control over financial reporting as of January 2, 2016.

Changes in Internal Control over Financial Reporting

On March 10, 2015, we acquired Silicon Image, which operated under its own set of systems and internal controls. We are separately maintaining Silicon Image's systems and much of its control environment until we are able to incorporate Silicon Image's processes into our own systems and control environment. We currently expect to complete the integration of Silicon Image's operations into our systems and control environment by the end of the fiscal year ending December 31, 2016.

Other than as described above, there were no changes in our internal controls over financial reporting (as defined in Rules 13a - 15(f) and 15(d) - 15(f) under the Exchanges Act) that occurred during the fourth quarter of fiscal 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

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PART III

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Certain information required by Part III is incorporated by reference from our definitive proxy statement (the “Proxy Statement”) for the 2016 Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, which we will file not later than 120 days after the end of the fiscal year covered by this report. With the exception of the information expressly incorporated by reference from the Proxy Statement, the Proxy Statement is not to be deemed filed as a part of this report.

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding our directors that is required by this item is incorporated by reference from the information contained under the captions “Proposal 1: Election of Directors” and “Corporate Governance and Other Matters--Board Meetings and Committees” in the Proxy Statement. Information regarding our executive officers that is required by this item is incorporated by reference from the information contained under the caption “Proposal 2: Executive Compensation--The Executive Officers of the Company” in the Proxy Statement.

Information regarding Section 16(a) reporting compliance that is required by this item is incorporated by reference from the information contained under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement.

We have adopted a Code of Conduct that applies to all of our employees, including our principal executive officer, principal financial officer, principal accounting officer, and persons performing similar functions. The Code of Conduct is posted on our website at [www.latticesemi.com](http://www.latticesemi.com). There were no changes to our code of conduct during fiscal 2015. Amendments to the Code of Conduct or any grant of a waiver from a provision of the code of ethics requiring disclosure under applicable SEC rules, if any, will be disclosed on our website at [www.latticesemi.com](http://www.latticesemi.com).

Information about our “Director Code of Ethics” and written committee charters for our Audit Committee, Compensation Committee, and Nominating and Governance Committee are available free of charge on the Company's website at [www.latticesemi.com](http://www.latticesemi.com) and are available in print to any shareholder upon request.

There have been no material changes to the procedures by which security holders may recommend nominees to our Board of Directors since the filing of our Annual Report on Form 10-K for the year ended January 3, 2015. The procedures by which security holders may recommend nominees to our Board of Directors were described in detail in the information concerning our Nominating and Governance Committee under the caption “Board Meetings and Committees” in our Proxy Statement filed April 7, 2015.

Information regarding our Audit Committee that is required by this Item is incorporated by reference from the information concerning our Audit Committee contained under the caption “Corporate Governance and Other Matters--Board Meetings and Committees” in the Proxy Statement.

Item 11. Executive Compensation

The information contained under the captions “Executive Compensation,” “Director Compensation,” “Compensation Committee Interlocks and Insider Participation,” and “Compensation Committee Report” in the Proxy Statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information contained under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the Proxy Statement is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

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The information contained under the captions entitled “Certain Relationships and Related Transactions” and “Corporate Governance and Other Matters--Director Independence” in the Proxy Statement is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information contained under the caption entitled “Audit and Related Fees” in the Proxy Statement is incorporated herein by reference.

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## PART IV

## Item 15. Exhibits.

## (a) List of Documents Filed as Part of this Report

## (1) All financial statements.

The following financial statements are filed as part of this report under Item 8.

Consolidated Financial Statements:	Page
<u>Consolidated Balance Sheets</u>	<u>49</u>
<u>Consolidated Statements of Operations</u>	<u>50</u>
<u>Consolidated Statements of Comprehensive (Loss) Income</u>	<u>51</u>
<u>Consolidated Statements of Changes in Stockholders' Equity</u>	<u>52</u>
<u>Consolidated Statements of Cash Flows</u>	<u>53</u>
<u>Notes to Consolidated Financial Statements</u>	<u>54</u>

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

## (2) Exhibits.

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated January 26, 2015, by and among Lattice Semiconductor Corporation, Cayabyab Merger Company and Silicon Image, Inc. (Incorporated by reference to Exhibit 2.1 filed with the Company's Current Report on Form 8-K filed January 27, 2015).
3.1	The Company's Restated Certificate of Incorporation filed, as amended on June 4, 2009 (Incorporated by reference to Exhibit 3.1 filed with the Company's Current Report on Form 8-K filed June 4, 2009).
3.2	The Company's Bylaws, as amended and restated as of June 4, 2009 (Incorporated by reference to Exhibit 3.2 filed with the Company's Current Report on Form 8-K filed June 4, 2009).
10.16*	Lattice Semiconductor Corporation Employee Stock Purchase Plan, as amended (incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A for the 2007 Annual Meeting of Stockholders filed on April 5, 2007).
10.24*	Lattice Semiconductor Corporation 1996 Stock Incentive Plan, as amended, and Related Form of Option Agreement (Incorporated by reference to Exhibit 10.24 filed with the Company's Annual Report on Form 10-K for the fiscal year ended December 29, 2012).
10.33*	2001 Outside Directors' Stock Option Plan, as amended and restated (Incorporated by reference to Exhibit 10.33 filed with the Company's Annual Report on Form 10-K for the fiscal year ended December 29, 2012).

10.34\* 2001 Stock Plan, as amended, and related Form of Option Agreement (Incorporated by reference to Exhibit 10.34 filed with the Company's Annual Report on Form 10-K for the fiscal year ended December 29, 2012).

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Exhibit Number	Description
10.41*	Form of Indemnification Agreement executed by each director and executive officer of the Company and certain other officers and employees of the Company and its subsidiaries (Incorporated by reference to Exhibit 10.41 filed with the Company's Annual Report on Form 10-K for the fiscal year ended January 3, 2004).
10.51*	Form of Amendment to Stock Option Agreements for 1996 Stock Incentive Plan, as amended, and 2001 Stock Plan, as amended (Incorporated by reference to Exhibit 99.3 filed with the Company's Current Report on Form 8-K filed on December 12, 2005).
10.56*	Form of Notice of Grant of Restricted Stock Units to Executive Officer (Incorporated by reference to Exhibit 99.1 filed with the Company's Current Report on Form 8-K filed on February 8, 2007).
10.63*	2009 Bonus Plan of Lattice Semiconductor Corporation (Incorporated by reference to Exhibit 10.63 filed with the Company's Annual Report on Form 10-K for the fiscal year ended January 3, 2009).
10.66*	Employment Agreement between Lattice Semiconductor Corporation and Byron Milstead effective as of December 30, 2008 (Incorporated by reference to Exhibit 10.66 filed with the Company's Annual Report on Form 10-K filed for the fiscal year ended January 3, 2009).
10.69*	Lattice Semiconductor Corporation 2010 Cash Incentive Compensation Plan (Incorporated by reference to Exhibit 10.69 filed with the Company's Annual Report on Form 10-K filed for the fiscal year ended January 2, 2010).
10.70*	Employment Agreement between Lattice Semiconductor Corporation and Darin G. Billerbeck dated as of November 8, 2010 (Incorporated by reference to Exhibit 10.70 filed with the Company's Quarterly Report on Form 10-Q for the quarter ended October 2, 2010).
10.71*	Employment Agreement between Lattice Semiconductor Corporation and Joe Bedewi dated as of April 11, 2011. (Incorporated by reference to Exhibit 10.71 filed with the Company's Quarterly Report on Form 10-Q for the quarter ended April 2, 2011).
10.72*	Lattice Semiconductor Corporation 2012 Employee Stock Purchase Plan (incorporated by reference to Annex 1 to the Company's Definitive Proxy Statement on Schedule 14A for the 2012 Annual Meeting of Stockholders filed on April 12, 2012).
10.74*	Lattice Semiconductor Corporation Amended 2011 Non-Employee Director Equity Incentive Plan (Incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A for the 2014 Annual Meeting of Stockholders filed on March 20, 2014).
10.75*	Lattice Semiconductor Corporation 2013 Incentive Plan (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A for the 2014 Annual Meeting of Stockholders filed on March 20, 2014).
10.76	Office Lease, effective as of October 21, 2014, between 555 SW Oak, LLC and Lattice Semiconductor Corporation (Incorporated by reference to Exhibit 10.1 filed with the Company's Current Report on Form 8-K filed October 27, 2014).

- 10.77\* Lattice Semiconductor Corporation 2013 Cash Incentive Plan (Incorporated by reference to Exhibit 10.77 filed with the Company's Annual Report on Form 10-K filed for the fiscal year ended January 3, 2015).
- 10.78\* Lattice Semiconductor Corporation 2014 Cash Incentive Plan (Incorporated by reference to Exhibit 10.78 filed with the Company's Annual Report on Form 10-K filed for the fiscal year ended January 3, 2015).
- 10.79 Employment Agreement between Lattice Semiconductor Corporation and Glen Hawk dated November 6, 2015.

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Exhibit Number	Description
21.1	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
*	Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Annual Report on Form 10-K pursuant to Item 15(b) thereof.

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## SIGNATURES

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

LATTICE SEMICONDUCTOR CORPORATION

(Registrant)

By: /s/ Joe Bedewi  
Joe Bedewi  
Corporate Vice President and Chief Financial Officer  
(Duly Authorized Officer and Principal Financial and Accounting Officer)

Date: March 2, 2016

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Darin G. Billerbeck and Joe Bedewi, or either of them, his or her attorneys-in-fact, each with the power of substitution, for such person in any and all capacities, to sign any amendments to this report and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that either of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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

Signature	Title	Date
Principal Executive Officer /s/ Darin G. Billerbeck Darin G. Billerbeck Principal Financial and Accounting Officer	President, Chief Executive Officer and Director	March 2, 2016
/s/ Joe Bedewi Joe Bedewi	Corporate Vice President and Chief Financial Officer	March 2, 2016
Directors /s/ Robin Abrams Robin Abrams	Director	March 2, 2016
/s/ John Bourgoïn John Bourgoïn	Director	March 2, 2016
/s/ Robert Herb Robert Herb	Director	March 2, 2016
/s/ Mark Jensen Mark Jensen	Director	March 2, 2016
/s/ Balaji Krishnamurthy Balaji Krishnamurthy	Director	March 2, 2016
/s/ Jeff Richardson Jeff Richardson	Director	March 2, 2016
/s/ Fred Weber Fred Weber	Director	March 2, 2016