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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 DECEMBER 29, 2012**

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)

|  |  |
|--|--|
| <b>Delaware</b><br>(State of Incorporation)  | <b>93-0835214</b><br>(I.R.S. Employer Identification Number) |
| <b>5555 NE Moore Court</b><br><b>Hillsboro, Oregon</b><br>(Address of principal executive offices) | <b>97124-6421</b><br>(Zip Code)                              |

Registrant's telephone number, including area code: **(503) 268-8000**  
Securities registered pursuant to Section 12(b) of the Act:

|  |   |
|--|---|
| <u>(Title of Class)</u><br>Common Stock, \$.01 par value | <u>(Name of each exchange on which registered)</u><br>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

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.

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

Accelerated filer

Non-accelerated filer

Smaller reporting company

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

Aggregate market value of voting stock held by non-affiliates of the registrant as of June 29, 2012 289,406,565

Number of shares of common stock outstanding as of March 6, 2013 115,473,147

**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 2013 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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**LATTICE SEMICONDUCTOR CORPORATION**  
**FORM 10-K**  
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## Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. We use words or phrases such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “may,” “will,” “should,” “continue,” “ongoing,” “future,” “potential” and similar words or phrases to identify forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements about: our plans to introduce new FPGA families in high-growth market niches where we believe that we have sustainable and differentiated positions, the majority of our revenue being through our sell-through distributors; the impact of our global tax structure and expectations regarding taxes and tax adjustments; our expectations that a significant portion of our revenue will continue to be dependent on the Communications end market; the Asia Pacific market being the primary source of our revenue; our plans to sell our auction rate securities; the costs and benefits and timing of completion of our restructuring plans; the impact of new accounting pronouncements; our expectations regarding customer preferences and product use; our future product development and marketing plans; our ability to maintain or develop successful foundry relationships to produce new products; our expectations regarding seasonal trends; our expectations regarding defenses to claims against our intellectual property; our making significant future investments in research and development; our beliefs concerning the adequacy of our liquidity and facilities, and our ability to meet our operating and capital requirements and obligations.

Forward-looking statements involve estimates, assumptions, risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. The key factors that could cause our actual results to differ materially from the forward-looking statements include global economic conditions and uncertainty, the concentration of our sales in the communications equipment end market, particularly as it relates to the concentration of our sales in the Asia Pacific region, market acceptance and demand for our new products, any disruption of our distribution channels, unexpected charges, delays or results relating to our restructuring plans, the effect of the downturn in the economy on capital markets and credit markets, the impact of competitive products and pricing, unanticipated taxation requirements, or positions of the U.S. Internal Revenue Service, unexpected impacts of recent accounting guidance and the other risks that are described herein and that are otherwise described from time to time in our filings with the Securities and Exchange Commission, including, but not limited to, the items discussed in “Risk Factors” in Item 1A of Part I of this Report. You should not unduly rely on forward-looking statements because our actual results could differ materially from those expressed in any forward-looking statements made by us. In addition, any forward-looking statement applies only as of the date on which it is made. We do not plan to, and undertake no obligation to, update any forward-looking statements to reflect events or circumstances that occur after the date on which such statements are made or to reflect the occurrence of unanticipated events.

## PART I

### Item 1. Business.

Lattice Semiconductor Corporation (“Lattice” or the “Company”) designs, develops and markets programmable logic products and related software. Programmable logic products are widely used semiconductor components that can be configured by end customers as specific logic circuits, enabling shorter design cycle times and reduced development costs. Our end customers are primarily original equipment manufacturers (“OEMs”) in the communications, industrial and other, consumer and computing end markets.

Lattice was incorporated in Oregon in 1983 and reincorporated in Delaware in 1985. Our headquarters facility is located at 5555 N.E. Moore Court, Hillsboro, Oregon 97124, our telephone number is (503) 268-8000 and our website can be accessed at [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.

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our fiscal 2012, 2011, 2010, and 2009 were 52-week years and ended December 29, 2012, December 31, 2011, January 1, 2011, and January 2, 2010, respectively. Our fiscal 2013 will be a 52-week year and will end on December 28, 2013. All references to quarterly or yearly financial results are references to the results for the relevant fiscal period.

### Programmable Logic Market Background

Three principal types of digital integrated circuits are used in most electronic systems: microprocessors, memory and logic. Microprocessors are used for control and computing tasks, memory is used to store programming instructions and data, and logic is employed to manage the interchange and manipulation of digital signals within a system.

Logic circuits are found in a wide range of today's digital electronic equipment, including communications, computing, consumer, industrial, automotive, medical, and military systems. The logic market encompasses general purpose logic semiconductor products, which include programmable logic devices, and application-specific semiconductor products, which include application-specific integrated circuits (“ASICs”) (custom devices for a single user) and application-specific standard products (“ASSPs”) (standardized logic devices marketed to multiple users). According to research from IHS iSuppli<sup>1</sup>, the general purpose logic and application-specific semiconductor product categories combined accounted for approximately 38% of the estimated \$303 billion worldwide semiconductor market in 2012.

Manufacturers of electronic equipment are challenged to bring differentiated products to market quickly. These competitive pressures often preclude the use of custom-designed ASICs, which generally entail significant design risks, non-recurring expenses and longer development cycles. ASSPs, an alternative to custom designed ASICs, limit a manufacturer's flexibility to adequately customize an end system. Programmable logic addresses these inherent difficulties. Programmable logic is a standard semiconductor product, purchased by systems manufacturers in a “blank” state that can be custom-configured into a virtually unlimited number of specific logic functions by programming the device with electrical signals. Programmable logic gives system designers the ability to more quickly create custom logic functions to enable product differentiation without sacrificing rapid time to market.

According to IHS iSuppli<sup>2</sup>, the programmable logic market was approximately \$4.5 billion in 2012. Within this market, there are two main markets: field programmable gate arrays (“FPGA”) and programmable logic devices (“PLD”), each representing a distinct silicon architectural approach to programmable logic. In 2012, FPGA was a \$4.0 billion market<sup>2</sup> while PLD was a \$0.5 billion market.<sup>2</sup> Products based on the two alternative programmable logic architectures are generally best suited for different types of logic functions, although many logic functions can be implemented using either architecture. FPGAs are characterized by a narrow-input logic cell and use a distributed interconnect scheme. FPGAs may also contain dedicated blocks of fixed circuits such as memory, high-speed input/output interfaces or processors. PLDs are traditionally characterized by a regular building block structure of wide-input logic cells, called macrocells, and use a centralized logic interconnect scheme. Although FPGAs and PLDs are typically suited for use in distinct types of logic applications, we believe that a substantial portion of programmable logic customers utilize both FPGA and PLD products. In addition, mixed signal PLDs that combine digital and analog features are growing in popularity.

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<sup>1</sup> IHS iSuppli, “Competitive Landscaping Tool (CLT) Q4 2012,” Nov. 16, 2012

<sup>2</sup> IHS iSuppli, “Core Silicon Q4 2012 Market Tracker & Component AMFT,” Dec. 28, 2012

## Lattice Products

Lattice actively participates in both the FPGA and PLD (which includes the growing mixed signal PLD) markets. We strive to meet our customers' needs by offering innovative and differentiated solutions that include not only silicon and packaged devices, but also design tools and intellectual property. A brief overview of our key products follows.

### FPGA Products

During fiscal 2012, 34% of our revenue was derived from FPGA products, compared to 34% in 2011 and 33% in 2010. In the future, we plan to introduce new FPGA families in high-growth market niches where we believe that we have sustainable and differentiated positions.

#### *LatticeECP2M and LatticeECP3 Low-Power High-Value FPGAs*

The LatticeECP FPGA family is designed for customers who need FPGAs with digital signal processing ("DSP"), a significant amount of memory, and high-speed serial communications channels ("SerDes"), but do not want to pay the price or power premiums of high-end FPGAs. The LatticeECP2M and LatticeECP3 families are able to serve this low density market due to careful circuit design choices aimed at achieving lower cost and various architectural enhancements to reduce power consumption.

Introduced in February 2009, the fourth generation LatticeECP3 FPGA family is particularly well suited for deployment in wireless infrastructure and wireline access equipment, as well as video and imaging applications. All generations of the LatticeECP family are manufactured using our foundry partner Fujitsu Limited's ("Fujitsu") advanced process technologies.

#### *LatticeXP2 Non-Volatile FPGAs*

Unlike a traditional FPGA that requires an external device to load its application program, the non-volatile LatticeXP2 FPGA family embeds a Flash memory block on-chip to store the program. This on-chip program memory offers customers several unique benefits. First, as a single chip solution it enables customers to reduce their board size. Second, without the comparatively long time delay caused by loading a program externally, a customer's equipment can start up much more quickly. We refer to this feature as "instant-on." While broadly used across many market segments, we believe that the single-chip, instant-on, and high-security provided by the LatticeXP2 FPGA family make it particularly attractive for the security, surveillance, and display markets.

The LatticeXP2 family is manufactured using embedded Flash processes co-developed with our foundry partner Fujitsu. The use of embedded Flash for the non-volatile memory enables the Lattice XP2 family to be re-programmable.

The key features of our selected FPGA families are described in the table below:

| <b>FPGA Family</b>        | <b>Year Introduced</b> | <b>Process Technology (nm)</b> | <b>Operating Voltage</b> | <b>Logic (K LUTs)</b> | <b>SERDES Channels</b> | <b>Max RAM (Mb)</b> | <b>I/O Pins (#)</b> |
|---------------------------|------------------------|--------------------------------|--------------------------|-----------------------|------------------------|---------------------|---------------------|
| LatticeECP3 <sup>TM</sup> | 2009                   | 65                             | 1.2                      | 17-149                | 4-16                   | 7.2                 | 116-586             |
| LatticeXP2 <sup>TM</sup>  | 2007                   | 90                             | 1.2                      | 5-40                  | —                      | 1.0                 | 86-540              |

**PLD Products**

During fiscal 2012, 66% of our revenue was derived from PLD products, compared to 66% in fiscal 2011 and 67% in fiscal 2010. We currently offer the industry's broadest line of PLDs based on our numerous families of ispLSI®, ispMACH®, GAL®, MachXO, MachXO2, and iCE products.

***MachXO2 PLD Family***

The MachXO2 family of versatile non-volatile reconfigurable PLDs is designed for applications traditionally implemented using complex programmable logic devices (“CPLD”) or low-capacity FPGAs. Widely adopted in a broad range of high value, cost sensitive applications that require general purpose I/O expansion, interface bridging and power-up management functions, MachXO2 PLDs offer the benefits of increased system integration by providing embedded memory, built-in Phase-locked Loops, high performance Low-voltage Differential Signaling (“LVDS”) I/O, remote field upgrade and a low-power sleep mode.

Introduced in 2010, our MachXO2 PLD family is built on a low power 65-nm process featuring embedded Flash technology. The MachXO2 family delivers a 3X increase in logic density, a 10X increase in embedded memory and more than a 100X reduction in static power than the MachXO PLD family. In addition, several popular functions used in low-density PLD applications, such as User Flash Memory (UFM), I2C, SPI and timer/counter, have been hardened into the MachXO2 devices, providing designers a “Do-it-All-PLD” for high volume, value orientated applications.

Designed for a broad range of ultra-low density applications, the MachXO2 PLD family is used in a variety of end markets including consumer, communications, computing, industrial and medical.

***Lattice iCE Ultra-Low Power PLD Devices***

Utilizing a single chip, ultra-low power programmable logic fabric, the iCE40 family enables mobile device designers to quickly add features to their mobile platform in areas such as connectivity, memory and storage, bridging, sensor management, and video and imaging. Lattice iCE products offer designers of handheld, battery-based consumer devices a programmable logic solution that delivers design flexibility and fast time-to-market benefits coupled with features that address their power, logic capacity, cost, and small form factor requirements.

The key features of our selected PLD families are described in the table below:

| <b>PLD Family</b> | <b>Year Introduced</b> | <b>Process Technology (nm)</b> | <b>Operating Voltage</b> | <b>Logic (Macrocells)</b> | <b>I/O Pins (#)</b> |
|-------------------|------------------------|--------------------------------|--------------------------|---------------------------|---------------------|
| MACHXO2™          | 2010                   | 65                             | 3.3/2.5/1.2              | 128-3,432                 | 19-335              |
| Lattice iCE40™    | 2011                   | 40                             | 1.2                      | 320-8,096                 | 25-222              |

Note: MachXO2 and iCE40 implement logic using look-up tables. The figures shown are the macrocell equivalents.

***Power Manager, ispClock and Platform Manager Programmable Mixed Signal Devices***

As customer equipment grows more complex, their power and clock management problems also become more complex. Our Power Manager and ispClock™ families feature a combination of programmable logic and programmable analog circuitry that allows system designers to reduce system cost and design time by quickly and easily integrating a wide variety of power or clock management functions within a single integrated circuit. These products can replace numerous discrete components, reducing cost and conserving board space, while providing customers with additional design flexibility and time-to-market benefits. The accuracy of our Power Manager products enables more reliable system performance for our customers.

The Platform Manager™ family is Lattice's third-generation mixed-signal device family. The programmable Platform Manager devices are expected to simplify board management design significantly by integrating programmable analog and logic to support many common functions, such as power management, digital housekeeping and glue logic. By integrating these support functions, Platform Manager devices can not only reduce the cost of these functions compared to traditional approaches, but also can improve system reliability and provide a high degree of design flexibility that minimizes the risk of circuit board re-spins.

### ***Software Development Tools and Intellectual Property Cores***

Our programmable logic products are supported by several design and development suites, each one targeted at the specific needs of the user of that product. Our Ultra-Low Density ("ULD") iCE products are supported by our iCEcube2 design and development suite. The remainder of our Ultra-Low Density and Low Density ("LD") products are supported by the Lattice Diamond™ design and development tool suite. Our mixed signal products are supported by PAC-Designer® software. The macrocell-based CPLD products are supported by ispLEVER Classic.

iCEcube2 is a complete, easy to learn design flow that meets the needs of the ULD designer. It is supported on the Windows platform. Lattice Diamond™ is also a complete, thoroughly modern, easy to learn FPGA design suite and is supported on both Windows and Linux platforms. Both iCEcube2 and Lattice Diamond™ allow our users to easily enter their design along with the design goals, quickly analyze and verify the design for accuracy, and then implement the design in our programmable logic solution. The flow enables logic simulation, static timing analysis, I/O pin assignment, synthesis and automatic timing driven place and route, and device programming.

For all tool suites, Synopsys' Synplify Pro advanced FPGA synthesis is included for all operating systems supported, and Aldec's Active-HDL Lattice Edition II simulator is included for Windows. In addition to the tool support for Lattice devices provided by the OEM versions of Synplify Pro and Active-HDL, Lattice devices are also supported by the full versions of Synopsys Synplify Pro and Aldec Active-HDL. Mentor Graphics ModelSim SE is also supported.

Lattice's IP core program (LatticeCORE™) assists our customers' design efforts by providing pre-tested, reusable functions that can be easily used, allowing our customers to focus on their unique system architectures. These IP cores eliminate the need to "re-invent the wheel" by providing many industry-standard functions, including PCI Express, DDR, Ethernet, CPRI, 7:1 LVDS, and embedded microprocessors.

### **Product Development**

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. Product development activities occur primarily in: Hillsboro, Oregon; San Jose, California; Shanghai, China; and Manila, Philippines.

Research and development expenses were \$77.6 million in 2012, \$71.9 million in 2011 and \$60.3 million in 2010. We expect to continue to make significant investments in research and development. During fiscal 2011, we consolidated our research and development activities and established an engineering development center in the Philippines.

### **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.

The Company and Fujitsu have entered into agreements pursuant to which Fujitsu manufactures our products on its 130 nanometer, 90 nanometer and 65 nanometer CMOS process technologies, as well as on 130 nanometer, 90 nanometer and 65 nanometer technologies with embedded flash memory that we have jointly developed with Fujitsu. Taiwan Semiconductor Manufacturing Company Ltd. ("TSMC") manufactures our 40 nanometer iCE products. In addition, United Microelectronics Corporation ("UMC") manufactures certain of our 40 nanometer products.

In addition, all of our assembly operations and most of our test operations are performed by outside suppliers.

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 shipment of inventory to third party distributors. During 2012 and 2011 we transferred significant portions of our supply chain support activities from our headquarters in Oregon and our operations center in Singapore to a new operations center in the Philippines.

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We perform certain test operations and reliability and quality assurance processes internally. We have achieved and maintained ISO9001:2000 Quality Management Systems Certification and ISO16949:2002 Quality Systems Certification, and released a full line of PLD products qualified to the AEC-Q100 Reliability Standard.

### ***Wafer Fabrication***

We source silicon wafers from our foundry partners, Fujitsu and Seiko Epson Corporation in Japan, United Microelectronics Corporation in Taiwan and GLOBALFOUNDRIES in Singapore, pursuant to agreements with each company and their respective affiliates. In addition, we now have manufacturing capability with TSMC in Taiwan for products on its 65 nanometer and 40 nanometer CMOS LP process technologies. 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, Singapore and South Korea. 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 test the die on most wafers prior to shipment for assembly. Following assembly, 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 and Singapore. Final testing is performed by independent contractors in Indonesia, Malaysia, the Philippines, Singapore, Taiwan and South Korea. We also perform certain test operations and reliability and quality assurance processes internally.

## **Marketing, Sales and Customers**

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. 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 in the communications, computing, consumer, industrial, automotive, medical and military end markets.

We have agreements with 21 manufacturers' representatives in North America. We have also established foreign sales channels in over 50 foreign countries through a network of 15 international sales representatives. The majority 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 through distributors accounted for 55% of our net revenue in 2012 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 primary sell-through distributors: Nu Horizon Electronics Corp., a wholly owned subsidiary of Arrow Electronics, Inc., and the Weikeng Group, primarily through Weikeng Industrial Co. Ltd., Weikeng International Co. Ltd., and Weikeng Technology Pte.

Historically the largest percentage of our revenue has been derived from customers participating in the communications equipment end market. In addition, the Company sells products used by two large China-based telecommunication equipment providers. No individual end customer accounted for more than 10% of total revenue in any of the fiscal years 2012, 2011 and 2010.



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Revenue from foreign sales as a percentage of total revenue were 88%, 86%, and 88% for fiscal 2012, 2011, and 2010, respectively. 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 (dollars in thousands):

|               | Year Ended        |      |                   |      |                 |      | % Change in |      |
|---------------|-------------------|------|-------------------|------|-----------------|------|-------------|------|
|               | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      | 2012        | 2011 |
| Asia          | \$ 189,811        | 68%  | \$ 201,118        | 63%  | \$ 200,594      | 67%  | (6)         | —    |
| Europe        | 48,202            | 17   | 66,319            | 21   | 54,332          | 18   | (27)        | 22   |
| Americas      | 41,243            | 15   | 50,929            | 16   | 42,842          | 15   | (19)        | 19   |
| Total revenue | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,768      | 100% | (12)        | 7    |

## Seasonality

In most years, we experience some seasonal trends in the sale of our products. Sales of our products are often higher during our fiscal quarters two and three, but lower during our fiscal quarters one and four. However on balance, general economic conditions and the cyclical nature of the semiconductor industry have a greater impact on our business and financial results than seasonal trends.

## Backlog

We accept purchase orders for deliveries covering periods from one day up to approximately one year from the date on which the order is placed. However, purchase orders, consistent with common industry practices, can generally be revised or canceled by many of our customers without 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. In addition, significant portions of our sales are ordered with relatively short lead times, often referred to as “turns business.” Considering these practices and our experience, we do not believe the total of customer purchase orders outstanding (backlog) provides meaningful information that can be consistently relied on to predict actual sales for future periods.

## Competition

The semiconductor industry is intensely competitive and characterized by rapid rates of technological change, product obsolescence and price erosion. Our current and potential competitors include a broad range of semiconductor companies from emerging companies to large, established companies, many of which have greater financial, technical, manufacturing, marketing and sales resources than we do.

The principal competitive factors in the programmable logic market include silicon and software product features, price, technical support, sales, marketing and distribution strength. The availability of competitive intellectual property cores is also critical. In addition to product features such as density, performance, power consumption, re-programmability, and reliability, competition occurs on the basis of price and market acceptance of specific products and technology. We intend to continue to address these competitive factors by continually introducing product enhancements and new products and by reducing the manufacturing cost of our products.

We compete with Altera Corporation and Xilinx, Inc. in the low end of the FPGA market. We also indirectly compete with other semiconductor companies that provide logic solutions that are not user programmable, or that offer products based on alternative solutions such as ASIC, ASSP, microcontroller, analog and DSP technologies. Although to date we have not experienced direct competition from companies located outside the United States, such companies may become a more significant competitive factor in the future. Competition may also increase if other larger semiconductor companies seek to expand into our market. Any such increases in competition could have a material adverse effect on our operating results.

## **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.

### **Patents**

We hold numerous domestic, European and Asian patents and have patent applications pending in the United States, Europe and Asia. Our current patents will expire at various times between 2013 and 2030. There can be no assurance that pending patent applications or other applications that may be filed 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, 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, that 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 and Agreements**

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.

#### ***Advanced Micro Devices***

In 1999, as part of our acquisition of Vantis Corporation, a wholly owned subsidiary of Advanced Micro Devices, Inc. (“AMD”), we entered into an agreement with AMD pursuant to which we have cross-licensed Vantis patents with AMD patents, having an effective filing date on or before June 15, 1999, related to programmable logic products. This cross-license was made on a worldwide, non-exclusive and royalty-free basis. Additionally, as part of our acquisition of Vantis, we acquired certain third-party license rights held by Vantis prior to the acquisition.

#### ***Agere Systems***

In 2002, as part of our acquisition of the FPGA business of Agere Systems, Inc., we entered into an intellectual property agreement with Agere and Agere Systems Guardian Corporation. Pursuant to this agreement, these Agere companies assigned or licensed to us certain FPGA and Field Programmable System Chip patents, trademarks, software and other intellectual property rights and technology, and we licensed back rights in these same assets. These cross-licenses were made on a worldwide, non-exclusive and royalty-free basis.

#### ***Altera***

In 2001, we entered into a comprehensive, royalty-free, non-exclusive patent cross-license agreement and a multi-year patent peace agreement with Altera.

#### ***SiliconBlue***

In 2011, as part of the acquisition of SiliconBlue Technologies, we assumed a patent license agreement dated July 21, 2006, under which Kilopass Technology, Inc. granted to SiliconBlue and its successors a license to certain U.S. patents and related foreign patents. The license is an exclusive, fully paid, worldwide license but is limited to the use of the patented inventions in the field of stand-alone programmable logic devices.

## Employees

At December 29, 2012, we had 739 full-time employees. We believe that our future success will depend, in part, on our ability to continue to attract and retain highly skilled technical and management personnel. No employee is subject to a collective bargaining agreement. We have never experienced a work stoppage and consider our employee relations to be good.

## Executive Officers of the Company

The following individuals currently serve as our executive officers:

| <u>Name</u>         | <u>Age</u> | <u>Position</u>   |
|---------------------|------------|---|
| Darin G. Billerbeck | 53         | President, Chief Executive Officer and Director         |
| Joe Bedewi          | 53         | Corporate Vice President and Chief Financial Officer    |
| Byron W. Milstead   | 56         | Corporate Vice President, General Counsel and Secretary |

**Darin G. Billerbeck** joined the Company as President and Chief Executive Officer on November 8, 2010. Prior to joining the Company, Mr. Billerbeck served as the Chief Executive Officer of Zilog, a microcontroller manufacturer, which was acquired by IXYS Corporation in February 2010. Prior to joining Zilog in January 2007, Mr. Billerbeck served 18 years in various executive and management positions at Intel Corporation, including as Vice President and General Manager of Intel's Flash Products Group from 1999 to 2007.

**Joseph Bedewi** joined the Company as Corporate Vice President and Chief Financial Officer on April 15, 2011. Mr. Bedewi served 17 years as Financial Controller for several groups, and held various other financial and operational management roles at Intel Corporation. His operations experience ranges from organizational development and optimization, strategic planning, business development and process improvement, to capacity and capital planning. After leaving Intel, Mr. Bedewi served as Chief Financial Officer at International DisplayWorks, Malibu Boats, LLC, and Solar Power, Inc.

**Byron W. Milstead** joined the Company in May 2008 as Corporate Vice President and General Counsel. Prior to joining the Company, Mr. Milstead served as Senior Vice President and General Counsel of Credence Systems Corporation from December 2005 to May 2008. Mr. Milstead served as Vice President and General Counsel of Credence Systems Corporation from November 2000 until December 2005. Prior to joining Credence Systems Corporation, Mr. Milstead practiced law at the Salt Lake City office of Parsons Behle & Latimer and the Portland offices of both Bogle and Gates and Ater Wynne.

## Available Information

We make available, free of charge through our 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 5555 N.E. Moore Court, Hillsboro, Oregon 97124-6421, telephone (503) 268-8000. Our SEC filings are also available at the SEC's website at [www.sec.gov](http://www.sec.gov).

## 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. 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. If any of the following risks occur, our business, financial condition, operating results and cash flows could be materially adversely affected.

### **We rely on independent foundries for the manufacture of all of our products and a manufacturing problem or insufficient foundry capacity could adversely affect our operations**

We depend on independent foundries to supply silicon wafers for many of our products. These foundries include Fujitsu Semiconductor Limited ("Fujitsu") in Japan, which supplies the majority of our wafers. 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

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wafers with competitive performance attributes. Should 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. Should the foundries not be able to manufacture sufficient quantities of our products or continue to manufacture a product for the full life of the product, our 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 their inability to meet their commitments to us and shortages of supply, 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.

If we fail to maintain our foundry relationships 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 and other foundry partners, including Seiko Epson Corporation in Japan, United Microelectronics Corporation in Taiwan, GLOBALFOUNDRIES in Singapore, and Taiwan Semiconductor Manufacturing Company Ltd. (TSMC) in South Korea. If for any reason our foundry partners do not provide their facilities and support for our development efforts, we may be unable to effectively develop new products in a timely manner.

Establishing, maintaining and managing multiple foundry relationships require the investment of management resources as well as additional costs. If we do not manage these relationships effectively, it could adversely affect our operating results. Should a change in foundry relationship be required, we may be unsuccessful in establishing new foundry relationships for our current or next generation products, or 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.

In order to secure new or additional wafer supply, we may from time to time consider various financial arrangements including equity investments, advance purchase payments, loans, or similar arrangements with independent wafer manufacturers in exchange for committed wafer capacity or other support. To the extent that we pursue any such additional financing arrangements, additional debt or equity financing may be required. There can be no assurance that such additional financing will be available when needed or, if available, will be on favorable terms. Any future equity financing will decrease existing stockholders' equity percentage ownership resulting in dilution.

### **We depend on distributors, to generate a majority of our sales and complete order fulfillment.**

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. Resale of product through distributors accounted for 55% of our revenue in 2012, with two distributors accounting for 47% of our revenue in 2012. We expect our distributors to generate a significant portion of our revenue in the future. Any adverse change to our relationship 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.

In addition, our distribution channels recently have experienced consolidation due to merger and acquisition activity. Consolidation may result in our distributors allocating fewer resources to the distribution and sale of our products, which could adversely affect 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.

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

Historically, the largest percentage of our revenue has been derived from customers participating in the Communications end market. In addition, sales to two large China-based telecommunication equipment providers accounted for 14% of our revenue in 2012. This is primarily due to strength in the wireless portion of the Communications end market. In the past, including in our most recent fiscal periods, a general weakening in demand for programmable logic products from customers in the Communications end market has adversely affected our revenue. In addition, telecommunication equipment providers are building network infrastructure for which we compete for product sales. Any deterioration in the Communications end market or our end customers' reduction in spending to support this end market could lead to a reduction in demand for our products which could adversely affect our revenue and results of operations.

**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 may negatively affect customer demand for our products and services and result in postponed or decreased spending amid concerns over declining asset values, inflation, volatility in energy costs, geopolitical issues, the availability and cost of credit, rising unemployment, and the stability and solvency of financial institutions, financial markets, businesses and sovereign nations, among other concerns. Recent events have shown that the financial conditions of sovereign nations, particularly in Europe, are of continuing concern as the sovereign debt crisis remains unresolved. These weak global economic conditions resulted in reduced end customer demand and had a negative impact on our results of operations during fiscal 2012. If weak economic conditions persist or worsen, our business could be harmed due to customers or potential customers reducing or delaying orders, the insolvency of key suppliers, which could result in production delays, the inability of customers to obtain credit, and the insolvency of one or more customers. Any of these effects could impact our ability to effectively manage inventory levels and collect receivables, require additional restructuring actions, and ultimately decrease our net revenues 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 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 weaker demand for our products. Weaker 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.

**The Consumer end market is cyclical, and our failure to accurately predict the frequency, duration, timing and severity of these cycles could adversely affect our financial condition and results.**

Revenue from the Consumer end market accounted for 15% of our revenue in fiscal 2012 and has increased as a percentage of our revenues over the past several years. Revenue from the Consumer end market consists primarily of revenue from our products designed and used in a broad range of products including smart handheld devices, flat panel displays, digital cameras and camcorders, gaming consoles, and set-top boxes. This market is characterized by rapidly changing requirements and products. 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 products on a timely basis; and
- avoid cancellations or delay of products.

Our inability to accomplish any of the foregoing could materially and adversely affect our business, financial condition, and results of operations. In addition, because of rapid changes in this market, which may affect demand for our products, the revenue derived from sales in this market may vary significantly over time adversely affecting our financial results.

**Our success depends on our ability to develop and introduce new products and failure to do so could have a material adverse effect on our financial condition and results of operations.**

The programmable logic market is characterized by rapid technology and product evolution on advanced technologies. Our competitive position and success depends on our ability to develop and introduce new products that compete effectively on the basis of price, density, functionality, power consumption and performance addressing the needs of the markets we serve. These new products typically are more technologically complex than their predecessors.

The success of new product introductions depends upon numerous factors, including:

- timely completion and introduction of new product designs;
- ability to generate new design opportunities and design wins;
- 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;
- ability to obtain 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;
- customer acceptance of advanced features in our new products; and
- market acceptance of our customers' products.

Our product development efforts may not be successful, our new products may not achieve industry acceptance and we may not achieve the necessary volume of production that would lead to acceptable cost reductions. Revenues relating to our mature products are expected to decline in the future, which is normal for our product life cycles. As a result, we may be increasingly dependent on revenues derived from design wins for 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 at prices with higher margins, our financial condition and results of operations could be materially adversely affected.

**Foreign sales account for the majority of our revenue and 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 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;
- 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.

We have significant international operations, including foreign sales offices to support our international customers and distributors, an operational center in the Philippines, and research and development sites in China, India and the Philippines. Since our restructuring, our international operations have grown as we relocated certain operational, design, and administrative

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functions outside the United States. In addition, we purchase our wafers from foreign foundries, have our commercial products assembled, packaged and tested by subcontractors located outside the United States, and rely upon 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 IP, longer receivable collection periods, disruptions or delays in production or shipments, and instability or fluctuations in exchange rates, any of which could have a material adverse effect on our business, financial condition and/or operating results.

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 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. In 2011 and 2012, we implemented a global tax structure to more effectively align our corporate structure 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. 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 Singapore, the United States 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 cannot give any 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 has proposed tax policy changes with respect to the taxation of non-U.S. operations. 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.

**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 market segment 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 current inventory levels are higher than historical norms due to our decisions to reduce direct material cost and enable timely responsiveness to surges in demand. In the event demand does not materialize, 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 are dependent on independent contractors for most of our assembly, test, and logistics services, and disruption of these services could negatively impact our financial condition and results of operations.**

We are dependent on subcontractors to assemble, test and ship our products with acceptable quality and yield levels. Certain problems could delay shipments and have a material adverse effect on our ability to meet customer demands, including: prolonged inability to obtain wafers with competitive performance and cost attributes, adequate yields or timely delivery; disruption in assembly, test or shipping services; delays in stabilizing manufacturing processes and ramping up volume for new products; transitions to new service providers; or any other circumstances that would require us to seek alternative sources of supply. Economic conditions may adversely impact the financial health and viability of our subcontractors and result in their inability to meet their commitments to us. These factors could result 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 reduced their capacity commitment or increased their prices, and we cannot find alternative sources, our operating results could be adversely affected.

**Increased costs of wafers and materials, or shortages in wafers and materials could adversely impact our gross margins and lead to reduced revenues.**

If greater demand for wafers is not offset by increased foundry capacity, if market demand for wafers or production and assembly materials increases, or if a supplier of our wafers or assembly materials ceases or suspends operations or otherwise experiences a disruption to its operations, our supply of wafers and other materials could become constrained. Worldwide manufacturing capacity for silicon wafers is relatively limited and inelastic. Wafer shortages could result in wafer price increases or shortages in materials at production and test facilities, which could decrease our ability to meet customer product demands in a timely manner.

If any of our current or future foundry partners or assembly and test subcontractors significantly increases the costs of wafers or other materials or interrupts or reduces our supply, including for reasons outside of their control, or if any of our relationships with our partner suppliers is terminated, our operating results could be adversely affected.

**Our future revenue is dependent on customer and market acceptance of our programmable logic solutions.**

We operate in a dynamic environment marked by rapid product obsolescence. The programmable logic market is characterized by rapid technology and product evolution followed by a relatively longer ramp process to volume production. Our success depends on our ability to develop and introduce new products that compete effectively on the basis of price and performance and which address the markets we serve.

Customer design-in activity, and therefore future revenue growth is dependent on market acceptance of our new products and the continued market acceptance of our current products. We face uncertainties relating to the potential impact of customer design-in activity because we cannot easily predict whether any particular customer design-in will ultimately result in sales of significant volume. After we obtain a specific customer design-in, many factors can impact the timing and volume of sales which are ultimately realized. Changes in the competitive position of our technology, our customers' product competitiveness or product strategy, the financial condition of the customer, and other factors can impact the timing and volume of sales ultimately realized from any specific customer design-in. If our new products do not achieve market acceptance, or our current products do not maintain market acceptance, we may not be able to manage production levels or accurately forecast the future revenue and operating results may be adversely affected.

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

We generally 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 inventory impairment charges. On occasion we have also repaired



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or replaced certain components or 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.

**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.**

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 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 impairs our ability to project our inventory requirements, which could result, and in the past has resulted, in inventory write-downs or failure to timely 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 impedes 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 cannot 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.

**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 Item 3. "Legal Proceedings," included in Part I of this Form 10-K, 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.

**If we are not able to successfully compete in the highly competitive semiconductor industry, our financial results and future prospects will be adversely affected.**

The semiconductor industry is intensely competitive and many of our direct and indirect competitors have substantially greater financial, technological, manufacturing, marketing and sales resources. The current level of competition in the

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programmable logic market is high and may increase in the future. We currently compete directly with companies that have licensed our technology or have developed similar products, including Altera Corporation and Xilinx, Inc. We also compete indirectly with numerous semiconductor companies that offer products based on alternative solutions such as ASIC, ASSP, microcontroller, analog, and digital signal processing (DSP) technologies. These direct and indirect competitors are established, multinational semiconductor companies as well as emerging companies. If we are unable to compete successfully in this environment, our future results may be adversely affected.

### **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 and agreements could disrupt the release of or introduction of new or existing products, which might be detrimental to the capability of our new 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 rely on information technology systems, and failure of these systems to function properly or our failure to control unauthorized access to our systems 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. Consequently, we periodically implement new, or upgrade or enhance existing, operational and IT systems, procedures and controls. Any delay in the implementation of, or disruption in the transition to, 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. These systems are also subject to power and telecommunication outages or other general system failures. Failure of our IT systems or difficulties in managing them could result in excessive cost or business disruption. We may also be subject to unauthorized access to our IT systems through a security breach or attack. 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. We seek to prevent, detect and investigate any security incidents and prevent their recurrence, but in some cases, we might be unaware of an incident or its magnitude and effects. Our business could be significantly harmed and we could be subject to third party claims in the event of such a security breach.

### **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, worker's 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, natural disasters, product defects, political risk, theft, patent infringement and some 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 may experience a disruption of our business activities related to the execution of our restructuring plans.**

On October 12, 2012, the Board of Directors of the Company adopted a 2012 restructuring plan. In connection with this restructuring plan, the Company reduced and eliminated certain sites. The 2012 restructuring plan is expected to be substantially completed in the first quarter of 2013.

Our restructuring will result in fewer employees and relocation of some of our workforce, among other things. This could cause a disruption in our operations, inhibit our ability to attract and retain key personnel, and delay the introduction and customer acceptance of our new products. If this occurs, or we are unable to realize the benefits of this or future restructuring plans, our results may be adversely affected.

**We compete with others to attract and retain key personnel, and any loss of, or inability to attract, such personnel would harm us.**

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. 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 restructuring which eliminate 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, our business, financial condition and results of operations could be seriously harmed.

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

We have recently acquired technology companies whose products complement our products, and in the past we have made a number of strategic investments in other technology companies whom we believe complement and improve our operational capabilities. We may make similar acquisitions and strategic investments in the future. Acquisitions and strategic investments 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 further our business strategy as we expected, and we may not integrate an acquired company or technology as successfully as we expected;
- our operating results or financial condition may be adversely impacted by unexpected costs, claims or liabilities that we assume from an acquired company or technology or that are otherwise related to an acquisition;
- 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, in general and administrative functions that support such products;
- we may have difficulty integrating and retaining key personnel;
- our liquidity and/or capital structure may be adversely impacted;
- our strategic investments may not perform as expected; and
- we may experience unexpected changes in how we are required to account for our acquisitions and strategic investments pursuant to U.S. GAAP.

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.

We cannot guarantee that we will be able to consummate any future acquisitions or that we will realize any anticipated benefits from any of our past or future acquisitions. 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 consummate additional acquisitions on commercially acceptable terms.

As a result of past acquisitions, as of December 29, 2012, we had \$44.8 million in goodwill on our balance sheet. We are required under U.S. GAAP to test goodwill for possible impairment on an annual basis and at any other time that circumstances arise indicating the carrying value may not be recoverable. We completed our annual test of goodwill impairment in the fourth quarter of 2012 and concluded that we did not have any impairment at that time. There is no

assurance that future impairment tests will indicate that goodwill will be deemed recoverable.

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

The Dodd-Frank Wall Street Reform and Consumer Protection Act requires the SEC to establish 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. When these new requirements are implemented, they could affect the sourcing and availability of minerals used in the manufacture of our semiconductor products. There will also be 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.

**Item 1B. Unresolved Staff Comments.**

None.

**Item 2. Properties.**

Our corporate headquarters consists of land and 189,000 square feet of buildings we own in Hillsboro, Oregon. In Shanghai, China, we own an 18,869 square foot research and development facility and lease an additional 6,481 square foot research and development facility. We currently lease a 66,350 square foot research and development facility in San Jose, California through December 2013. In January 2013, we entered into a lease of a 98,874 square foot research and development facility in San Jose, California and intend to commence operations at that facility during the second quarter of fiscal 2013. In Manila, 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 addition, we lease a 4,200 square foot facility in Singapore through February 2013, primarily to support supply chain activities. We lease a 5,296 square foot research and development facility in Bangalore, India through September 2013. We also lease office facilities in multiple metropolitan locations for our domestic and international sales staff. We believe that our existing facilities are suitable and adequate for our current and foreseeable future needs.

Additionally, we lease a 793 square foot research and development facility in Illinois through August 2015, and an 18,114 square foot research and development facility in Pennsylvania through September 2014. As part of our 2012 restructuring plan, we ceased our operations in these locations (see discussion under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations").

**Item 3. Legal Proceedings.**

On June 11, 2007, a patent infringement lawsuit was filed by Lizy K. John ("John") against the Company in the U.S. District Court for the Eastern District of Texas, Marshall Division. In the complaint, John seeks an injunction, unspecified damages, and attorneys' fees and expenses. The Company filed a request for re-examination of the patent by the United States Patent and Trademark Office ("PTO"), which was granted by the PTO. The litigation was stayed pending the results of the re-examination. After the re-examination concluded, the stay was lifted on January 1, 2012, and the lawsuit was transferred by consent of the parties to the Northern District of California. The Company also filed a request for a second re-examination of the patent, which was granted and is still pending. Discovery is on-going. Trial is scheduled for September 22, 2014. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any potential exposure to us. The Company believes it possesses defenses to these claims and intends to vigorously defend this litigation.

On December 8, 2010, Intellectual Ventures I LLC and Intellectual Ventures II LLC ("Intellectual Ventures") filed a patent infringement lawsuit against the Company, Altera Corporation and Microsemi Corporation in the U.S. District Court for the District of Delaware, seeking unspecified damages. The complaint alleged, inter alia, that certain programmable logic devices manufactured by the Company infringe certain United States patents assigned to Intellectual Ventures. In February 2013, the Company entered into a License Agreement with Intellectual Ventures granting the Company a license to a portfolio of patents held by Intellectual Ventures, including those forming the basis for the patent infringement lawsuit, for the field programmable gate array device field of use. As a result of this License Agreement, the Company and Intellectual Ventures have settled this matter and Intellectual Ventures has agreed to dismiss the action against us. The resolution of this matter did not have a material adverse effect on our financial position, results of operation or cash flows.

We are also 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 Financial Accounting Standards Board Accounting Standards Codification 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. Presently, no accrual has been estimated under ASC 450 for potential losses that may or may not arise from the current lawsuits in which we are involved.

**Item 4. Mine Safety Disclosures**

Not applicable.

**PART II.****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters & 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.

|                | <b>Low</b> | <b>High</b> |
|----------------|------------|-------------|
| 2012:          |            |             |
| First Quarter  | \$ 5.92    | \$ 7.12     |
| Second Quarter | 3.49       | 6.60        |
| Third Quarter  | 3.17       | 4.53        |
| Fourth Quarter | 3.46       | 4.38        |
| 2011:          |            |             |
| First Quarter  | \$ 5.51    | \$ 7.38     |
| Second Quarter | 5.76       | 7.19        |
| Third Quarter  | 4.70       | 6.79        |
| Fourth Quarter | 4.84       | 7.18        |

**Holdings**

As of March 6, 2013, we had approximately 334 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 (most recent quarter only)**

None.

**Issuer Purchases of Equity Securities (most recent quarter only)**

| <b>Period</b>                               | <b>Total Number of<br/>Shares<br/>Purchased</b> | <b>Average Price<br/>paid Per Share</b> | <b>Total Number of<br/>Shares<br/>Purchased as<br/>Part of Publicly<br/>Announced<br/>Program</b> | <b>Maximum Dollar<br/>Value of Shares<br/>That May Yet Be<br/>Purchased Under<br/>the Program</b> |
|---|---|---|---|---|
| September 30, 2012 through October 27, 2012 | 438,000   | \$ 3.68                                 | 438,000   | \$ 6,018,604  |
| October 28, 2012 through November 24, 2012  | 366,000   | \$ 3.89                                 | 366,000   | \$ 4,587,973  |
| November 25, 2012 through December 29, 2012 | 537,300   | \$ 3.96                                 | 537,300   | \$ 2,452,221  |
|   | <u>1,341,300</u>                                | <u>\$ 3.85</u>                          | <u>1,341,300</u>  |   |

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On February 24, 2012, the Company's 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 is twelve months. During the fourth quarter of fiscal 2012, approximately 1.3 million shares were repurchased for \$5.2 million. During fiscal 2012, approximately 4.1 million shares were repurchased at \$17.5 million. At December 29, 2012, we have approximately \$2.5 million remaining under the approved program. All shares repurchased under this program were retired by December 29, 2012. All repurchases have been and will be open market transactions and funded from available working capital. The program ended by its terms in February 2013.

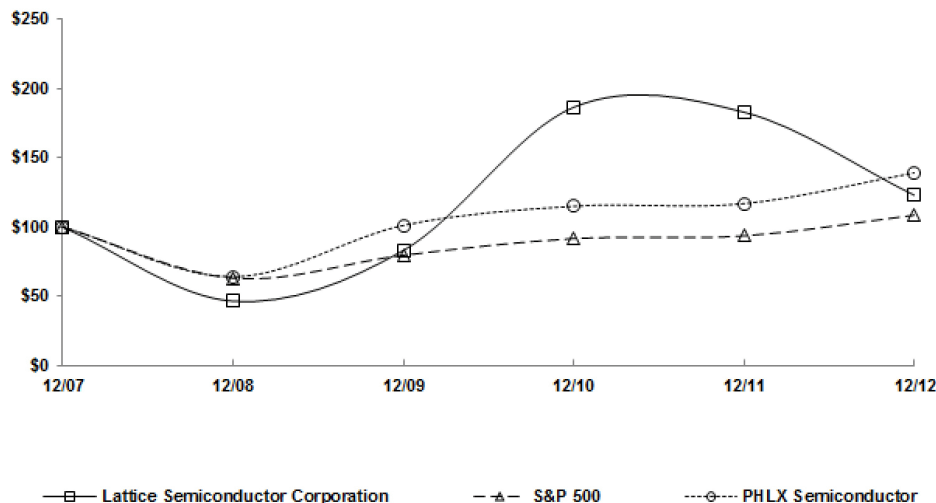
On October 21, 2010, the Company's Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock could have been repurchased. The duration of the repurchase program was twelve months from adoption. In connection with this stock repurchase program, the Company entered into a 10b5-1 plan. During fiscal 2011, approximately 2.4 million shares were repurchased for \$14.2 million. During fiscal 2010, approximately 0.4 million shares were repurchased for \$2.0 million. All shares repurchased under this program were retired by December 31, 2011. All repurchases were open market transactions and were funded from available working capital. The program ended by its terms in October 2011.

**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 2007 through December 2012. 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.

**Lattice Cumulative Stockholder Return**

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***  
Among Lattice Semiconductor Corporation, the S&P 500 Index, and the PHLX Semiconductor Index



\*\$100 invested on 12/31/07 in stock or index, including reinvestment of dividends.  
Fiscal year ending December 31.

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**Item 6. Selected Financial Data.**

|   | Year Ended           |                      |                    |                    |                    |
|---|----------------------|----------------------|--------------------|--------------------|--------------------|
|   | December 29,<br>2012 | December 31,<br>2011 | January 1,<br>2011 | January 2,<br>2010 | January 3,<br>2009 |
| (in thousands, except per share data)                     |                      |                      |                    |                    |                    |
| <b>STATEMENT OF OPERATIONS DATA:</b>                      |                      |                      |                    |                    |                    |
| Revenue   | \$ 279,256           | \$ 318,366           | \$ 297,768         | \$ 194,420         | \$ 222,262         |
| <b>Costs and expenses:</b>                                |                      |                      |                    |                    |                    |
| Cost of products sold                                     | 128,499              | 129,769              | 117,943            | 90,077             | 102,831            |
| Research and development                                  | 77,610               | 71,855               | 60,326             | 56,133             | 68,610             |
| Selling, general and administrative                       | 72,317               | 68,838               | 64,359             | 52,545             | 58,680             |
| Acquisition related and Amortization of intangible assets | 4,178                | 536                  | —                  | 228                | 5,587              |
| Restructuring charges                                     | 6,018                | 6,079                | 11                 | 3,689              | 6,789              |
|   | <u>288,622</u>       | <u>277,077</u>       | <u>242,639</u>     | <u>202,672</u>     | <u>242,497</u>     |
| (Loss) income from operations                             | (9,366)              | 41,289               | 55,129             | (8,252)            | (20,235)           |
| Other income (expense), net                               | 505                  | 1,434                | 2,474              | 1,812              | (17,791)           |
| (Loss) income before income taxes                         | (8,861)              | 42,723               | 57,603             | (6,440)            | (38,026)           |
| (Provision) benefit for income taxes                      | (20,745)             | 35,509               | (531)              | (517)              | (180)              |
| Net (loss) income   | \$ (29,606)          | \$ 78,232            | \$ 57,072          | \$ (6,957)         | \$ (38,206)        |
| Basic net (loss) income per share                         | \$ (0.25)            | \$ 0.66              | \$ 0.49            | \$ (0.06)          | \$ (0.33)          |
| Diluted net (loss) income per share                       | \$ (0.25)            | \$ 0.65              | \$ 0.48            | \$ (0.06)          | \$ (0.33)          |
| <b>Shares used in per share calculations:</b>             |                      |                      |                    |                    |                    |
| Basic   | 117,194              | 117,875              | 116,726            | 115,384            | 115,291            |
| Diluted   | 117,194              | 121,139              | 120,143            | 115,384            | 115,291            |

|   | At                   |                      |                    |                    |                    |
|---|----------------------|----------------------|--------------------|--------------------|--------------------|
|   | December 29,<br>2012 | December 31,<br>2011 | January 1,<br>2011 | January 2,<br>2010 | January 3,<br>2009 |
| (in thousands)  |                      |                      |                    |                    |                    |
| <b>BALANCE SHEET DATA:</b>                                  |                      |                      |                    |                    |                    |
| Cash, cash equivalents and Short-term marketable securities | \$ 183,401           | \$ 210,134           | \$ 238,220         | \$ 164,540         | \$ 65,909          |
| Total assets  | \$ 428,759           | \$ 467,924           | \$ 377,687         | \$ 296,557         | \$ 291,936         |
| Total liabilities   | \$ 71,209            | \$ 74,363            | \$ 58,965          | \$ 43,197          | \$ 36,997          |
| Stockholders' equity  | \$ 357,550           | \$ 393,561           | \$ 318,722         | \$ 253,360         | \$ 254,939         |



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

### Overview

Lattice Semiconductor Corporation ("Lattice," the "Company," "we," "us," or "our") designs, develops and markets high performance programmable logic products and related software. Programmable logic products are widely used semiconductor components that can be configured by end customers as specific logic circuits, enabling shorter design cycle times and reduced development costs. Our end customers are primarily original equipment manufacturers ("OEMs") in the communications, industrial and other, consumer and computing end markets. Within the programmable logic market there are two groups of products - programmable logic devices ("PLD") and field programmable gate arrays ("FPGA") - each representing a distinct silicon architectural approach. Products based on the two alternative programmable logic architectures are generally optimal for different types of logic functions, although many logic functions can be implemented using either architecture. We believe that a substantial portion of programmable logic customers utilize both PLD and FPGA architectures.

### 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 requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, auction rate securities, goodwill (including the assessment of reporting unit), intangible assets, long-lived 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. Actual results could differ from those estimates.

**Revenue Recognition and Deferred Income.** We sell our products directly to end customers or through a network of independent manufacturers' representatives and indirectly through a network of independent sell-in and sell-through distributors. Distributors provide us 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") or sell-in distributors is recognized upon 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, 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, net 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 products sold 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.

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.

Revenue from software licensing was not material for the periods presented.

**Fair Value of Financial Instruments.** We invest in various financial instruments including corporate and government bonds, notes, commercial paper and auction rate securities. 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”) ASC 820, “Fair Value Measurements and Disclosures.” 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.

*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 are classified as Level 3 instruments. Management uses a combination of the market and income approach to derive the fair value of auction rate securities, which include 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 are classified as Long-term marketable securities on our Condensed Consolidated Balance Sheets and are entirely made up of auction rate securities that consist of student loan asset-backed notes. Such loans are insured by the federal government or guaranteed by the Federal Family Educational Loan Program (“FFELP”). Fair value measurement may be sensitive to various unobservable inputs such as the ability of students to repay their loans, or change in the provision of government guarantees policy toward guaranteeing loan repayment. If students are unable to pay back their loans or the government changes its policy, our investments may be further impaired.

**Inventory.** Inventories are recorded at the lower of actual cost (approximated by standard 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 sales.

**Asset Impairments.** 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 Statement of Operations and Comprehensive (Loss) Income. 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. No impairment charges were recorded for the fiscal year ended 2012.

**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, the Company makes a qualitative assessment to determine if it is more likely than not that its fair value is less than its carrying amount. If the qualitative assessment determines that it is more likely than not that its fair value is less than its 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 the Company 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

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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 a single reporting unit. No goodwill impairment charges were recorded for the fiscal year ended 2012.

**Restructuring Charges.** Expenses associated with exit or disposal activities are recognized when incurred under ASC 420, "Exit or Disposal Cost Obligations." 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.

**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 December 29, 2012, U.S. income taxes were not provided on approximately \$2.0 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.

Our income tax calculations are based on application of the respective U.S. federal, state or foreign tax law. The Company's 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 are recorded as income tax expense or benefit in the Consolidated Statements of Operations and Comprehensive (Loss) Income.

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 and Comprehensive (Loss) Income 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.

Restricted stock unit grants are part of the Company's equity compensation practices for employees who receive equity grants. The restricted stock units granted to employees generally vest quarterly over a four-year period beginning on the grant date.

**Results of operations**

Key elements of our Consolidated Statements of Operations and Comprehensive (Loss) Income were as follows (dollars in thousands):

|                                     | Year Ended        |         |                   |        |                 |        |
|-------------------------------------|-------------------|---------|-------------------|--------|-----------------|--------|
|                                     | December 29, 2012 |         | December 31, 2011 |        | January 1, 2011 |        |
| Revenue                             | \$ 279,256        | 100.0 % | \$ 318,366        | 100.0% | \$ 297,768      | 100.0% |
| Gross margin                        | 150,757           | 54.0    | 188,597           | 59.2   | 179,825         | 60.4   |
| Research and development            | 77,610            | 27.8    | 71,855            | 22.6   | 60,326          | 20.3   |
| Selling, general and administrative | 72,317            | 25.9    | 68,838            | 21.6   | 64,359          | 21.6   |
| Acquisition related charges         | 4,178             | 1.5     | 536               | 0.2    | —               | —      |
| Restructuring charges               | 6,018             | 2.2     | 6,079             | 1.9    | 11              | —      |
| (Loss) income from operations       | \$ (9,366)        | (3.4)%  | \$ 41,289         | 13.0%  | \$ 55,129       | 18.5%  |

**Revenue**

|         | Year Ended        |                   |                 | % Change in |      |
|---------|-------------------|-------------------|-----------------|-------------|------|
|         | December 29, 2012 | December 31, 2011 | January 1, 2011 | 2012        | 2011 |
| Revenue | \$ 279,256        | \$ 318,366        | \$ 297,768      | (12)        | 7    |

Revenue declined \$39 million or 12% in fiscal 2012 compared to fiscal 2011 principally due to macroeconomic weakness affecting the Communications and Computing end markets and declines in our military business which is a component of our Industrial and other end market. These declines were partially offset by strength in our New products, principally in the Consumer end market led by incremental revenue generated by our iCE 40 product line.

Revenue increased \$21 million or 7% in fiscal 2011 compared to fiscal 2010 due primarily to strength in our New products, principally in the Consumer end market and a relatively high volume of late product life-cycle buys on Mainstream and Mature products in the Industrial and other end market.

**Revenue by Product Line**

The composition of our revenue by product line for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|               | Year Ended        |      |                   |      |                 |      | % Change in |      |
|---------------|-------------------|------|-------------------|------|-----------------|------|-------------|------|
|               | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      | 2012        | 2011 |
| PLD           | \$ 184,044        | 66%  | \$ 211,036        | 66%  | \$ 200,679      | 67%  | (13)        | 5    |
| FPGA          | 95,212            | 34   | 107,330           | 34   | 97,089          | 33   | (11)        | 11   |
| Total revenue | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,768      | 100% | (12)        | 7    |

PLD and FPGA revenue for fiscal 2012 declined approximately 13% and 11%, respectively, when compared to fiscal 2011. For PLD products, strong growth in New product volume driven by product acceptance in the Consumer end market, offset more than 40% of the revenue decline experienced by certain Mainstream and Mature products primarily resulting from a decline in the accelerated sales of certain late life-cycle products, declines in our military business and macroeconomic weakness reducing infrastructure investments in the Communications end market. For FPGA products, the strong growth in New product volume, driven by customers migrating from our Mainstream and Mature products, offset more than one-half of the volume declines experienced by certain of our older Mainstream and Mature products, which were affected by both declines in our military business and the migration to New products.

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PLD and FPGA revenue for fiscal 2011 increased approximately 5% and 11%, respectively, when compared to fiscal 2010. In fiscal 2011, PLD product volume increased due largely to late product life-cycle buys on several low density Mature products. In addition, PLD product volume also increased for certain New products in both the Consumer and Communications end markets. FPGA products in fiscal 2011 experienced significant volume increases due largely to Communications end market customers migrating to newer technology and late product life-cycle buys on Mature products, principally in our military business, which is part of our Industrial and other end market.

#### Revenue by End Market

The following end market data is derived from data that is provided to us by our distributors and end customers. With a diverse base of customers who in some cases 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.

The composition of our revenue by end market for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                      | Year Ended        |      |                   |      |                 |      | % Change in |      |
|----------------------|-------------------|------|-------------------|------|-----------------|------|-------------|------|
|                      | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      | 2012        | 2011 |
| Communications       | \$ 127,713        | 46%  | \$ 141,283        | 44%  | \$ 146,607      | 49%  | (10)        | (4)  |
| Industrial and other | 76,491            | 27   | 97,519            | 31   | 75,667          | 25   | (22)        | 29   |
| Consumer             | 41,490            | 15   | 36,858            | 12   | 32,525          | 11   | 13          | 13   |
| Computing            | 33,562            | 12   | 42,706            | 13   | 42,969          | 15   | (21)        | (1)  |
| Total revenue        | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,768      | 100% | (12)        | 7    |

The Communications market continues to represent our largest end market. Our revenue in this market is largely dependent on a small number of large telecommunications equipment providers; however no individual end customer exceeded 10% of total revenue in 2012, 2011, or 2010. For fiscal 2012, the Communications market revenue declined 10% when compared to fiscal 2011 and declined 4% when comparing fiscal 2011 to fiscal 2010. These declines were driven primarily by macroeconomic weakness which impacted infrastructure investments in the Communications market in the second half of fiscal 2011 and throughout fiscal 2012.

For fiscal 2012, the Industrial and other market experienced a revenue decline of 22% when compared to fiscal 2011. This decline was primarily due to volume declines in our military business. For fiscal 2011, revenue increased 29% when compared to fiscal 2010. This increase is driven by a relatively high volume of late product life-cycle buys on certain of our Mainstream and Mature products.

Consumer market revenue increased 13% in both fiscal 2012 and fiscal 2011 when compared to the respective previous years. Consumer market revenue increased in fiscal 2012 due in large part to our iCE 40 product, which bolstered our Consumer market product offerings. For 2011, the Consumer market revenue increases were driven primarily by volume increase resulting from continued proliferation of more consumer products and a concentrated focus by the Company to penetrate this market.

For fiscal 2012, revenue for the Computing end market declined 21% when compared to fiscal 2011. Similar to the Communications market, this decline due to reduced volume driven primarily by macroeconomic factors. For fiscal 2011, Computing revenue declined 1% when compared to fiscal 2010.

[Table of Contents](#)*Revenue by Product Classification*

The composition of our revenue by product classification for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|               | Year Ended        |      |                   |      |                 |      | % Change in |      |
|---------------|-------------------|------|-------------------|------|-----------------|------|-------------|------|
|               | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      | 2012        | 2011 |
| New *         | \$ 62,304         | 22%  | \$ 34,668         | 11%  | \$ 18,785       | 6%   | 80          | 85   |
| Mainstream *  | 154,733           | 56   | 187,560           | 59   | 188,732         | 64   | (18)        | (1)  |
| Mature *      | 62,219            | 22   | 96,138            | 30   | 90,253          | 30   | (35)        | 7    |
| Total revenue | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,770      | 100% | (12)        | 7    |

Revenue for New products increased 80% in fiscal 2012 when compared to fiscal 2011. Revenue for New products increased 85% in fiscal 2011 when compared to fiscal 2010. In both years, New product revenue increased primarily due to strong volume ramping of certain New products, principally to customers in the Consumer and Communications end markets. These revenue increases were driven by strong acceptance of certain New Consumer product offerings and a general migration of customers to New products from our Mainstream and Mature products.

Revenue for Mainstream products decreased 18% in fiscal 2012 when compared to fiscal 2011. Mainstream product revenue declined due primarily to macroeconomic factors affecting the Communications and Computing end markets as well as reduced volume as customers migrated to newer technology. Revenue for Mainstream products decreased 1% in fiscal 2011 when compared to fiscal 2010.

Mature product revenue decreased 35% in fiscal 2012 when compared to fiscal 2011. Mature product revenue decreased primarily due to macroeconomic factors, reduced volume as accelerated sales of certain late life-cycle products ended and customers migrated to newer technology. Revenue for Mature products increased 7% in fiscal 2011 when compared to fiscal 2010. This increase is driven by a relatively high volume of late product life-cycle buys on certain of our Mature products.

\* Product Classifications:

**New:** LatticeECP3, MachXO2, Power Manager II, and iCE40

**Mainstream:** ispMACH 4000ZE, ispMACH 4000/Z, LatticeSC, LatticeECP2/M, LatticeECP, LatticeXP2, LatticeXP, MachXO, ispClock A/D/S, Software and IP

**Mature:** ispXPLD, ispXPGA, FPSC, ORCA 2, ORCA 3, ORCA 4, ispPAC, isplsi 8000V, ispMACH 5000B, ispMACH 2LV, ispMACH 5LV, ispLSI 2000V, ispLSI 5000V, ispMACH 5000VG, all 5-volt CPLDs, ispGDX2, GDX/V, ispMACH 4/LV, iCE65, ispClock, Power Manager I, all SPLDs

· Product categories are modified as appropriate relative to our portfolio of products and the generation within each major product family. New products consist of our latest generation of products, while Mainstream and Mature are older or based on unique late stage customer-based production needs. Generally, product categories are adjusted every two to three years, at which time prior periods are reclassified to conform to the new categorization. In the first fiscal quarter of 2012 we reclassified our New, Mainstream and Mature product categories to better reflect our current product portfolio.

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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 (dollars in thousands):

|               | Year Ended        |      |                   |      |                 |      | % Change in |      |
|---------------|-------------------|------|-------------------|------|-----------------|------|-------------|------|
|               | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      | 2012        | 2011 |
| Asia          | \$ 189,811        | 68%  | \$ 201,118        | 63%  | \$ 200,594      | 67%  | (6)         | —    |
| Europe        | 48,202            | 17   | 66,319            | 21   | 54,332          | 18   | (27)        | 22   |
| Americas      | 41,243            | 15   | 50,929            | 16   | 42,842          | 15   | (19)        | 19   |
| Total revenue | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,768      | 100% | (12)        | 7    |

Revenue declines in Europe and Americas in fiscal 2012, compared to fiscal 2011, are due largely to macroeconomic weakness in those regions. In addition, revenue declined in Asia in fiscal 2012, compared fiscal 2011 due to relative weakness in the Communications end market. We believe the Asia region will remain the primary source of our revenue due to relatively more favorable business conditions in Asia and a continuing trend towards the outsourcing of manufacturing by North American and European customers to the Asia Pacific region.

Revenue from foreign sales as a percentage of total revenue were 88%, 86%. and 88% for fiscal 2012, 2011, and 2010, respectively.

*Revenue by Distributors*

Our largest customers are 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 sell-through distributors are as follows:

|   | % of Total Revenue |      |      |
|---|--------------------|------|------|
|   | 2012               | 2011 | 2010 |
| Nu Horizons Electronics Corp. (including its parent company, Arrow Electronics) | 33%                | 22%  | 18%  |
| Weikeng Group   | 14                 | 14   | 14   |
| Avnet, Inc.   | —                  | 17   | 17   |
| All others  | 8                  | 8    | 7    |
| All sell-through distributors   | 55%                | 61%  | 56%  |

No other individual end customer accounted for more than 10% of total revenue in any of the fiscal years 2012, 2011 and 2010.

In fiscal 2011, our global franchise agreement with Avnet terminated; however, we had mutually agreed to terms for the transition of inventory through December 31, 2011. Revenue from Avnet made up approximately 20% of our total revenue for the first nine months of fiscal 2011. Because we and our remaining global and regional distributors worked directly with our end customers in order to transition the fulfillment of customer orders to replacement distributors, the impact on our business as a result of this change was negligible. We continue to serve our end customers with a network that includes a global distributor, regional distributors, manufacturer's representatives, and our direct sales team.

**Gross Margin**

The composition of our gross margin, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                       | <b>Year Ended</b>        |                          |                        |
|-----------------------|--------------------------|--------------------------|------------------------|
|                       | <b>December 29, 2012</b> | <b>December 31, 2011</b> | <b>January 1, 2011</b> |
| Gross margin          | \$ 150,757               | \$ 188,597               | \$ 179,825             |
| Percentage of revenue | 54.0%                    | 59.2%                    | 60.4%                  |

In fiscal 2012, gross margin declined 5.2 percentage points as compared to fiscal 2011. This decline was due primarily to an increase in the percentage of revenue attributable to New products sold into the Consumer and Communications end markets. New products typically yield a lower gross margin than our Mainstream and Mature products. A net increase to reserves for excess and obsolete inventory slightly reduced fiscal 2012 gross margin. Degradation in gross margin due to product and customer mix was partially offset by product cost reductions realized primarily in the second half of the year.

In fiscal 2011, gross margin declined 1.2 percentage points as compared to fiscal 2010. This decline was primarily attributed to an increase in New product revenue which typically carries a lower gross margin than our Mainstream and Mature products. Sales of fully reserved inventory in fiscal 2011 contributed a slight benefit to gross margin.

**Operating Expenses***Research and development expense*

The composition of our research and development expenses, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                          | <b>Year Ended</b>        |                          |                        | <b>% Change in</b> |             |
|--------------------------|--------------------------|--------------------------|------------------------|--------------------|-------------|
|                          | <b>December 29, 2012</b> | <b>December 31, 2011</b> | <b>January 1, 2011</b> | <b>2012</b>        | <b>2011</b> |
| Research and development | \$ 77,610                | \$ 71,855                | \$ 60,326              | 8.0%               | 19.1%       |
| Percentage of revenue    | 27.8%                    | 22.6%                    | 20.3%                  |                    |             |

Research and development expenses include costs for compensation and benefits, development masks, engineering wafers, depreciation and amortization, licenses, and outside engineering services. These expenditures are for the design of new products, intellectual property cores, processes, quality control, 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 fiscal 2012, compared to fiscal 2011, was primarily due to increased compensation and benefits due to additional headcount, project-based outside engineering services, and depreciation and amortization. Approximately 40% of these increases were offset by reductions in mask costs and variable compensation.

The increase in fiscal 2011 compared to fiscal 2010 was primarily related to increases in compensation and benefits, additional mask costs and project-based outside engineering services.



[Table of Contents](#)*Selling, general, and administrative expense*

The composition of our selling, general and administrative expenses, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                                     | Year Ended        |                   |                 | % Change in |      |
|-------------------------------------|-------------------|-------------------|-----------------|-------------|------|
|                                     | December 29, 2012 | December 31, 2011 | January 1, 2011 | 2012        | 2011 |
| Selling, general and administrative | \$ 72,317         | \$ 68,838         | \$ 64,359       | 5.1%        | 7.0% |
| Percentage of revenue               | 25.9%             | 21.6%             | 21.6%           |             |      |

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

The increase in fiscal 2012 compared to fiscal 2011 was primarily due to increased severance, stock compensation expense, and legal and professional services. These increases were partially offset by lower commissions as a result of reduced revenue. Fiscal 2012 also had increased costs due to additional headcount associated with the December, 2011 acquisition of SiliconBlue which were entirely offset by reductions in variable compensation.

The increase in fiscal 2011 compared to fiscal 2010 was the result of an increase in compensation and benefits, legal services and professional service costs for marketing and financial consulting.

*Acquisition related charges, including amortization of intangible assets*

The composition of our acquisition related charges, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|  | Year Ended        |                   |                 | % Change in |      |
|--|-------------------|-------------------|-----------------|-------------|------|
|  | December 29, 2012 | December 31, 2011 | January 1, 2011 | 2012        | 2011 |
| Acquisition related charges, including amortization of intangible assets | \$ 4,178          | \$ 536            | \$ —            | 679         | —    |
| Percentage of revenue  | 1.5%              | 0.2%              | —%              |             |      |

Acquisition related charges include severance and professional fees directly related to acquisitions, as well as the amortization of the stepped up value of inventory and amortization of identifiable intangible assets with finite useful lives associated with our December, 2011 acquisition of SiliconBlue.

The fiscal 2012 charges include \$2.9 million in amortization of intangibles assets. Fiscal 2012 also included amortization of the stepped up value of inventory, professional fees, and severance costs.

The charges in fiscal 2011 include professional service and legal fees, and amortization of intangible assets.

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The composition of our restructuring charges, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                       | Year Ended        |                   |                 | % Change in |      |
|-----------------------|-------------------|-------------------|-----------------|-------------|------|
|                       | December 29, 2012 | December 31, 2011 | January 1, 2011 | 2012        | 2011 |
| Restructuring charges | \$ 6,018          | \$ 6,079          | \$ 11           | (1.0)%      | —%   |
| Percentage of revenue | 2.2%              | 1.9%              | —%              |             |      |

On October 12, 2012, our Board of Directors adopted a 2012 restructuring plan. In connection with this restructuring plan, we reduced our headcount by approximately 110 employees and eliminated certain sites, including our sites in Pennsylvania and Illinois.

For fiscal 2012, restructuring charges primarily relate to severance and lease termination costs associated with the aforementioned 2012 restructuring plan. We expect to incur additional restructuring charges of \$0.5 million in the first quarter of fiscal 2013, and the 2012 restructuring plan is expected to be substantially completed in that quarter.

We also implemented a restructuring plan during fiscal 2011 and the resultant restructuring charges approximated \$7 million primarily related to severance, offset by approximately \$1 million benefit due primarily to the re-occupancy of a previously restructured leased facility.

*Other income, net*

The composition of our Other income, net, including as a percentage of revenue, for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                       | Year Ended        |                   |                 | % Change in |         |
|-----------------------|-------------------|-------------------|-----------------|-------------|---------|
|                       | December 29, 2012 | December 31, 2011 | January 1, 2011 | 2012        | 2011    |
| Other income, net     | \$ 505            | \$ 1,434          | \$ 2,474        | (64.8)%     | (42.0)% |
| Percentage of revenue | 0.2%              | 0.5%              | 0.8%            |             |         |

The decrease in Other income, net, in fiscal 2012, as compared to fiscal 2011 resulted primarily from lower investment income and higher foreign exchange losses in fiscal 2012.

The increase in fiscal 2011 relates to an increase in investment income due to higher invested balances in fiscal 2011 when compared to fiscal 2010.

*Income taxes*

The composition of our income taxes for fiscal years 2012, 2011 and 2010 was as follows (dollars in thousands):

|                                      | Year Ended        |                   |                 |
|--------------------------------------|-------------------|-------------------|-----------------|
|                                      | December 29, 2012 | December 31, 2011 | January 1, 2011 |
| (Provision) benefit for income taxes | \$ (20,745)       | \$ 35,509         | \$ (531)        |

On December 31, 2011, we began to implement a global tax structure to more effectively align the Company's corporate structure with the geographic business operations including responsibility for sales and manufacturing activities. As part of this tax restructuring, 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 U.S. and foreign entities. The intercompany sales of rights to intellectual property resulted in a gain for tax purposes, for which we recorded a \$76.8 million tax provision in the fourth quarter of fiscal 2011 which was fully offset by the release of valuation allowance on deferred tax assets.

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Also during the fourth quarter of 2011, 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 \$35.2 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 including the implementation of a global tax structure discussed above. 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 new tax structure in reaching this decision.

The global tax structure was completed during the first quarter of 2012 upon the intercompany sale of inventory and fixed assets. During 2012, we incurred \$20.7 million in tax expense related to on-going operations and the completion of the tax structure implementation including the sell-through of the inventory portion of this intercompany sale.

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.

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.

### **Liquidity and Capital Resources**

The following sections discuss the effect of changes in our balance sheet, as well as the effects of our contractual obligations, other commitments, and the stock repurchase program on our liquidity and capital resources.

We classify our investments as short-term based on their nature and availability for use in current operations. The overall quality of our portfolio is strong, with our cash equivalents and short-term investments consisting primarily of high quality, investment-grade securities. Our strong cash, cash equivalent and short-term investment position allows us to use our cash resources for acquisitions, working capital needs, and repurchases of common stock.

We have historically financed our operating and capital resource requirements through cash flows from operations. Cash provided by 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 December 29, 2012, we have no long-term debt and do not have significant long-term commitments for capital expenditures. In the future, we may consider acquisition opportunities to extend our product or technology portfolios and to expand our product offerings. In connection with funding capital expenditures, completing acquisitions, securing additional wafer supply, or increasing our working capital, we may seek to obtain debt or equity financing, or advance purchase payments or similar arrangements with wafer manufacturers. We may also need to obtain debt or equity financing if we experience downturns or cyclical fluctuations in our business that are more severe or longer than anticipated.

### **Liquidity**

*Cash and cash equivalents, Short-term and Long-term investments* (dollars in thousands):

|   | <b>December 29, 2012</b> | <b>December 31, 2011</b> | <b>\$ change</b> |
|---|--------------------------|--------------------------|------------------|
| Cash and cash equivalents   | \$ 118,536               | \$ 141,423               | \$ (22,887)      |
| Short-term marketable securities  | 64,865                   | 68,711                   | (3,846)          |
| Long-term marketable securities   | 4,717                    | 6,946                    | (2,229)          |
| Total Cash and cash equivalents, short-term and long-term marketable securities | \$ 188,118               | \$ 217,080               | \$ (28,962)      |

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As of December 29, 2012, we had total Cash and cash equivalents of \$118.5 million, of which approximately \$42.1 million 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 December 29, 2012, we could access all cash held by our foreign subsidiaries without incurring material additional expense.

The decrease in Cash and cash equivalents, and short-term investments of \$26.7 million as compared to December 31, 2011, was primarily the result of cash used for repurchases of common stock of \$17.5 million and capital expenditures of \$13.6 million. These uses of cash were partially offset by cash provided by operations of \$4.5 million and proceeds from the issuance of common stock pursuant to employee stock compensation plans of \$4.4 million.

At December 29, 2012, Long-term investments consisted of auction rate securities with par value of \$5.7 million and an estimated fair value of \$4.7 million. Due to continued multiple failed auctions and the resultant illiquidity of these investments, we have classified our investment in auction rate securities as long-term. We intend to sell the auction rate securities as markets for these securities resume or reasonable offers become available. During 2012, we redeemed auction rate securities at a par value of \$2.6 million and an estimated fair value of \$2.3 million.

*Accounts receivable, net* (dollars in thousands):

|                          | December 29, 2012 | December 31, 2011 | Change   |
|--------------------------|-------------------|-------------------|----------|
| Accounts receivable, net | \$ 46,947         | \$ 36,993         | \$ 9,954 |
| Days sales outstanding   | 64                | 47                | 17       |

Accounts receivable, net increased \$10 million or 27% as of December 29, 2012 compared to December 31, 2011 due primarily to timing of shipments and collections in the last week of each year. As a result of this increase in accounts receivable, coupled with a decline in revenue, days sales outstanding at December 29, 2011 was 64 days, an increase of 17 days from December 31, 2011.

*Inventories* (dollars in thousands):

|                             | December 29, 2012 | December 31, 2011 | Change   |
|-----------------------------|-------------------|-------------------|----------|
| Inventories                 | \$ 44,194         | \$ 37,278         | \$ 6,916 |
| Months of inventory on hand | 4.4               | 3.2               | 1.2      |

Inventory increased \$7 million or 19% as of December 29, 2012 compared to December 31, 2011 due primarily to a strategic inventory build in the fourth quarter 2012. The intent of our strategic inventory build is to both reduce direct material cost and enable timely responsiveness to surges in demand. As a result, our months of inventory on hand increased from 3.2 months in 2011 to 4.4 months in 2012.

### *Share Repurchase Program*

During 2012, we repurchased approximately 4.1 million shares for \$17.5 million under the share repurchase program approved by the Board of Directors in February 2012. This program approved the repurchase of up to \$20 million in outstanding stock over a 12 month period. As of December 29, 2012 approximately \$2.5 million remain available under the 2012 stock repurchase program. All shares repurchased under this program were retired by December 29, 2012. All repurchases under this program have been and will be open market transactions and funded from available working capital.

### *Credit Arrangements*

As of December 29, 2012, we had no long-term debt, no significant long-term purchase commitments for capital expenditures, and no existing used or unused credit arrangements.

**Contractual Obligations**

The following table summarizes our significant contractual cash obligations at December 29, 2012 (in thousands):

| <b>Fiscal year</b> | <b>Operating leases(1)</b> | <b>Purchase order obligations(2)</b> |
|--------------------|----------------------------|--------------------------------------|
| 2013               | \$ 4,099                   | \$ 48,025                            |
| 2014               | 1,374                      | —                                    |
| 2015               | 702                        | —                                    |
| 2016               | 517                        | —                                    |
| 2017               | 97                         | —                                    |
| Thereafter         | 40                         | —                                    |
|                    | <b>\$ 6,829</b>            | <b>\$ 48,025</b>                     |

- (1) Certain of our facilities and equipment are leased under operating leases, which expire at various times through 2017.
- (2) This column excludes amounts already recorded on our Consolidated Balance Sheet as current or long-term liabilities at December 29, 2012.

We also have other liabilities of \$21.7 million relating to uncertain tax positions. However, as we are unable to reliably estimate the timing of future payments related to uncertain tax positions, we have excluded this amount from the table above.

Our significant operating leases are for our facilities in San Jose, California; Bethlehem, Pennsylvania; Shanghai, China; Downers Grove, Illinois; and Manila, Philippines. Our lease in San Jose expires in December 2013 with annual rental costs estimated to be \$2.0 million. In January 2013 we entered into a 159 month lease of new facilities in San Jose, California with annual rental costs estimated at \$2.1 million with 3% annual increases. We anticipate that we will commence operations at that facility during the second quarter of fiscal 2013. Our lease in Bethlehem expires in September 2014, with annual rental costs estimated to be \$0.5 million with 3% annual increases. Our lease in Shanghai expires in May 2013, with remaining rental costs estimated to be \$0.1 million. Our lease in Downers Grove expires in November 2015, with annual rental costs estimated to be \$0.1 million. Our leases in Manila expire in December 2016, April 2017 and May 2017, with total annual rental costs estimated to be \$0.4 million with 5% annual increases. Leasehold improvements are amortized over the shorter of the non-cancelable lease term or the estimated useful life of the assets. We have discontinued operations at our Bethlehem, Pennsylvania and Downers Grove, Illinois facilities.

**New Accounting Pronouncements**

In February 2013, the FASB issued Accounting Standards Update No. 2013-02, "*Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*," ("ASU 2013-02"). ASU 2013-02 finalizes the requirements of ASU 2011-05 that ASU 2011-12 deferred, clarifying how to report the effect of significant reclassifications out of accumulated other comprehensive income. ASU 2013-02 is to be applied prospectively. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for us on December 30, 2012. The Company does not anticipate that the adoption of this ASU will materially change the presentation of its consolidated financial statements.

**Off-Balance Sheet Arrangements**

As of December 29, 2012, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

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

**Credit Market Risks**

At December 29, 2012 and December 31, 2011, we held auction rate securities with a par value of \$5.7 million and \$8.3 million, respectively. At December 29, 2012 and December 31, 2011, the auction rate securities held by us had an estimated fair value of \$4.7 million and \$6.9 million, respectively. Our investments in auction rate securities are subject to interest rate and market risk. A hypothetical 10% movement in interest rates would not have a material impact on the fair value of the portfolio. If the market for our investment portfolio declines, our consolidated operating results may be negatively impacted.

**Foreign Currency Exchange Rate Risk**

We have international subsidiary and branch operations. In addition, a portion of our silicon wafer and other purchases are denominated in Japanese yen and we bill our Japanese customers in yen. We mitigate the resulting foreign currency exchange rate exposure by entering into foreign currency forward exchange contracts for Japanese yen. 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 earnings. We do not hold or issue derivative financial instruments for trading or speculative purposes.

As a result of the use of derivative financial instruments, the Company is exposed to the risk that counter-parties to derivative contracts will fail to meet their contractual obligations. To mitigate the counter-party credit risk, the Company enters into contracts with carefully selected major financial institutions based upon their credit ratings and other factors.

On December 29, 2012, the Company had a forward contract to deliver 150,000,000 Japanese yen on January 22, 2013. The contract settled on that date.

**Item 8. Financial Statements and Supplementary Data.**

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**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**  
**(In thousands, except share and par value data)**

|   | December 29,<br>2012 | December 31,<br>2011 |
|---|----------------------|----------------------|
| <b>ASSETS</b>   |                      |                      |
| Current assets:   |                      |                      |
| Cash and cash equivalents   | \$ 118,536           | \$ 141,423           |
| Short-term marketable securities  | 64,865               | 68,711               |
| Accounts receivable, net  | 46,947               | 36,993               |
| Inventories   | 44,194               | 37,278               |
| Prepaid expenses and other current assets   | 12,806               | 16,200               |
| Total current assets  | 287,348              | 300,605              |
| Property and equipment, less accumulated depreciation   | 40,384               | 40,430               |
| Long-term marketable securities   | 4,717                | 6,946                |
| Other long-term assets  | 6,854                | 11,628               |
| Intangible assets, net of amortization  | 15,430               | 18,377               |
| Goodwill  | 44,808               | 44,808               |
| Deferred income taxes   | 29,218               | 45,130               |
| Total assets  | \$ 428,759           | \$ 467,924           |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>   |                      |                      |
| Current liabilities:  |                      |                      |
| Accounts payable and accrued expenses   | \$ 36,391            | \$ 31,842            |
| Accrued payroll obligations   | 6,149                | 9,373                |
| Deferred income and allowances on sales to sell-through distributors  | 10,553               | 10,761               |
| Total current liabilities   | 53,093               | 51,976               |
| Long-term liabilities   | 18,116               | 22,387               |
| Total liabilities   | 71,209               | 74,363               |
| Commitments and contingencies (See "Note 15-Commitments and Contingencies")   |                      |                      |
| 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, 115,500,000 and 117,675,000 shares issued and outstanding | 1,155                | 1,177                |
| Paid-in capital   | 621,170              | 627,637              |
| Accumulated other comprehensive loss  | (261)                | (345)                |
| Accumulated deficit   | (264,514)            | (234,908)            |
| Total stockholders' equity  | 357,550              | 393,561              |
| Total liabilities and stockholders' equity  | \$ 428,759           | \$ 467,924           |

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



**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE (LOSS) INCOME**  
(In thousands, except per share data)

|   | Year Ended           |                      |                    |
|---|----------------------|----------------------|--------------------|
|   | December 29,<br>2012 | December 31,<br>2011 | January 1,<br>2011 |
| Revenue   | \$ 279,256           | \$ 318,366           | \$ 297,768         |
| Costs and expenses:   |                      |                      |                    |
| Cost of products sold   | 128,499              | 129,769              | 117,943            |
| Research and development  | 77,610               | 71,855               | 60,326             |
| Selling, general and administrative   | 72,317               | 68,838               | 64,359             |
| Acquisition related charges, including amortization of intangible assets      | 4,178                | 536                  | —                  |
| Restructuring charges   | 6,018                | 6,079                | 11                 |
|   | <u>288,622</u>       | <u>277,077</u>       | <u>242,639</u>     |
| (Loss) income from operations   | (9,366)              | 41,289               | 55,129             |
| Other income, net   | 505                  | 1,434                | 2,474              |
| (Loss) income before income taxes   | (8,861)              | 42,723               | 57,603             |
| (Provision) benefit for income taxes  | (20,745)             | 35,509               | (531)              |
| Net (loss) income   | <u>\$ (29,606)</u>   | <u>\$ 78,232</u>     | <u>\$ 57,072</u>   |
| Net (loss) income per share   |                      |                      |                    |
| Basic   | \$ (0.25)            | \$ 0.66              | \$ 0.49            |
| Diluted   | <u>\$ (0.25)</u>     | <u>\$ 0.65</u>       | <u>\$ 0.48</u>     |
| Shares used in per share calculations:  |                      |                      |                    |
| Basic   | 117,194              | 117,875              | 116,726            |
| Diluted   | <u>117,194</u>       | <u>121,139</u>       | <u>120,143</u>     |
| Comprehensive (loss) income   |                      |                      |                    |
| Net (loss) income   | \$ (29,606)          | \$ 78,232            | \$ 57,072          |
| Other comprehensive income:   |                      |                      |                    |
| Unrealized (loss) gain related to marketable securities, net                  | (57)                 | (526)                | 581                |
| Recognized gain on redemption of marketable securities, previously unrealized | (78)                 | (133)                | —                  |
| Tax effect of change in fair market value of auction rate securities          | —                    | —                    | (304)              |
| Translation adjustment  | 219                  | (185)                | 64                 |
| Comprehensive (loss) income   | <u>\$ (29,522)</u>   | <u>\$ 77,388</u>     | <u>\$ 57,413</u>   |

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
(In thousands, except par value)

|   | Common Stock<br>(\$01 par value) |          | Paid-in<br>capital | Treasury<br>stock | Accumu-<br>lated<br>deficit | Accumulated<br>other comprehensive<br>loss | Total      |
|---|----------------------------------|----------|--------------------|-------------------|-----------------------------|--|------------|
|   | Shares                           | Amount   |                    |                   |                             |  |            |
| Balances, January 2, 2010   | 115,592                          | \$ 1,156 | \$ 622,258         | \$ —              | \$ (370,212)                | \$ 158                                     | \$ 253,360 |
| Net income for 2010   | —                                | —        | —                  | —                 | 57,072                      | —  | 57,072     |
| Unrealized gain related to marketable securities, net   | —                                | —        | —                  | —                 | —                           | 581  | 581        |
| Tax effect of change in fair market value of auction rate securities                                      | —                                | —        | —                  | —                 | —                           | (304)                                      | (304)      |
| Translation adjustments   | —                                | —        | —                  | —                 | —                           | 64   | 64         |
| Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs (net of taxes) | 2,750                            | 27       | 5,341              | —                 | —                           | —  | 5,368      |
| Stock repurchase  | (371)                            | (4)      | —                  | (1,966)           | —                           | —  | (1,970)    |
| Retirement of treasury stock  | —                                | —        | (1,966)            | 1,966             | —                           | —  | —          |
| Stock-based compensation expense related to stock options, ESPP and RSUs                                  | —                                | —        | 4,551              | —                 | —                           | —  | 4,551      |
| Balances, January 1, 2011   | 117,971                          | 1,179    | 630,184            | —                 | (313,140)                   | 499  | 318,722    |
| Net income for 2011   | —                                | —        | —                  | —                 | 78,232                      | —  | 78,232     |
| Unrealized loss related to marketable securities, net   | —                                | —        | —                  | —                 | —                           | (526)                                      | (526)      |
| Recognized gain on redemption of marketable securities, previously unrealized                             | —                                | —        | —                  | —                 | —                           | (133)                                      | (133)      |
| Translation adjustments   | —                                | —        | —                  | —                 | —                           | (185)                                      | (185)      |
| Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs (net of taxes) | 2,145                            | 23       | 5,508              | —                 | —                           | —  | 5,531      |
| Stock repurchase  | (2,441)                          | (25)     | —                  | (14,411)          | —                           | —  | (14,436)   |
| Retirement of treasury stock  | —                                | —        | (14,411)           | 14,411            | —                           | —  | —          |
| Stock-based compensation expense related to stock options, ESPP and RSUs                                  | —                                | —        | 6,356              | —                 | —                           | —  | 6,356      |
| Balances, December 31, 2011   | 117,675                          | 1,177    | 627,637            | —                 | (234,908)                   | (345)                                      | 393,561    |
| Net loss for 2012   | —                                | —        | —                  | —                 | (29,606)                    | —  | (29,606)   |
| Unrealized loss related to marketable securities, net   | —                                | —        | —                  | —                 | —                           | (57)                                       | (57)       |
| Recognized gain on redemption of marketable securities, previously unrealized                             | —                                | —        | —                  | —                 | —                           | (78)                                       | (78)       |
| Translation adjustments   | —                                | —        | —                  | —                 | —                           | 219  | 219        |
| Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs (net of taxes) | 1,896                            | 19       | 3,531              | —                 | —                           | —  | 3,550      |
| Stock repurchase  | —                                | —        | —                  | (17,549)          | —                           | —  | (17,549)   |
| Retirement of treasury stock  | (4,071)                          | (41)     | (17,508)           | 17,549            | —                           | —  | —          |
| Stock-based compensation expense related to stock options, ESPP and RSUs                                  | —                                | —        | 7,510              | —                 | —                           | —  | 7,510      |
| Balances, December 29, 2012   | 115,500                          | \$ 1,155 | \$ 621,170         | \$ —              | \$ (264,514)                | \$ (261)                                   | \$ 357,550 |

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

|  | Year Ended           |                      |                    |
|--|----------------------|----------------------|--------------------|
|  | December 29,<br>2012 | December 31,<br>2011 | January 1,<br>2011 |
| Cash flows from operating activities:  |                      |                      |                    |
| Net (loss) income  | \$ (29,606)          | \$ 78,232            | \$ 57,072          |
| Adjustments to reconcile net (loss) income to net cash provided by operating activities:                       |                      |                      |                    |
| Depreciation and amortization  | 22,149               | 16,666               | 14,492             |
| Change in deferred income tax provision (benefit)  | 19,224               | (49,376)             | (479)              |
| Gain on sale or maturity of marketable securities, net   | (393)                | (303)                | (668)              |
| Gain on sale of real estate  | —                    | —                    | (720)              |
| Stock-based compensation   | 7,510                | 6,356                | 4,551              |
| Changes in assets and liabilities: net of acquisitions   |                      |                      |                    |
| Accounts receivable, net   | (9,954)              | 4,553                | (7,637)            |
| Inventories  | (6,916)              | 2,618                | (11,408)           |
| Prepaid expenses and other assets  | 387                  | (1,367)              | (3,613)            |
| Foundry advances (includes advance credits)  | —                    | —                    | 11,475             |
| Accounts payable and accrued expenses (includes restructuring)   | 5,306                | (1,059)              | 6,747              |
| Accrued payroll obligations  | (3,224)              | (2,281)              | 6,536              |
| Deferred income and allowances on sales to sell-through distributors   | (208)                | (4,931)              | 5,532              |
| Other liabilities  | 220                  | 13,068               | 222                |
| Net cash provided by operating activities  | 4,495                | 62,176               | 82,102             |
| Cash flows from investing activities:  |                      |                      |                    |
| Proceeds from sales or maturities of marketable securities   | 56,408               | 81,313               | 54,252             |
| Purchase of marketable securities  | (50,076)             | (83,259)             | (105,661)          |
| Proceeds from sale of land   | —                    | —                    | 871                |
| Acquisitions net of cash acquired  | —                    | (45,645)             | —                  |
| Payment for purchase of intangible assets  | —                    | (18,500)             | —                  |
| Capital expenditures   | (13,593)             | (13,001)             | (13,856)           |
| Other investing activities, primarily time-based software licenses   | (6,122)              | (7,140)              | (2,791)            |
| Net cash used in investing activities  | (13,383)             | (86,232)             | (67,185)           |
| Cash flows from financing activities:  |                      |                      |                    |
| Net share settlement upon issuance of RSUs   | (832)                | (642)                | (808)              |
| Purchase of treasury stock   | (17,549)             | (14,436)             | (1,970)            |
| Net proceeds from issuance of common stock   | 4,382                | 6,173                | 6,176              |
| Net cash (used in) provided by financing activities  | (13,999)             | (8,905)              | 3,398              |
| Net (decrease) increase in cash and cash equivalents   | (22,887)             | (32,961)             | 18,315             |
| Beginning cash and cash equivalents  | 141,423              | 174,384              | 156,069            |
| Ending cash and cash equivalents   | \$ 118,536           | \$ 141,423           | \$ 174,384         |
| Supplemental disclosures of non-cash investing and financing activities:                                       |                      |                      |                    |
| Unrealized (loss) gain related to marketable securities, net, included in Accumulated other comprehensive loss | \$ (57)              | \$ (526)             | \$ 581             |
| Distribution of deferred compensation from trust assets  | \$ 263               | \$ 341               | \$ 288             |
| Tax effect of change in fair market value of auction rate securities   | \$ —                 | \$ —                 | \$ (304)           |

Refer to Note 3 - *Business combinations and Goodwill* for other non-cash impacts associated with the acquisition of SiliconBlue.

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(1) Nature of Operations and Significant Accounting Policies:**

*Nature of Operations*

Lattice Semiconductor Corporation (“Lattice” or the “Company”) designs, develops and markets programmable logic products and related software. Programmable logic products are widely used semiconductor components that can be configured by end customers as specific logic circuits, enabling shorter design cycle times and reduced development costs. Our end customers are primarily original equipment manufacturers (“OEMs”) in the communications, industrial and other, consumer and computing end markets.

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 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. Product development activities occur primarily in: Hillsboro, Oregon; San Jose, California; Shanghai, China; and Manila, Philippines.

*Fiscal Reporting Period*

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our fiscal 2012, 2011 and 2010 ended on December 29, 2012, December 31, 2011 and January 1, 2011, respectively. Our fiscal 2013 will be a 52-week year and will end on December 28, 2013. All references to quarterly or yearly financial results are references to the results for the relevant fiscal period.

*Principles of Consolidation*

The accompanying Condensed Consolidated Financial Statements include the accounts of Lattice and its subsidiaries, all of which are wholly owned, after the elimination of all intercompany balances and transactions. Certain balances in prior fiscal years have been reclassified to conform to the presentation adopted in the current year.

*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 with unrealized gains or losses recorded to Accumulated other comprehensive loss, unless losses are considered other-than-temporary, in which case, losses are charged to the Consolidated Statements of Operations and Comprehensive (Loss) Income .

*Fair Value of Financial Instruments*

We invest in various financial instruments including corporate and government bonds, notes, commercial paper and auction rate securities. The Company values these instruments at their fair value and monitors their 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, the Company records an impairment charge and establishes 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 and Disclosures.” 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.

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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 are classified as Level 3 instruments. Management uses a combination of the market and income approach to derive the fair value of auction rate securities, which include 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 are classified as Long-term marketable securities on our Condensed Consolidated Balance Sheet and are entirely made up of auction rate securities that consist of student loan asset-backed notes. Such loans are insured by the federal government or guaranteed by the Federal Family Educational Loan Program ("FFELP"). Fair value measurement may be sensitive to various unobservable inputs such as the ability of students to repay their loans, or change in the provision of government guarantees policy toward guaranteeing loan repayment. If students are unable to pay back their loans or the government changes its policy, our investments may be further impaired.

### *Foreign Exchange and Translation of Foreign Currencies*

A portion of our silicon wafer and other purchases are denominated in Japanese yen and we bill certain Japanese customers in yen. Gains or losses from foreign exchange rate fluctuations on balances denominated in foreign currencies are reflected in Other income, net. Realized and unrealized gains or losses on foreign currency transactions were not significant for the years 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*

At December 29, 2012 and December 31, 2011, we had open foreign exchange contracts of 150,000,000 JPY and 140,000,000 JPY, respectively. The contracts outstanding at December 29, 2012 and December 31, 2011 were settled in January 2013 and January 2012, respectively. 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 earnings, with an impact of less than \$0.1 million for the periods reported. We do not hold or issue derivative financial instruments for trading or speculative purposes.

### *Concentration Risk*

Potential exposure to concentration risk consists primarily of cash and cash equivalents, marketable securities, trade receivables and supply of wafers for our new products. We place our investments primarily through three financial institutions and mitigate the concentration of credit risk by limiting the maximum portion of the investment portfolio which may be invested in any one instrument. The Company's investment policy defines approved credit ratings for investment securities. Investments on-hand consisted primarily of money market instruments, "AA" or better corporate notes and bonds, and U.S. government agency obligations. See Note 4 for a discussion of the liquidity attributes of our marketable securities.

Concentration of credit risk with respect to trade receivables are mitigated by a geographically diverse customer base and our credit and collection process. Accounts receivable are recorded at the invoice amount, do not bear interest, and are shown net of allowances for doubtful accounts of \$1.1 million and \$0.9 million at December 29, 2012 and December 31, 2011, respectively. We perform credit evaluations for essentially all customers and secure transactions with letters of credit or advance payments where appropriate. 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 rely on a limited number of foundries for our wafer purchases including: Fujitsu Limited, Seiko Epson Corporation Taiwan Semiconductor Manufacturing, Ltd, United Microelectronics Corporation, and GLOBALFOUNDRIES.

### Revenue Recognition and Deferred Income

We sell our products directly to end customers or 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) or sell-in distributors is recognized upon 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, 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, net 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 products sold 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.

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

|   | <b>December 29,<br/>2012</b> | <b>December 31,<br/>2011</b> |
|---|------------------------------|------------------------------|
| Inventory valued at published list price and held by sell-through distributors with right of return | \$ 38,623                    | \$ 40,147                    |
| Allowance for distributor advances  | (22,450)                     | (23,300)                     |
| Deferred cost of sales related to inventory held by sell-through distributors                       | (5,620)                      | (6,086)                      |
| Total Deferred income and allowances on sales to sell-through distributors                          | <u>\$ 10,553</u>             | <u>\$ 10,761</u>             |

We expect the majority of our revenue in fiscal 2013 will be from sell-through distributors. For the fiscal years 2012, 2011 and 2010, resale of product by sell-through distributors as a percentage of our total revenue was 55%, 61% and 56%, respectively.

In 2011 our global franchise agreement with Avnet terminated, however, we had mutually agreed to terms for the transition of inventory through December 31, 2011. Revenue from Avnet made up approximately 20% of our total revenue for the first nine months of fiscal 2011. Because we and our remaining global and regional distributors worked directly with our end customers in order to transition the fulfillment of customer orders to replacement distributors, the impact on our business as a result of this change has been negligible. We continue to serve our end customers with a network that includes a global distributor, regional distributors, manufacturer's representatives, and our direct sales team.

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.

Revenue from software licensing was not material for the periods presented.

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### *Inventories*

Inventories are recorded at the lower of actual cost (approximated by standard cost) determined on a first-in-first-out basis or market. We establish provisions for inventory if it is in excess of projected customer demand, and the creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of sales.

### *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 operations. Repair and maintenance costs are expensed as incurred.

### *Asset Impairments*

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 Statement of Operations and Comprehensive (Loss) Income. 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. No impairment charges were recorded for the fiscal year ended 2012.

### *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. The Company reviews 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, the Company makes a qualitative assessment to determine if it is more likely than not that its fair value is less than its carrying amount. If the qualitative assessment determines that it is more likely than not that its fair value is less than its 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 the Company 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 a single reporting unit. No goodwill impairment charges were recorded for the fiscal year ended 2012.

### *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.

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### *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 charge is recorded when such costs are probable and the amount can be reasonably estimated in accordance with ASC 712, "Compensation - Nonretirement Postemployment Benefits." For leased facilities that were ceased to be used, 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, was recorded as a part of restructuring charges.

### *Research and Development*

Research and development costs are expensed as incurred.

### *Accounting for Income Taxes*

The Company's provision for income tax is comprised of its current tax liability and change in deferred tax assets and liabilities. Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax basis 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 December 29, 2012, U.S. income taxes were not provided on approximately \$2.0 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, we would be subject to additional U.S. income taxes.

The Company's income tax calculations are based on application of the respective U.S. federal, state or foreign tax law. The Company's tax filings, however, are subject to audit by the relevant tax authorities. Accordingly, the Company recognizes tax liabilities based upon its 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 are recorded as income tax expense or benefit in the Consolidated Statements of Operations and Comprehensive (Loss) Income.

In assessing the realizability of 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 and Comprehensive (Loss) Income for the period that the adjustment is determined to be required.

### *Stock-Based Compensation*

The Company records stock-based compensation expense related to employee and director stock options, restricted stock units ("RSUs"), and the Employee Stock Purchase Plan ("ESPP") in accordance with ASC 718, "Compensation - Stock Compensation." In addition, the Company records compensation expense over the offering period in connection with shares issuable under the ESPP.

### *Net (Loss) Income Per Share*

We compute basic (loss) income per share by dividing Net (loss) income available to common 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, RSUs and ESPP shares. 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.



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A reconciliation of basic and diluted Net (loss) income per share is presented below (in thousands, except per share data):

|  | Year Ended           |                      |                    |
|--|----------------------|----------------------|--------------------|
|  | December 29,<br>2012 | December 31,<br>2011 | January 1,<br>2011 |
| Basic and diluted Net (loss) income                    | \$ (29,606)          | \$ 78,232            | \$ 57,072          |
| Shares used in basic Net (loss) income per share       | 117,194              | 117,875              | 116,726            |
| Dilutive effect of stock options, RSUs and ESPP shares | —                    | 3,264                | 3,417              |
| Shares used in diluted Net (loss) income per share     | 117,194              | 121,139              | 120,143            |
| Basic Net (loss) income per share                      | \$ (0.25)            | \$ 0.66              | \$ 0.49            |
| Diluted Net (loss) income per share                    | \$ (0.25)            | \$ 0.65              | \$ 0.48            |

The computation of diluted Net (loss) income per share for fiscal years 2012, 2011 and 2010, excludes the effects of stock options, RSUs and ESPP shares aggregating 10.6 million, 3.9 million and 3.0 million shares, 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. Stock options and RSUs that are antidilutive at December 29, 2012 could become dilutive in the future.

#### *Supplemental Cash Flow*

Income taxes paid approximated \$1.0 million, \$1.5 million and \$0.6 million in fiscal years 2012, 2011 and 2010, respectively. Interest paid was insignificant for all periods presented.

#### *Use of Estimates*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, auction rate securities, 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 and the reported amounts of revenue and expenses during the fiscal periods presented. Actual results could differ from those estimates.

#### **(2) New Accounting Pronouncements:**

In February 2013, the FASB issued Accounting Standards Update No. 2013-02, "*Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*," ("ASU 2013-02"). ASU 2013-02 finalizes the requirements of ASU 2011-05 that ASU 2011-12 deferred, clarifying how to report the effect of significant reclassifications out of accumulated other comprehensive income. ASU 2013-02 is to be applied prospectively. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for us on December 30, 2012. The Company does not anticipate that the adoption of this ASU will materially change the presentation of its consolidated financial statements.

#### **(3) Business Combinations and Goodwill:**

In December 2011, we acquired SiliconBlue Technologies Ltd., ("SiliconBlue"), for \$63.2 million in cash. Of the total purchase price, \$43.9 million was allocated to goodwill, \$18.5 million was allocated to intangible assets, and the remaining to net tangible assets acquired. The goodwill and identifiable intangible assets are not deductible for tax purposes. SiliconBlue was consolidated into our financial statements beginning in December, 2011.

Inventories were recorded at their estimated fair value ("step-up"), which represented an amount equivalent to estimated selling prices less fulfillment costs and a normative selling profit. The step-up of \$0.3 million was charged to Acquisition related costs in the six months ended June 30, 2012, approximating the estimated inventory turn-over for this particular product.

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In July 2011, the Company acquired substantially all of the assets of Rise Technology Development Limited ("Rise"), for \$1.0 million in cash. Of the purchase price, \$0.9 million was allocated to Goodwill and the remaining to net tangible assets acquired.

No impairment charges relating to goodwill and intangible assets were recorded for the fiscal years 2012 or 2011.

**(4) Marketable Securities:**

The following table summarizes the contractual maturities of our marketable securities (at fair value and in thousands):

|  | December 29,<br>2012 | December 31,<br>2011 |
|--|----------------------|----------------------|
| <b>Short-term marketable securities:</b> |                      |                      |
| Maturities of less than five years       | \$ 64,865            | \$ 68,711            |
| <b>Long-term marketable securities:</b>  |                      |                      |
| Maturities of more than ten years        | 4,717                | 6,946                |
| Total marketable securities              | \$ 69,582            | \$ 75,657            |

The following table summarizes the composition of our marketable securities (at fair value and in thousands):

|   | December 29,<br>2012 | December 31,<br>2011 |
|---|----------------------|----------------------|
| <b>Short-term marketable securities:</b>                      |                      |                      |
| Corporate and government bonds and notes and commercial paper | \$ 64,865            | \$ 68,711            |
| <b>Long-term marketable securities:</b>                       |                      |                      |
| Federally-insured or FFELP guaranteed student loans           | 4,717                | 6,946                |
| Total marketable securities                                   | \$ 69,582            | \$ 75,657            |

The following table summarizes the composition of our auction rate securities (in thousands):

|   | December 29, 2012 |            |                         | December 31, 2011 |            |                         |
|---|-------------------|------------|-------------------------|-------------------|------------|-------------------------|
|   | Par Value         | Fair Value | S&P<br>Credit<br>rating | Par Value         | Fair Value | S&P<br>Credit<br>rating |
| <b>Long-term marketable securities:</b>             |                   |            |                         |                   |            |                         |
| Federally-insured or FFELP guaranteed student loans | \$ 5,700          | \$ 4,717   | AA+                     | \$ 8,300          | \$ 6,946   | AAA                     |

On May 22, 2012, a student loan auction rate security with a par value of \$2.6 million and an estimated fair value of \$2.3 million was redeemed by the issuer for \$2.6 million. As a result, the Company reported a gain of \$0.4 million and relieved \$0.1 million of previously unrecognized gain in Accumulated other comprehensive loss. On March 29, 2011, the Company sold student loan auction rate securities, with a par value of \$3.3 million and an estimated fair value of \$2.8 million, for \$3.3 million, reported a gain of \$0.6 million and relieved \$0.1 million of previously unrecognized gain in Accumulated other comprehensive loss, in the first quarter of fiscal 2011. On December 9, 2010, the Company sold auction market preferred shares issued by AMBAC Assurance Corporation with a par value of \$8.3 million and a fair value of \$0.2 million for \$0.5 million and reported a gain of \$0.3 million in the fourth quarter of fiscal 2010. On July 29, 2010, the Company sold student loan auction rate securities, with a par value of \$3.8 million and fair value of \$2.9 million for \$3.3 million and reported a gain of \$0.4 million in the third quarter of fiscal 2010. At December 29, 2012, due to continued multiple failed auctions and a determination of illiquidity, the auction rate securities held by the Company are classified as Long-term marketable securities. These auction rate securities are exposed to risks associated with student loan asset-backed notes. Such loans are insured by the federal government or guaranteed by the Federal Family Educational Loan Program ("FFELP"). The Company intends to sell its auction rate securities as markets for these securities resume or reasonable offers become available.

**(5) Fair Value of Financial Instruments (in thousands):**

|   | Fair value measurements as of<br>December 29, 2012 |           |         |          | Fair value measurements as of<br>December 31, 2011 |           |         |          |
|---|--|-----------|---------|----------|--|-----------|---------|----------|
|   | Total  | Level 1   | Level 2 | Level 3  | Total  | Level 1   | Level 2 | Level 3  |
| Short-term marketable securities            | \$ 64,865  | \$ 64,865 | \$ —    | \$ —     | \$ 68,711  | \$ 68,711 | \$ —    | \$ —     |
| Long-term marketable securities             | 4,717  | —         | —       | 4,717    | 6,946  | —         | —       | 6,946    |
| Foreign currency forward exchange contracts | (5)  | —         | (5)     | —        | 18   | —         | 18      | —        |
| Total fair value of financial instruments   | \$ 69,577  | \$ 64,865 | \$ (5)  | \$ 4,717 | \$ 75,675  | \$ 68,711 | \$ 18   | \$ 6,946 |

We invest in various financial instruments including corporate and government bonds and notes, commercial paper and auction rate securities. In addition, we enter into foreign currency forward exchange contracts to mitigate our foreign currency exchange rate exposure. The Company carries 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 federal agency, corporate notes and bonds, and commercial paper that are traded in active markets and are classified as Short-term marketable securities on our Condensed Consolidated Balance Sheet.

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 are classified as Level 3 instruments. Management uses a combination of the market and income approach to derive the fair value of auction rate securities, which include 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 are classified as Long-term marketable securities on our Condensed Consolidated Balance Sheet and are entirely made up of auction rate securities that consist of student loan asset-backed notes. Such loans are insured by the federal government or guaranteed by the Federal Family Educational Loan Program ("FFELP"). Fair value measurement may be sensitive to various unobservable inputs such as the ability of students to repay their loans, or change in the provision of government guarantees policy toward guaranteeing loan repayment. If students are unable to pay back their loans or the government changes its policy, our investments may be further impaired.

There were no transfers between Levels 1 and 2 during fiscal 2012, 2011 and 2010. There were no transfers into or out of Level 3 during fiscal 2012, 2011 and 2010.

During the fiscal years ended December 29, 2012 and December 31, 2011, the following changes occurred in our Level 3 instruments (in thousands):

|   | Year Ended           |                      |
|---|----------------------|----------------------|
|   | December 29,<br>2012 | December 31,<br>2011 |
| Beginning fair value of Long-term marketable securities | \$ 6,946             | \$ 10,232            |
| Fair value of securities sold or redeemed               | (2,285)              | (2,843)              |
| Temporary fluctuations in fair value                    | 56                   | (443)                |
| Ending fair value of Long-term marketable securities    | \$ 4,717             | \$ 6,946             |

In accordance with ASC 320, "Investments-Debt and Equity Securities," the Company recorded an unrealized loss of \$0.1 million during the fiscal year ended December 29, 2012 and an unrealized loss of \$0.1 million during the year ended December 31, 2011, on certain Short-term marketable securities (Level 1 instruments), which has been recorded in Accumulated other

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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. In addition, during the years ended December 29, 2012 and December 31, 2011, the Company realized a gain of \$0.4 million and \$0.6 million, respectively, related to the sale of a portion of its Long-term marketable securities portfolio. If the Company were to determine in the future that any further decline in fair value is other-than-temporary, we would record an impairment charge, which could have a materially detrimental impact 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 or the previously reported other-than-temporary impairment charge.

**(6) Inventories (in thousands):**

|                   | December 29,<br>2012 | December 31,<br>2011 |
|-------------------|----------------------|----------------------|
| Work in progress  | \$ 27,915            | \$ 24,260            |
| Finished goods    | 16,279               | 13,018               |
| Total inventories | <u>\$ 44,194</u>     | <u>\$ 37,278</u>     |

**(7) Property and Equipment (in thousands):**

|   | December 29,<br>2012 | December 31,<br>2011 |
|---|----------------------|----------------------|
| Land                                      | \$ 1,456             | \$ 1,456             |
| Buildings                                 | 27,827               | 27,809               |
| Computer and test equipment               | 154,809              | 160,506              |
| Office furniture and equipment            | 8,755                | 9,363                |
| Leasehold and building improvements       | 16,460               | 13,484               |
|   | <u>209,307</u>       | <u>212,618</u>       |
| Accumulated depreciation and amortization | <u>(168,923)</u>     | <u>(172,188)</u>     |
|   | <u>\$ 40,384</u>     | <u>\$ 40,430</u>     |

Depreciation expense was \$13.6 million, \$12.2 million and \$10.9 million for fiscal years 2012, 2011 and 2010, respectively.

**(8) Intangible Assets and Acquisition Related Charges:**

In connection with our acquisition of SiliconBlue in December 2011, we recorded identifiable intangible assets related to developed technology and customer relationships based on guidance for determining fair value under the provisions of ASC 820. The following table summarizes the details of the Company's total purchased intangible assets (in thousands):

|                        | Weighted Average<br>Amortization Period<br>(in years) | Gross            | Accumulated<br>Amortization | Intangible assets, net of<br>amortization<br>December 29, 2012 |
|------------------------|---|------------------|-----------------------------|--|
| Developed technology   | 7   | \$ 10,700        | \$ (1,592)                  | \$ 9,108   |
| Customer relationships | 5.5   | 7,800            | (1,478)                     | 6,322  |
| Total                  | 6.3   | <u>\$ 18,500</u> | <u>\$ (3,070)</u>           | <u>\$ 15,430</u>   |

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Amortization expense associated with these intangible assets is reported as Acquisition related charges, including amortization of intangible assets in the Consolidated Statements of Operations and Comprehensive (Loss) Income and amounted to \$2.9 million, \$0.1 million, and \$0 in 2012, 2011, and 2010, respectively. We expect amortization expense related to these intangible assets to approximate \$2.9 million in 2013, 2014, 2015 and 2016. We expect amortization expense related to these intangible assets to approximate \$2.2 million in 2017 and \$1.5 million in 2018.

Acquisition related charges, including amortization of intangible assets in the Consolidated Statements of Operations and Comprehensive (Loss) Income also include severance and professional fees related to the acquisition, as well as the amortization of the stepped up value of inventory collectively amounting to \$1.2 million, \$0.4 million, and \$0 in 2012, 2011, and 2010, respectively.

**(9) Lease Obligations:**

Certain of our facilities are leased under operating leases, which expire at various times through 2017. Rental expense under the operating leases was \$3.7 million, \$3.3 million and \$2.7 million for fiscal years 2012, 2011 and 2010, respectively. Future minimum lease commitments at December 29, 2012 are as follows (in thousands):

| <b>Fiscal year</b> | <b>Amount</b>   |
|--------------------|-----------------|
| 2013               | \$ 4,099        |
| 2014               | 1,374           |
| 2015               | 702             |
| 2016               | 517             |
| 2017               | 97              |
| Thereafter         | 40              |
|                    | <u>\$ 6,829</u> |

**(10) Income Taxes:**

|                                   | <b>Year Ended</b>        |                          |                        |
|-----------------------------------|--------------------------|--------------------------|------------------------|
|                                   | <b>December 29, 2012</b> | <b>December 31, 2011</b> | <b>January 1, 2011</b> |
| Domestic                          | \$ 51,859                | \$ 42,619                | \$ 56,782              |
| Foreign                           | (60,720)                 | 104                      | 821                    |
| (Loss) income before income taxes | <u>\$ (8,861)</u>        | <u>\$ 42,723</u>         | <u>\$ 57,603</u>       |

The components of the income tax (provision) benefit are as follows (in thousands):

|                                      | <b>Year Ended</b>        |                          |                        |
|--------------------------------------|--------------------------|--------------------------|------------------------|
|                                      | <b>December 29, 2012</b> | <b>December 31, 2011</b> | <b>January 1, 2011</b> |
| <b>Current:</b>                      |                          |                          |                        |
| Federal                              | \$ 344                   | \$ (13,463)              | \$ (83)                |
| State                                | (36)                     | 137                      | (47)                   |
| Foreign                              | (1,498)                  | (541)                    | (880)                  |
|                                      | <u>(1,190)</u>           | <u>(13,867)</u>          | <u>(1,010)</u>         |
| <b>Deferred:</b>                     |                          |                          |                        |
| Federal                              | (18,000)                 | 45,423                   | 296                    |
| State                                | (1,487)                  | 3,894                    | 8                      |
| Foreign                              | (68)                     | 59                       | 175                    |
|                                      | <u>(19,555)</u>          | <u>49,376</u>            | <u>479</u>             |
| (Provision) benefit for income taxes | <u>\$ (20,745)</u>       | <u>\$ 35,509</u>         | <u>\$ (531)</u>        |

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The (provision) benefit for income taxes 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        |                   |                 |
|---|-------------------|-------------------|-----------------|
|   | December 29, 2012 | December 31, 2011 | January 1, 2011 |
|   | %                 | %                 | %               |
| Statutory federal rate                  | 35                | 35                | 35              |
| Adjustments for tax effects of:         |                   |                   |                 |
| State taxes, net                        | (7)               | 3                 | —               |
| Intellectual property sale              | —                 | 144               | —               |
| Research and development credits        | (1)               | (3)               | (2)             |
| Foreign rate differential               | (252)             | 2                 | —               |
| Foreign dividends                       | 3                 | 1                 | —               |
| Valuation allowance                     | (19)              | (289)             | (37)            |
| Change in uncertain tax benefit accrual | 3                 | 31                | —               |
| Tax rate change                         | —                 | (7)               | 5               |
| Other                                   | 4                 | —                 | —               |
| Effective income tax rate               | (234)             | (83)              | 1               |

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.

On December 31, 2011, we began to implement a global tax structure to more effectively align the Company's corporate structure with the geographic business operations including responsibility for sales and manufacturing activities. As part of this tax restructuring, 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 U.S. and foreign entities. The intercompany sales of rights to intellectual property resulted in a gain for tax purposes, for which we recorded a \$76.8 million tax provision in the fourth quarter of fiscal 2011 which was fully offset by the release of valuation allowance on deferred tax assets.

The global tax structure was completed during the first quarter of 2012 upon the intercompany sale of inventory and fixed assets. During 2012, this inventory has been sold to end customers in the ordinary course of business resulting in income before taxes in the U.S. and a loss before taxes in foreign jurisdictions. Taxes have been applied to the gain on sale based on U.S. statutory tax rates, offset by deferred tax assets. This resulted in an increase to the effective tax rate and a net income tax provision of \$13.7 million during 2012.

Also during the fourth quarter of 2011, 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 \$35.2 million and a net deferred tax asset of \$49.7 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 including the implementation of a global tax structure discussed above. 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 new tax structure in reaching this decision. As of December 29, 2012 we have approximately \$30.1 million of deferred tax assets. We will continue to evaluate both positive and negative evidence in future periods to determine if additional deferred tax assets should be recognized. We do not 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 December 29, 2012 was approximately \$1.7 million.

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The components of our net deferred tax assets are as follows (in thousands):

|                                       | <b>December 29,<br/>2012</b> | <b>December 31,<br/>2011</b> |
|---------------------------------------|------------------------------|------------------------------|
| <b>Deferred tax assets:</b>           |                              |                              |
| Accrued expenses and reserves         | \$ 1,791                     | \$ 4,011                     |
| Inventory                             | —                            | 4,036                        |
| Deferred revenue                      | —                            | 13,047                       |
| Stock-based and deferred compensation | 4,164                        | 3,716                        |
| Intangible assets                     | 8,187                        | 9,277                        |
| Fixed assets                          | —                            | 124                          |
| Net operating loss carry forwards     | 127,400                      | 125,013                      |
| Tax credit carry forwards             | 32,446                       | 31,768                       |
| Capital loss carry forwards           | 6,926                        | 6,916                        |
| Unrealized loss on securities         | 758                          | 925                          |
| Other                                 | 120                          | 81                           |
|                                       | <u>181,792</u>               | <u>198,914</u>               |
| Less: valuation allowance             | (149,209)                    | (147,499)                    |
| Net deferred tax assets               | <u>32,583</u>                | <u>51,415</u>                |
| <b>Deferred tax liabilities:</b>      |                              |                              |
| Fixed Assets                          | 1,897                        | —                            |
| Prepaid expenses                      | —                            | 768                          |
| Other                                 | 608                          | 977                          |
| Total deferred tax liabilities        | <u>2,505</u>                 | <u>1,745</u>                 |
| Net deferred tax assets               | <u>\$ 30,078</u>             | <u>\$ 49,670</u>             |

Of the total Net deferred tax assets, \$0.9 million and \$4.5 million is considered current and included in Prepaid expenses and other current assets on the Consolidated Balance Sheet as of December 29, 2012 and December 31, 2011, respectively.

At December 29, 2012, we have federal net operating loss carryforwards (pretax) of approximately \$296.9 million that expire at various dates between 2023 and 2032. We have state net operating loss carryforwards (pretax) of approximately \$173.4 million that expire at various dates from 2013 through 2032. We also have federal and state credit carryforwards of \$14.1 million and \$24.8 million of which \$22.1 million do not expire. The remaining credits expire at various dates from 2013 through 2031.

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. 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 December 29, 2012, U.S. income taxes were not provided for approximately \$2.0 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.

At December 29, 2012, our unrecognized tax benefits associated with uncertain tax positions were \$21.7 million, of which \$20.5 million, if recognized, would affect the effective tax rate, subject to valuation allowance. As of December 29, 2012, interest and penalties associated with unrecognized tax benefits were \$0.4 million.

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The following table summarizes the changes to unrecognized tax benefits for fiscal years 2012, 2011 and 2010 (in thousands):

| <b>Unrecognized tax benefit</b>                                     | <b>Amount</b> |
|---|---------------|
| Balance at January 2, 2010  | \$ 6,969      |
| Additions based on tax positions related to the current year        | 786           |
| Additions based on tax positions of prior years                     | 60            |
| Reduction for tax positions of prior years                          | —             |
| Settlements   | —             |
| Reduction as a result of lapse of applicable statute of limitations | (74)          |
| Balance at January 1, 2011  | 7,741         |
| Additions based on tax positions related to the current year        | 15,005        |
| Additions based on tax positions of prior years                     | —             |
| Additions for acquisition of SiliconBlue                            | 298           |
| Reduction for tax positions of prior years                          | (106)         |
| Settlements   | (1,248)       |
| Reduction as a result of lapse of applicable statute of limitations | (138)         |
| Balance at December 31, 2011  | 21,552        |
| Additions based on tax positions related to the current year        | 384           |
| Additions based on tax positions of prior years                     | 192           |
| Reduction for tax positions of prior years                          | (26)          |
| Settlements   | (30)          |
| Reduction as a result of lapse of applicable statute of limitations | (392)         |
| Balance at December 29, 2012  | \$ 21,680     |

At December 29, 2012, it is reasonably possible that \$0.4 million of unrecognized tax benefits and \$0.2 million of associated interest and penalties could significantly change during the next twelve months. The \$0.4 million potential change would represent a decrease in unrecognized tax benefits, comprised of items related to tax filings for years that will no longer be subject to examination under expiring statutes of limitations.

The Internal Revenue Service has examined our income tax returns for 2001 and 2002, and issued proposed adjustments of \$1.4 million, plus interest. These adjustments relate to the treatment of acquisition costs and a tax accounting method change for prepaid expenses. We reached an agreement regarding the acquisition costs during the three months ended March 29, 2008. We made a payment of \$0.3 million related to this settlement agreement. On May 23, 2008, we filed a petition with the Tax Court seeking a redetermination of the prepaid expense adjustment. On May 9, 2011 the United States Tax Court ruled that the IRS did not err in denying our request to change our accounting method with respect to prepaid expenses and held that we were not allowed a deduction for prepaid expenses on our 2002 tax return. During the quarter ended October 1, 2011, we decided not to pursue further litigation with regard to the prepaid expense adjustment and paid the adjustments to the IRS. As a result, we paid \$1.0 million in October 2011 related to disallowed prepaid expense deductions and the corresponding carry back of those deductions to the 1999 and 2000 tax returns through a net operating loss carry back. The amount paid was fully reserved. A benefit of approximately \$0.9 million was recognized in the three months ended October 1, 2011 for the reversal of uncertain tax positions and related interest for the years effectively settled.

We are not currently under examination in any tax 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 2009 for federal income taxes, 2008 for state income taxes, and 2006 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.



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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. Therefore, the expected tax benefit, if any, resulting from reinstatement for 2012 will not be reflected in the Company's annual effective tax rate until 2013.

**(11) Restructuring:**

In October, 2012, the Company's Board of Directors adopted the "2012 restructuring plan." In connection with this restructuring plan, the Company reduced its headcount by approximately 110 employees and eliminated certain sites, including its sites in Pennsylvania and Illinois. In connection with this action, the Company recorded restructuring charges of approximately \$5.4 million in the fourth quarter of fiscal 2012. In addition, during 2012, the Company incurred approximately \$0.7 million related to the 2011 restructuring plan which was completed during the second quarter of 2012.

In 2011, the Company adopted the "2011 restructuring plan" to more efficiently implement its product development cycle and streamline supply chain activities. During 2011, the company incurred approximately \$6.9 million, primarily related to severance costs. In addition, the company re-occupied leased space which had previously been restructured, resulting in a benefit of \$0.8 million.

The following table displays the activity related to the restructuring plans described above (in thousands):

|  | Severance and<br>related | Lease termination | Other  | Total    |
|--|--------------------------|-------------------|--------|----------|
| <b>Balance at January 2, 2010</b>        | \$ 715                   | \$ 1,508          | \$ 13  | \$ 2,236 |
| Restructuring charges                    | 198                      | 51                | —      | 249      |
| Non-cash adjustments                     | (295)                    | 57                | —      | (238)    |
| Cash payments                            | (443)                    | (602)             | —      | (1,045)  |
| <b>Balance at January 1, 2011</b>        | 175                      | 1,014             | 13     | 1,202    |
| Restructuring charges                    | 6,503                    | 11                | 830    | 7,344    |
| Non-cash adjustments                     | (269)                    | —                 | —      | (269)    |
| Cash payments                            | (4,678)                  | (178)             | (843)  | (5,699)  |
| Adjustments to prior restructuring costs | (175)                    | (821)             | —      | (996)    |
| <b>Balance at December 31, 2011</b>      | 1,556                    | 26                | —      | 1,582    |
| Restructuring charges                    | 4,277                    | 1,083             | 776    | 6,136    |
| Cash payments                            | (3,356)                  | (302)             | (518)  | (4,176)  |
| Adjustments to prior restructuring costs | (104)                    | (14)              | —      | (118)    |
| <b>Balance at December 29, 2012</b>      | \$ 2,373                 | \$ 793            | \$ 258 | \$ 3,424 |

We cannot be certain as to the actual amount of any remaining restructuring charges or the timing of their recognition for financial reporting purposes.

**(12) Common Stock Repurchase Program:**

On February 24, 2012, the Company's 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 is twelve months. During fiscal 2012, approximately 4.1 million shares were repurchased at \$17.5 million. At December 29, 2012, we have approximately \$2.5 million remaining under the approved program. All shares repurchased under this program were retired by December 29, 2012. All repurchases have and will be open market transactions and funded from available working capital.

On October 21, 2010, the Company's Board of Directors approved a stock repurchase program pursuant to which up to \$20.0 million of outstanding common stock could have been repurchased. The duration of the repurchase program was twelve months from adoption. In connection with this stock repurchase program, the Company entered into a 10b5-1 plan. During fiscal 2011, approximately 2.4 million shares were repurchased for \$14.4 million. During fiscal 2010, approximately 0.4 million shares were repurchased for \$2.0 million. All shares repurchased under this program were retired by December 31,

2011. All repurchases were open market transactions and were funded from available working capital. The program ended by its terms in October 2011.

**(13) Stockholders' Equity:**

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

The Company's employee stock option plans include principal plans adopted in 1996 and 2001 ("principal option plans"). We have authorized an aggregate of 9,000,000 and 17,200,000 shares of common stock for issuance to officers and employees under the 2001 plan and 1996 plan, respectively. The principal option plans provide for grants of options to employees to purchase common stock at the fair market value of such shares on the grant date. The options generally vest quarterly over a four-year period beginning on the grant date. The 2001 plan expired by its terms in May 2011 and new grants to employees may no longer be made under the plan. Options granted under the principal option plans are generally non-qualified stock options but the principal option plans permit some options granted to qualify as "incentive stock options" under the U.S. Internal Revenue Code. The contractual term of options granted prior to January 31, 2006 was generally ten years, while the contractual term of options granted subsequent to January 31, 2006 is generally seven years.

Restricted stock unit ("RSUs") grants are part of the Company's equity compensation practices for employees who receive equity grants. The RSUs granted to employees generally vest quarterly over a four-year period beginning on the grant date.

In May 2011, the shareholders of the Company approved the 2011 Non-Employee Director Equity Incentive Plan. The Plan provides that non-employee members of our Board of Directors receive non-qualified option grants and restricted stock units in set amounts and at set times, at option prices equal to the fair market value on the date of grant. An aggregate of 750,000 shares of common stock have been authorized for issuance under the plan. Vesting periods for options and RSUs granted to Directors is over three years and one year respectively. The contractual term of all non-employee director options is 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 million shares of common stock to eligible employees to purchase shares of common stock through payroll deduction. Payroll deductions are not to exceed 10% of an employee's compensation. The purchase price of the shares is the lower of 85% of the fair market 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 compensation expense related to the 2012 ESPP of less than \$0.1 million for fiscal 2012.

The Company's ESPP, which was amended and approved by our stockholders in May 2007 ("2007 ESPP"), permits eligible employees to purchase shares of common stock through payroll deductions, not to 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, but in no event less than the book value per share at the mid-point of each offering period. An aggregate of 5,500,000 shares of common stock have been authorized for issuance under the plan. We have treated the 2007 ESPP as a compensatory plan, and recorded compensation expense related to the 2007 ESPP of \$0.1 million, \$0.5 million and \$0.4 million for fiscal 2012, 2011 and fiscal 2010, respectively. The 2007 ESPP was replaced with the 2012 ESPP in May 2012.

*Stock-Based Compensation*

Total stock-based compensation expense included in our Condensed Consolidated Statements of Operations and Comprehensive (Loss) Income was as follows (in thousands):

| <b>Line item:</b>                   | <b>Year Ended</b>            |                              |                            |
|-------------------------------------|------------------------------|------------------------------|----------------------------|
|                                     | <b>December 29,<br/>2012</b> | <b>December 31,<br/>2011</b> | <b>January 1,<br/>2011</b> |
| Cost of products sold               | \$ 525                       | \$ 461                       | \$ 312                     |
| Research and development            | 3,009                        | 2,697                        | 1,851                      |
| Selling, general and administrative | 3,976                        | 3,095                        | 2,388                      |
| Restructuring charges               | —                            | 103                          | —                          |
| Total stock-based compensation      | <u>\$ 7,510</u>              | <u>\$ 6,356</u>              | <u>\$ 4,551</u>            |

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. Beginning January 1, 2006, in connection with the adoption of ASC 718, the Company examined the historical pattern of option exercises in an effort to determine if there were any discernible activity patterns based on certain employee populations. From this analysis, the Company identified two employee populations. Prior to January 3, 2009, the Company used the simplified method as prescribed by the SEC’s Staff Accounting Bulletin No. 107. The Company now believes that it has sufficient internal historical data to refine the expected term assumption. As such, the expected term computation is based on historical vested option exercises and includes an estimate of the expected term for options that were fully vested and outstanding at January 3, 2009 for each of the two populations identified. 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.

|  | <b>Year Ended</b>            |                              |                            |
|--|------------------------------|------------------------------|----------------------------|
|  | <b>December 29,<br/>2012</b> | <b>December 31,<br/>2011</b> | <b>January 1,<br/>2011</b> |
| <b>Employee and Director Stock Options</b>   |                              |                              |                            |
| Expected volatility (%)                      | 58.1 to 59.5                 | 57.4 to 61.9                 | 55.1 to 61.6               |
| Risk-free interest rate (%)                  | .006 to .01                  | .003 to .02                  | .78 to 2.47                |
| Expected term (in years)                     | 4.09 to 4.47                 | 4.05 to 4.37                 | 4.06 to 4.43               |
| Dividend yield                               | —%                           | —%                           | —%                         |
| <b>Employee Stock Purchase Plan</b>          |                              |                              |                            |
| Weighted average expected volatility (%)     | 50.0                         | 48.1                         | 52.3                       |
| Weighted average risk-free interest rate (%) | 0.12                         | 0.14                         | 0.20                       |
| Expected term (in years)                     | 0.50                         | 0.50                         | 0.50                       |
| Dividend yield                               | —%                           | —%                           | —%                         |

At December 29, 2012, there was \$10.1 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 4.5 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.

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The following table summarizes our stock option activity and related information for the year ended December 29, 2012 (shares and aggregate intrinsic value in thousands):

|  | Shares  | Weighted<br>average<br>exercise price | Weighted<br>average<br>remaining<br>contractual<br>term<br>(years) | Aggregate<br>Intrinsic Value |
|--|---------|---------------------------------------|--|------------------------------|
| Balance, December 31, 2011                       | 9,287   | \$ 4.22                               |  |                              |
| Granted  | 3,237   | 5.96                                  |  |                              |
| Exercised  | (1,342) | 2.56                                  |  |                              |
| Forfeited or expired                             | (1,643) | 5.95                                  |  |                              |
| Balance, December 29, 2012                       | 9,539   | \$ 4.74                               |  |                              |
| Vested and expected to vest at December 29, 2012 | 9,539   | \$ 4.74                               | 4.53   | \$ 4,462                     |
| Exercisable, December 29, 2012                   | 5,013   | \$ 4.20                               | 3.46   | \$ 3,517                     |

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 2012, 2011 and 2010, and was 3.4 million, \$6.6 million and \$5.3 million, respectively. The total fair value of options and RSUs vested and expensed in fiscal 2012, 2011 and 2010 and was \$7.4 million, \$6.0 million and \$4.2 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 \$2.74, \$2.92 and \$2.31 for fiscal years 2012, 2011 and 2010, respectively. The weighted average fair values calculated using the Black-Scholes option pricing model for the ESPP were \$1.35, \$1.80 and \$1.07 for fiscal years 2012, 2011 and 2010, respectively.

The following table summarizes our RSU activity for the year ended December 29, 2012 (shares in thousands):

|                              | Shares | Weighted<br>average grant<br>date fair value |
|------------------------------|--------|--|
| Balance at December 31, 2011 | 1,077  | \$ 6.12                                      |
| Granted                      | 643    | 5.99   |
| Vested                       | (514)  | 5.93   |
| Forfeited                    | (127)  | 5.95   |
| Balance at December 29, 2012 | 1,079  | \$ 6.15                                      |

At December 29, 2012, there was \$5.4 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.

At December 29, 2012, a total of 6.9 million shares of our common stock were available for future grants under our stock option plans. Shares subject to stock option grants that expire or are canceled without delivery of such shares generally become available for re-issuance under these plans. At December 29, 2012, a total of 3.0 million shares of our common stock were available for future purchases under our ESPP.

**(14) 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. The Company matched contributions for a total of \$0.8 million in fiscal 2012, \$0.8 million in fiscal 2011 and \$0.2 million in fiscal 2010.

*Executive Deferred Compensation Plan*

We initiated an Executive Deferred Compensation Plan effective August 1997. Under the provisions of this plan, as approved by the Board of Directors, certain senior executives may annually defer up to 75% of their salary and up to 100% of their incentive compensation. The return on deferred funds is based upon the performance of designated mutual funds. There is no guaranteed return or matching contribution. We paid out \$0.3 million, \$0.3 million and \$0.3 million of the deferred compensation balance in fiscal 2012, 2011 and 2010, respectively. Balances at December 29, 2012 and December 31, 2011 of \$0.1 million and \$0.4 million, respectively, are reflected in Other long-term liabilities in our accompanying Consolidated Balance Sheets and the related assets are included in Other long-term assets in our accompanying Consolidated Balance Sheets. The deferred compensation amounts are unsecured obligations, but we have made corresponding contributions to a trust fund owned by the Company for the benefit of deferred compensation plan participants. The trust fund invests in mutual funds in the manner directed by participants pursuant to provisions of the plan. The mutual funds are accounted for as trading securities and are marked to market.

*Executive Variable Compensation Plan*

In December 2007, the Compensation Committee of the Board of Directors approved the 2008 Executive Variable Compensation Plan. The Company's Chief Executive Officer and other members of senior management as nominated by the Chief Executive Officer and approved by the Compensation Committee are eligible to participate in the Executive Variable Compensation Plan. The payout for each participant is based both on Company performance, as measured by achievement of revenue and operating income performance goals approved by the Board prior to the commencement of the plan year, and individual performance. There was no expense under this plan during fiscal years 2012, 2011 or 2010.

*2010 Cash Incentive Compensation Plan*

On December 1, 2009, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the 2010 Cash Incentive Compensation Plan ("2010 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, were eligible to participate in the 2010 Plan. Under the 2010 Plan, individual cash incentive payments for the Chief Executive Officer and other executive officers were based both on Company performance, as measured by achievement of GAAP operating income, and individual performance, as measured by the achievement of personal management objectives. Under the 2010 Plan, cash incentive payments were funded by the Company's achievement of GAAP operating income, with funding of the plan to be determined as a specified percentage of GAAP operating income (before incentive plan accruals) within specified ranges established by the Compensation Committee. The Compensation Committee determined the individual performance of the Chief Executive Officer based on the achievement of personal management objectives that were established by the committee during the first fiscal quarter of 2010, and the Chief Executive Officer determined the individual performance of the other participants based on the achievement of personal management objectives established by the Chief Executive Officer and reviewed by the committee during the first fiscal quarter of 2010.

The 2010 Plan required that the Company be profitable on a GAAP operating income basis before payments are made under the 2010 Plan. Under the 2010 Plan, the aggregate target cash incentive awards for all executive management participants, including the Chief Executive Officer, other executive officers, and other members of senior management, including vice presidents and director-level employees, totaled approximately \$1.7 million, and the aggregate maximum cash award for all management participants totaled approximately \$3.0 million. The maximum amount of cash that could be paid out under the 2010 Plan was \$6.5 million. During fiscal 2010, the Company recorded a charge of \$5.4 million under the 2010 Plan, which is recorded on the Consolidated Balance Sheet in Accrued payroll obligations. Cash incentive awards were paid in February 2011.

*2011 Cash Incentive Plan*

On February 1, 2011, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the FY2011 Cash Incentive Plan (the “2011 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, were eligible to participate in the 2011 Plan. Under the 2011 Plan, individual cash incentive payments for the Chief Executive Officer and other executive officers would be based both on Company performance, as measured by achievement of operating income (before incentive plan accruals) and revenue goals within specified ranges established by the Compensation Committee, and individual performance, as measured by the achievement of personal management objectives, with each of these components representing one-third of the potential cash incentive award. On February 6, 2012, the Compensation Committee approved \$2.6 million under the provisions of the 2011 Plan, which was paid in February of 2012.

*2012 Incentive Plan*

On February 7, 2012, upon the recommendation of the Compensation Committee, the Board of Directors of the Company approved the FY2012 Incentive Plan (the “2012 Plan”). The chief executive officer and other executive officers are eligible to participate in the 2012 Plan. Under the 2012 Plan, individual cash incentive payments and restricted stock unit grants for the chief executive officer and other executive officers 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 will determine 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 2012. There was no expense recorded under this plan during fiscal 2012.

**(15) Legal Matters:**

On June 11, 2007, a patent infringement lawsuit was filed by Lizy K. John (“John”) against the Company in the U.S. District Court for the Eastern District of Texas, Marshall Division. In the complaint, John seeks an injunction, unspecified damages, and attorneys' fees and expenses. The Company filed a request for re-examination of the patent by the United States Patent and Trademark Office (“PTO”), which was granted by the PTO. The litigation was stayed pending the results of the re-examination. After the re-examination concluded, the stay was lifted on January 1, 2012, and the lawsuit was transferred by consent of the parties to the Northern District of California. The Company also filed a request for a second re-examination of the patent, which was granted and is still pending. Discovery is open and proceeding. Trial is scheduled for September 22, 2014. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any potential exposure to us. The Company believes it possesses defenses to these claims and intends to vigorously defend this litigation.

On December 8, 2010, Intellectual Ventures I LLC and Intellectual Ventures II LLC (“Intellectual Ventures”) filed a patent infringement lawsuit against the Company, Altera Corporation and Microsemi Corporation in the U.S. District Court for the District of Delaware, seeking unspecified damages. The complaint alleged, inter alia, that certain programmable logic devices manufactured by the Company infringe certain United States patents assigned to Intellectual Ventures. In February 2013, the Company entered into a License Agreement with Intellectual Ventures granting the Company a license to a portfolio of patents held by Intellectual Ventures, including those forming the basis for the patent infringement lawsuit, for the field programmable gate array device field of use. As a result of this License Agreement, the Company and Intellectual Ventures have settled this matter and Intellectual Ventures has agreed to dismiss the action against us. The resolution of this matter did not have a material adverse effect on our financial position, results of operation or cash flows.

We are also 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 Financial Accounting Standards Board Accounting Standards Codification 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. Presently, no accrual has been estimated under ASC 450 for potential losses that may or may not arise from the current lawsuits in which we are involved.

**(16) Segment and Geographic Information:**

We operate in one industry segment comprising the design, development, manufacture and marketing of high performance programmable logic devices. Our revenue by major geographic area based on ship-to location was as follows (dollars in thousands):

|                       | Year Ended        |      |                   |      |                 |      |
|-----------------------|-------------------|------|-------------------|------|-----------------|------|
|                       | December 29, 2012 |      | December 31, 2011 |      | January 1, 2011 |      |
| United States:        | \$ 34,172         | 12%  | \$ 44,847         | 14%  | 36,211          | 12%  |
| China                 | 113,585           | 41   | 123,124           | 39   | 124,910         | 42   |
| Europe                | 48,202            | 17   | 66,319            | 21   | 54,332          | 18   |
| Japan                 | 35,696            | 13   | 36,961            | 11   | 38,992          | 13   |
| Taiwan                | 8,276             | 3    | 8,346             | 3    | 8,839           | 3    |
| Other Asia            | 32,254            | 11   | 32,687            | 10   | 27,853          | 10   |
| Other Americas        | 7,071             | 3    | 6,082             | 2    | 6,631           | 2    |
| Total foreign revenue | 245,084           | 88   | 273,519           | 86   | 261,557         | 88   |
| Total revenue         | \$ 279,256        | 100% | \$ 318,366        | 100% | \$ 297,768      | 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.

*Revenue by Distributors*

Our largest customers are 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 |      |      |
|---|--------------------|------|------|
|   | 2012               | 2011 | 2010 |
| Nu Horizons Electronics Corp. (including Arrow Electronics) | 33%                | 22%  | 18%  |
| Weikeng Group   | 14                 | 14   | 14   |
| Avnet, Inc.   | —                  | 17   | 17   |
| All others  | 8                  | 8    | 7    |
| All sell-through distributors                               | 55%                | 61%  | 56%  |

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.

In 2011 our global franchise agreement with Avnet terminated, however, we had mutually agreed to terms for the transition of inventory through December 31, 2011. Revenue from Avnet made up approximately 20% of our total revenue for the first nine months of fiscal 2011. Because we and our remaining global and regional distributors worked directly with our end customers in order to transition the fulfillment of customer orders to replacement distributors, the impact on our business as a result of this change has been negligible. We continue to serve our end customers with a network that includes a global distributor, regional distributors, manufacturer's representatives, and our direct sales team.

**(17) Quarterly Financial Data (Unaudited):**

A summary of the Company's consolidated quarterly results of operations is as follows (in thousands, except per share data):

|                                     | 2012       |            |             |            | 2011      |           |           |           |
|-------------------------------------|------------|------------|-------------|------------|-----------|-----------|-----------|-----------|
|                                     | Q4         | Q3         | Q2          | Q1         | Q4        | Q3        | Q2        | Q1        |
| Revenue                             | \$ 65,875  | \$ 70,889  | \$ 70,792   | \$ 71,700  | \$ 70,170 | \$ 81,720 | \$ 83,861 | \$ 82,615 |
| Gross margin                        | \$ 35,673  | \$ 38,548  | \$ 37,051   | \$ 39,485  | \$ 40,463 | \$ 47,854 | \$ 50,671 | \$ 49,609 |
| Restructuring charges (adjustment)  | \$ 5,375   | \$ —       | \$ 87       | \$ 556     | \$ 1,097  | \$ 1,760  | \$ 1,387  | \$ 1,835  |
| Net (loss) income                   | \$ (7,175) | \$ (2,175) | \$ (12,542) | \$ (7,714) | \$ 40,945 | \$ 13,337 | \$ 13,031 | \$ 10,919 |
| Basic net (loss) income per share   | \$ (0.06)  | \$ (0.02)  | \$ (0.11)   | \$ (0.07)  | \$ 0.35   | \$ 0.11   | \$ 0.11   | \$ 0.09   |
| Diluted net (loss) income per share | \$ (0.06)  | \$ (0.02)  | \$ (0.11)   | \$ (0.07)  | \$ 0.34   | \$ 0.11   | \$ 0.11   | \$ 0.09   |

**(18) Subsequent Event:**

On January 25, 2013, we entered into a lease of a 98,874 square foot research and development facility in San Jose, California and intend to commence operations at that facility during the second quarter of fiscal 2013. The term of the lease is 159 months with total annual rental costs of \$2.1 million with approximately 3% annual increases.

On February 27, 2013, the Company's 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 is twelve months. All repurchases will be open market transactions and funded from available working capital.

On December 8, 2010, Intellectual Ventures I LLC and Intellectual Ventures II LLC ("Intellectual Ventures") filed a patent infringement lawsuit against the Company, Altera Corporation and Microsemi Corporation in the U.S. District Court for the District of Delaware, seeking unspecified damages. The complaint alleged, inter alia, that certain programmable logic devices manufactured by the Company infringe certain United States patents assigned to Intellectual Ventures. In February 2013, the Company entered into a License Agreement with Intellectual Ventures granting the Company a license to a portfolio of patents held by Intellectual Ventures, including those forming the basis for the patent infringement lawsuit, for the field programmable gate array device field of use. As a result of this License Agreement, the Company and Intellectual Ventures have settled this matter and Intellectual Ventures has agreed to dismiss the action against us. The resolution of this matter did not have a material adverse effect on our financial position, results of operation or cash flows.



**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 as of December 29, 2012 and December 31, 2011, and the related consolidated statements of operations and comprehensive (loss) income, changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 29, 2012. In connection with our audits of the consolidated financial statements, we also have audited financial statement Schedule II. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule 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 Lattice Semiconductor Corporation and subsidiaries as of December 29, 2012 and December 31, 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 29, 2012, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement Schedule II, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Lattice Semiconductor Corporation's internal control over financial reporting as of December 29, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 8, 2013 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Portland, Oregon  
March 8, 2013

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders  
Lattice Semiconductor Corporation:

We have audited Lattice Semiconductor Corporation's internal control over financial reporting as of December 29, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Lattice Semiconductor Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We 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, Lattice Semiconductor Corporation maintained, in all material respects, effective internal control over financial reporting as of December 29, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Lattice Semiconductor Corporation and subsidiaries as of December 29, 2012 and December 31, 2011, and the related consolidated statements of operations and comprehensive (loss) income, changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 29, 2012, and our report dated March 8, 2013 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Portland, Oregon  
March 8, 2013

**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**

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

**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 December 29, 2012. 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*. Based on this assessment, management concluded that, as of December 29, 2012, the Company's internal control over financial reporting was effective.

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 December 29, 2012.

**Changes in Internal Control over Financial Reporting**

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 2012 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information.**

None.

### PART III

Certain information required by Part III is incorporated by reference from our definitive proxy statement (the “Proxy Statement”) for the 2012 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 set forth in Part I of this report under the caption “Executive Officers of the Registrant.”

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 ethics that applies to all of our employees, including our principal executive officer, principal financial officer, principal accounting officer, and persons performing similar functions. The Standards of Ethics and Conduct is posted on our website at [www.latticesemi.com](http://www.latticesemi.com). Amendments to the code of ethics 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 December 31, 2011. 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 12, 2012.

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,” “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 caption “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement is incorporated herein by reference.

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

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.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules.**

**(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:**

|  |                    |
|--|--------------------|
| Consolidated Balance Sheets, at December 29, 2012 and December 31, 2011  | <a href="#">40</a> |
| Consolidated Statements of Operations and Comprehensive (Loss) Income, for the Years ended December 29, 2012, December 31, 2011, and January 1, 2011 | <a href="#">41</a> |
| Consolidated Statements of Changes in Stockholders' Equity, for the Years ended December 29, 2012, December 31, 2011 and January 1, 2011             | <a href="#">42</a> |
| Consolidated Statements of Cash Flows, for the Years ended December 29, 2012, December 31, 2011 and January 1, 2011                                  | <a href="#">43</a> |
| Notes to Consolidated Financial Statements   | <a href="#">44</a> |

**(2) Financial Statement Schedules.**

|   |                    |
|---|--------------------|
| Schedule II—Valuation and Qualifying Accounts | <a href="#">73</a> |
|---|--------------------|

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.

**(3) Exhibits.**

| <b>Exhibit Number</b> | <b>Description</b>  |
|-----------------------|---|
| 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).   |
| 10.24*                | Lattice Semiconductor Corporation 1996 Stock Incentive Plan, as amended, and Related Form of Option Agreement.  |
| 10.33*                | 2001 Outside Directors' Stock Option Plan, as amended and restated.   |
| 10.34*                | 2001 Stock Plan, as amended, and related Form of Option Agreement.  |
| 10.35                 | Intellectual Property Agreement by and between Agere Systems Inc. and Agere Systems Guardian Corporation and Lattice Semiconductor Corporation as Buyer, dated January 18, 2002 (Incorporated by reference to Exhibit 10.35 filed with the Company's Annual Report on Form 10-K for the fiscal year ended December 29, 2001). |
| 10.37*                | Lattice Semiconductor Corporation Executive Deferred Compensation Plan, as amended and restated effective as of August 11, 1997 (Incorporated by reference to Exhibit 99.3 filed with the Company's Registration Statement on Form S-3, as amended, dated October 17, 2002).  |
| 10.38*                | Amendment No. 1 to the Lattice Semiconductor Corporation Executive Deferred Compensation Plan, as amended, dated November 19, 1999 (Incorporated by reference to Exhibit 99.4 filed with the Company's Registration Statement on Form S-3, as amended, dated October 17, 2002).   |
| 10.39                 | Registration Rights Agreement, dated as of June 20, 2003, between the Company and the initial purchaser named therein (Incorporated by reference to Exhibit 4.3 filed with the Company's Registration Statement on Form S-3 on August 13, 2003).  |

| <b>Exhibit Number</b> | <b>Description</b>   |
|-----------------------|--|
| 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).  |
| 10.67*                | Employment Agreement between Lattice Semiconductor Corporation and Sean Riley dated September 22, 2008 (Incorporated by reference to Exhibit 10.67 filed with the Company's Current Report on Form 10-Q filed on May 8, 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).  |
| 10.73                 | Agreement and Plan of Merger, dated as of December 9, 2011, by and among Lattice Corp., Lattice Semiconductor, Ltd., a Bermuda exempted company and a wholly owned subsidiary of Lattice Corp., Aff Inv Acquisition Corporation, a Cayman Islands exempted company and a wholly owned subsidiary of Lattice Ltd., SiliconBlue Technologies Ltd., a Cayman Islands exempted company, and Fortis Advisors LLC, as the representative for SiliconBlue's security holders (Incorporated by reference to Exhibit 2.1 filed with the Company's Current Report on Form 8-K filed on December 19, 2011). |
| 10.74*                | Lattice Semiconductor Corporation 2011 Non-Employee Director Equity Incentive Plan (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A for the 2011 Annual Meeting of Stockholders filed on April 12, 2011).  |

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| <b>Exhibit Number</b> | <b>Description</b>   |
|-----------------------|--|
| 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   |

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(1) Pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, confidential treatment has been granted to portions of this exhibit, which portions have been deleted and filed separately with the Securities and Exchange Commission.

\* 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.

**(b) See (a)(3) above.**

**(c) See (a)(1) and (2) above.**





**LATTICE SEMICONDUCTOR CORPORATION**  
**VALUATION AND QUALIFYING ACCOUNTS**  
(in thousands)

| <u>Column A</u>                      | <u>Column B</u>                       | <u>Column C</u>                               | <u>Column D</u>                  | <u>Column E</u>                     | <u>Column F</u>                 |
|--------------------------------------|---------------------------------------|---|----------------------------------|-------------------------------------|---------------------------------|
| <u>Classification</u>                | <u>Balance at beginning of period</u> | <u>Charged (Credit) to costs and expenses</u> | <u>Charged to other accounts</u> | <u>Write-offs net of recoveries</u> | <u>Balance at end of period</u> |
| Fiscal year ended December 29, 2012: |                                       |   |                                  |                                     |                                 |
| Allowance for deferred taxes         | \$ 147,499                            | \$ 1,652                                      | \$ 58                            | \$ —                                | \$ 149,209                      |
| Allowance for doubtful accounts      | 939                                   | 286   | —                                | (103)                               | 1,122                           |
| Allowance for warranty expense       | —                                     | —   | —                                | —                                   | —                               |
|                                      | <u>\$ 148,438</u>                     | <u>\$ 1,938</u>                               | <u>\$ 58</u>                     | <u>\$ (103)</u>                     | <u>\$ 150,331</u>               |
| Fiscal year ended December 31, 2011: |                                       |   |                                  |                                     |                                 |
| Allowance for deferred taxes         | \$ 271,208                            | \$ (123,709)                                  | \$ —                             | \$ —                                | \$ 147,499                      |
| Allowance for doubtful accounts      | 866                                   | 73  | —                                | —                                   | 939                             |
| Allowance for warranty expense       | 99                                    | —   | —                                | (99)                                | —                               |
|                                      | <u>\$ 272,173</u>                     | <u>\$ (123,636)</u>                           | <u>\$ —</u>                      | <u>\$ (99)</u>                      | <u>\$ 148,438</u>               |
| Fiscal year ended January 1, 2011:   |                                       |   |                                  |                                     |                                 |
| Allowance for deferred taxes         | \$ 292,683                            | \$ —  | \$ (476)                         | \$ (20,999)                         | \$ 271,208                      |
| Allowance for doubtful accounts      | 963                                   | —   | —                                | (97)                                | 866                             |
| Allowance for warranty expense       | 153                                   | —   | —                                | (54)                                | 99                              |
|                                      | <u>\$ 293,799</u>                     | <u>\$ —</u>                                   | <u>\$ (476)</u>                  | <u>\$ (21,150)</u>                  | <u>\$ 272,173</u>               |

## LATTICE SEMICONDUCTOR CORPORATION

## 1996 STOCK INCENTIVE PLAN

(as amended August 1, 2000)

1. **Purpose.** The purpose of this 1996 Stock Incentive Plan (the "Plan") is to enable Lattice Semiconductor Corporation (the "Company") to attract and retain experienced and able employees and to provide additional incentive to these employees to exert their best efforts for the Company and its stockholders.

2. **Shares Subject to the Plan.** Subject to adjustment as provided below and in paragraph 12, the stock to be offered under the Plan shall consist of shares of the Company's Common Stock ("Stock"), and the number of shares of Stock that may be issued pursuant to this Plan shall not exceed, in the aggregate, 8,600,000 shares. Such shares may be authorized and unissued shares or may be treasury shares. If an option granted under the Plan expires or terminates for any reason without having been exercised in full, the unpurchased shares subject to such option shall again be available under the Plan. If Stock sold or awarded as a bonus under the Plan is forfeited to the Company or repurchased by the Company at its original purchase price pursuant to applicable restrictions, the number of shares forfeited or repurchased shall again be available under the Plan; provided, however, that, Stock which has actually been issued under the Plan and is not subject to a repurchase right at its original purchase price shall not in any event be returned to the Plan and shall not become available for future distribution under the Plan. Stock issued under the Plan may be subject to such restrictions on transfer, repurchase rights or other restrictions as determined by the Board of Directors of the Company (the "Board of Directors").

3. **Effective Date and Duration of Plan.**

(a) **Effective Date.** The Plan shall become effective when adopted by the Board of Directors. Options may be granted and Stock may be awarded as bonuses or sold under the Plan at any time after the effective date and before termination of the Plan.

(b) **Duration.** The Plan shall continue in effect until, in the aggregate, options and stock appreciation rights have been granted and exercised and Stock has been awarded as bonuses or sold and the restrictions on any such Stock have lapsed on all shares available for the Plan under paragraph 2 (subject to any adjustments under paragraph 12); provided, however, that unless sooner terminated by the Board of Directors, no incentive stock options shall be granted on or after the tenth anniversary of the effective date. The Board of Directors may suspend or terminate the Plan at any time except with respect to options and to Stock subject to restrictions then outstanding under the Plan. Termination shall not affect any right of the Company to repurchase shares or the forfeitability of shares issued under the Plan.

4. **Administration.**

(a) **Composition of Administrator.**

(i) **Multiple Administrative Bodies.** If permitted by Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act") ("Rule 16b-3") and the legal requirements relating to the administration of stock option plans under applicable securities laws, Delaware corporate law and the Internal Revenue Code of 1986, as amended (the "Code") ("Applicable Laws"), the Plan may (but need not) be administered by different administrative bodies with respect to (A) members of the Board of Directors ("Directors") who are employees, (B) officers who are not Directors and (C) employees who are neither Directors nor officers.

(ii) **Administration with Respect to Directors and Officers.** With respect to grants, awards and sales to eligible participants who are officers or Directors of the Company, the Plan shall be administered by (A) the Board of Directors, if the Board of Directors may administer the Plan in compliance with Rule 16b-3 as it applies to a plan intended to qualify thereunder as a discretionary grant or award plan, or (B) a committee designated by the Board of Directors to administer the Plan, which committee shall be constituted (1) in such a manner as to permit the Plan to comply with Rule 16b -3 as it applies to a plan intended to qualify thereunder as a discretionary grant or award plan and (2) in such a manner as to satisfy the Applicable Laws.

(iii) **Administration with respect to Grants, Awards and Sales intended to Qualify as Performance-Based Compensation.** With respect to grants, awards and sales to eligible participants that are intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan shall be administered by a committee designated

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by the Board of Directors, which committee shall consist of two or more members of the Board who are not employees of the Company and who otherwise qualify as "outside directors" within the meaning of Section 162(m) of the Code.

(iv) Administration with respect to Other Persons. With respect to grants, awards and sales to eligible participants who are neither Directors nor officers of the Company, the Plan shall be administered by (A) the Board of Directors or (B) a committee designated by the Board of Directors, which committee shall be constituted in such a manner as to satisfy the Applicable Laws.

(v) General. Once a committee has been appointed pursuant to subsection (ii) or (iii) of this Section 4(a), such Committee shall continue to serve in its designated capacity until otherwise directed by the Board of Directors. From time to time the Board of Directors may increase the size of any committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies (however caused) and remove all members of a committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws and, in the case of a committee appointed under subsection (ii), to the extent permitted by Rule 16b -3 as it applies to a plan intended to qualify thereunder as a discretionary grant or award plan.

(b) Powers of the Board of Directors or its Committee (the "Administrator"). Subject to the provisions of the Plan, and in the case of a committee, subject to the specific duties delegated by the Board of Directors to such committee, the Administrator shall have the authority, in its discretion:

(i) to determine the fair market value of the Stock;

(ii) to select the consultants and employees to whom grants, sales and awards may be made hereunder;

(iii) to determine whether and to what extent grants, sales and awards, or any combination thereof, are made hereunder;

(iv) to determine the number of shares of Stock to be covered by grants, sales and awards hereunder;

(v) to approve forms of agreement for use under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any grants, sales and awards hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when grants, sales and awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any grant, sale or award, or the shares of Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vii) to construe and interpret the terms of the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan;

(ix) to determine whether and under what circumstances grants, sales and awards may be settled in cash instead of Stock or Stock instead of cash;

(x) subject to paragraph 14 of this Plan, to modify or amend grants, sales and awards, including the ability to correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any stock bonus, stock purchase or option agreement in the manner and to the extent it shall deem expedient to carry the Plan into effect;

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect grants, sales and awards previously granted by the Administrator;

(xii) to determine the terms and restrictions applicable to grants, sales and awards and any restricted Stock; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations shall be final and binding on all optionees and any other holders of grants, sales and awards.

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(d) No Option Repricing Without Stockholder Approval. In no event shall the Administrator have the right, without stockholder approval, to (i) lower the price of an option granted under the Plan after it is granted, except in connection with adjustments provided in Sections 12 and 13; (ii) take any other action with respect to an option granted under the Plan that is treated as a repricing under generally accepted accounting principles; or (iii) cancel an option granted under the Plan at a time when its strike price exceeds the fair market value of the underlying shares of Stock, in exchange for another option, restricted stock, or other equity, unless the cancellation and exchange occurs in connection with a merger, acquisition, spin-off or other similar corporate transaction.

## **5. Grants, Awards and Sales.**

(a) Type of Security. The Administrator may, from time to time, separately or in combination: (i) grant Incentive Stock Options, as defined in Section 422 of the Code and as provided in paragraph 5(b); (ii) grant options other than Incentive Stock Options ("Non-Statutory Stock Options") as provided in paragraph 5(c); (iii) grant stock appreciation rights or cash bonus rights as provided in paragraphs 10 and 11; (iv) award bonuses of Stock as provided in paragraph 5(d); and (v) sell Stock subject to restrictions as provided in paragraph 5(e). The Administrator shall select the employees to whom awards shall be made. The Administrator shall specify the action taken with respect to each person granted, awarded or sold any option or Stock under the Plan and shall specifically designate each option granted under the Plan as an Incentive Stock Option or Non-Statutory Stock Option.

(b) Incentive Stock Options. Incentive Stock Options shall be subject to the following terms and conditions:

(i) To the extent that the aggregate fair market value of (a) the Stock with respect to which options designated as Incentive Stock Options plus (b) the shares of stock of the Company, any parent and subsidiary with respect to which other Incentive Stock Options are exercisable for the first time by an optionee during any calendar year under all plans of the Company and any parent and subsidiary exceeds \$100,000, such options shall be treated as Non-Statutory Stock Options. For purposes of the preceding sentence, (a) Incentive Stock Options shall be taken into account in the order in which they were granted, and (b) the fair market value of the Stock shall be determined as of the time the Incentive Stock Option is granted.

(ii) An Incentive Stock Option may be granted under the Plan to an employee possessing more than 10 percent of the total combined voting power of all classes of stock of the Company or of any parent or subsidiary of the Company only if the option price is at least 110 percent of the fair market value of the Stock subject to the option on the date it is granted, as described in paragraph 5(b)(v), and the option by its terms is not exercisable after the expiration of five years from the date it is granted.

(iii) Incentive Stock Options may be granted under the Plan only to employees of the Company or any parent or sub-sidiary of the Company, including employees who are directors. Except as provided in paragraph 8, no Incentive Stock Option granted under the Plan may be exercised unless at the time of such exercise the optionee is employed by the Company or any parent or subsidiary of the Company and shall have been so employed continuously since the date such option was granted. Absence on leave or on account of illness or disability under rules established by the Administrator shall not, however, be deemed an interruption of employment for this purpose.

(iv) Subject to paragraphs 5(b)(ii) and 5(b)(iii), Incentive Stock Options granted under the Plan shall continue in effect for the period fixed by the Administrator, except that no Incentive Stock Option shall be exercisable after the expiration of 10 years from the date it is granted.

(v) The option price per share shall be determined by the Administrator at the time of grant. Except as provided in paragraph 5(b)(ii), the option price shall not be less than 100 percent of the fair market value of the shares covered by the Incentive Stock Option at the date the option is granted. The fair market value of shares covered by an Incentive Stock Option shall be determined by the Administrator.

(c) Non-Statutory Stock Options. Non-Statutory Stock Options shall be subject to the following terms and conditions:

(i) Non-Statutory Stock Options granted under the Plan shall continue in effect for the period fixed by the Administrator, except that no Non-Statutory Stock Option shall be exercisable after the expiration of 10 years plus 7 days from the date it is granted.

(ii) The option price per share shall be determined by the Administrator at the time of grant. The option price may be more or less than or equal to the fair market value of the shares covered by the Non-Statutory Stock Option on the

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date the option is granted, and the option price may fluctuate based on criteria determined by the Administrator, provided that in no event and at no time shall the option price be less than 50 percent of the fair market value of the shares on the date of grant. The fair market value of shares covered by a Non-Statutory Stock Option shall be determined by the Administrator.

(d) Stock Bonus. Stock awarded as a bonus shall be subject to the terms, conditions, and restrictions determined by the Administrator at the time the Stock is awarded as a bonus. The Administrator may require the recipient to sign an agreement as a condition of the award, but may not require the recipient to pay any money consideration except as provided in this paragraph. The agreement may contain such terms, conditions, representations and warranties as the Administrator may require. The certificates representing the shares of Stock awarded shall bear such legends as shall be determined by the Administrator.

(e) Restricted Stock. The Administrator may issue shares of Stock under the Plan for such consideration (including promissory notes and services) as determined by the Administrator and with such restrictions concerning transferability, repurchase by the Company or forfeiture as determined by the Administrator, provided that in no event shall the consideration be less than 50 percent of fair market value at the time of issuance, nor shall any of the shares issued hereunder be or become freely transferable or not subject to such restrictions within six months of the date such shares are issued. All shares of Stock issued pursuant to this paragraph 5(e) shall be subject to a Purchase Agreement, which shall be executed by the Company and the prospective recipient of the Stock prior to the delivery of certificates representing such shares to the recipient. The Purchase Agreement shall contain such terms and conditions and representations and warranties as the Administrator shall require. The certificates representing such Stock shall bear such legends as determined by the Administrator.

**6. Exercise of Options**. Except as provided in paragraphs 8 and 11, options granted under the Plan may be exercised from time to time over the period stated in each option in such amounts and at such times as shall be prescribed by the Administrator, provided that options shall not be exercised for fractional shares. Unless otherwise determined by the Administrator, if the optionee does not exercise an option in any one year with respect to the full number of shares to which the optionee is entitled in that year, the optionee's rights shall be cumulative and the optionee may purchase those shares in any subsequent year during the term of the option.

**7. Nontransferability**.

(a) Options and Awards. During the lifetime of the Optionee, an Option shall be exercisable only by the Optionee or the Optionee's guardian, legal representative or permitted transferees. Except as specified below, no Option shall be assignable or transferable by the Optionee except by will or by the laws of descent and distribution. At the sole discretion of the Board or its appointee, and subject to such terms and conditions as the Board or its appointee deems advisable, the Board or its appointee may allow, by means of a writing to the Optionee, for all or part of a vested Nonstatutory Stock Option to be assigned or transferred, including by means of sale, during an Optionee's lifetime to a member of the Optionee's immediate family or to a trust, LLC or partnership for the benefit of any one or more members of such Optionee's immediate family. "Immediate family" as used herein means the spouse, lineal descendants, father, mother, brothers and sisters of the Optionee. In such case, the transferee shall receive and hold the Option subject to the provisions of this Section 7(a), and there shall be no further assignation or transfer of the Option. The terms of Options granted hereunder shall be binding upon the transferees, purchasers, executors, administrators, heirs, successors and assigns of the Optionee.

(b) Stock. Stock issued upon exercise of an option or awarded as a bonus or sold under the Plan may have, in addition to restrictions on transfer imposed by law, any restrictions on transfer determined by the Administrator at the time the grant, sale or award is made.

**8. Termination of Employment or Death**.

(a) If an optionee's employment by the Company or by any parent or subsidiary of the Company is terminated by retirement or for any reason, voluntarily or involuntarily, with or without cause, other than in the circumstances specified in paragraph 8(b) below, any option held by such optionee may be exercised at any time prior to its expiration date or the date specified by the Administrator in the optionee's option grant, whichever is the shorter period, but only if and to the extent the optionee was entitled to exercise the option on the date of such termination. Subject to such terms and conditions as the Administrator may determine, the Administrator may extend the exercise period any length of time not later than the expiration date of the option and may increase the portion of the option that may be exercised on termination, provided that any extension of the exercise period of an Incentive Stock Option shall be subject to a written acknowledgment by the optionee that the extension disqualifies the option as an Incentive Stock Option.

(b) If an optionee's employment by the Company or by any parent or subsidiary of the Company is terminated because of death or physical disability (within the meaning of Section 22(e)(3) of the Code), the option, including portions not

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yet exercisable, may be exercised prior to the earlier of the expiration of 12 months from the date of death or the expiration of the option. If an optionee's employment is terminated by death, any option held by the optionee shall be exercisable only by the person or persons to whom such optionee's rights under such option shall pass by the optionee's will or by the laws of descent and distribution of the state or country of the optionee's domicile at the time of death. Subject to such terms and conditions as the Administrator may determine, the Administrator may extend the exercise period any length of time not later than the expiration date of the option, provided that any extension of the exercise period of an Incentive Stock Option shall be subject to a written acknowledgment by the optionee or the optionee's personal representative that the extension disqualifies the option as an Incentive Stock Option.

(c) To the extent an option held by any deceased optionee or by any optionee whose employment is terminated is not exercised within the limited periods provided above, all further rights to purchase shares pursuant to such option and all other related rights shall terminate at the end of such periods.

**9. Purchase of Shares Pursuant to Option.** Shares may be purchased or acquired pursuant to an option granted under the Plan only upon receipt by the Company of notice in writing from the optionee of the optionee's intention to exercise, specifying the number of shares as to which the optionee desires to exercise the option and the date on which the optionee desires to complete the transaction, which shall not be more than 30 days after receipt of the notice, and unless in the opinion of counsel for the Company such a representation is not required in order to comply with the Securities Act of 1933, as amended, containing a representation that it is the optionee's present intention to acquire the shares for investment and not with a view to distribution. On or before the date specified for completion of the purchase of shares pursuant to an option, the optionee must have paid the Company the full purchase price of such shares in cash (including cash that may be the proceeds of a loan from the Company), in whole or in part in shares of Stock of the Company previously acquired and, if acquired directly or indirectly from the Company, held for at least six months by the optionee, unless the Administrator consents to accepting Stock held for a lesser period of time. Any shares surrendered on payment for the exercise of options shall be valued at fair market value at the time of surrender as determined by the Administrator. No shares shall be issued until full payment therefor has been made. With the consent of the Administrator an optionee may request the Company to automatically apply the shares received upon the exercise of a portion of a stock option (even though stock certificates have not yet been issued) to satisfy the exercise price for additional portions of the option. With the consent of the Administrator the Company may allow the exercise price to be satisfied by delivery of a such documentation as the Administrator and any broker approved by the Company, if applicable, shall require to effect an exercise of the option and delivery to the Company of the sale or loan proceeds required to pay the exercise price.

**10. Stock Appreciation Rights.**

(a) Grant. Stock appreciation rights may be granted under the Plan by the Administrator, subject to such rules, terms and conditions as the Administrator prescribes.

(b) Exercise.

(i) A stock appreciation right shall be exercisable only at the time or times established by the Administrator. If a stock appreciation right is granted in connection with an option, then it shall be exercisable only to the extent and on the same conditions that the related option could be exercised. Upon exercise of a stock appreciation right, any option or portion thereof to which the stock appreciation right relates must be surrendered. Stock appreciation rights granted independent of options shall expire not later than 10 years plus 7 days from the date of grant.

(ii) The Administrator may withdraw any stock appreciation right granted under the Plan at any time and may impose any conditions upon the exercise of a stock appreciation right or adopt rules and regulations from time to time affecting the rights of holders of stock appreciation rights. Such rules and regulations may govern the right to exercise stock appreciation rights granted before adoption or amendment or such rules and regulations as well as stock appreciation rights granted thereafter.

(iii) Each stock appreciation right shall entitle the holder, upon exercise, to receive from the Company in exchange therefor an amount equal in value to the excess of the fair market value on the date of exercise of one share of Stock of the Company over its fair market value on the date of grant (or, in the case of a stock appreciation right granted in connection with an option, the option price per share under the option to which the stock appreciation right relates), multiplied by the number of shares covered by the stock appreciation right or the option, or portion thereof, that is surrendered. No stock appreciation right shall be exercisable at a time that the amount determined under this subparagraph is negative. Payment by the Company upon exercise of a stock appreciation right may be made in Stock valued at its fair market value, in cash, or partly in Stock and partly in cash, as determined by the Administrator.

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(iv) The fair market value of the Stock shall be determined for this purpose by the Administrator.

(v) No fractional shares shall be issued upon exercise of a stock appreciation right. In lieu thereof cash may be paid in an amount equal to the value of the fraction or, in the discretion of the Administrator, the number of shares may be rounded downward to the next whole share.

(vi) Cash payments of stock appreciation rights as well as Common Stock issued upon exercise of stock appreciation rights shall be applied against the maximum number of shares of Common Stock that may be issued pursuant to the Plan. The number of shares to be applied against such maximum number of shares in such circumstances shall be the number of shares subject to options surrendered upon exercise of a stock appreciation right or for stock appreciation rights not granted in connection with an option, shares equal to the amount of the cash payment divided by the fair market value of a share of Common Stock on the date the stock appreciation right is granted.

## **11. Cash Bonus Rights.**

(a) Grant. The Administrator may grant bonus rights under the Plan in connection with (i) an option granted or previously granted, (ii) Stock awarded, or previously awarded, as a bonus and (iii) Stock sold or previously sold under the Plan. Bonus rights will be subject to rules, terms and conditions as the Administrator may prescribe.

(b) Bonus Rights in Connection with Options. A bonus right granted in connection with an option will entitle an optionee to a cash bonus when the related option is exercised (or terminates in connection with the exercise of a stock appreciation right related to the option) in whole or in part, or at such other time as determined by the Administrator as the bonus right is granted. If an optionee purchases shares and does not exercise a related stock appreciation right, then the amount of the bonus shall be determined by multiplying the excess of the total fair market value of the shares to be acquired upon the exercise over the total option price for shares by the applicable bonus percentage. If the optionee is exercising a related stock appreciation right in connection with the termination of an option, then the bonus shall be determined by multiplying the total fair market value of the shares and cash received pursuant to the exercise of the stock appreciation right by the applicable bonus percentage. For the purposes of this paragraph, the fair market value of shares shall be determined by the Administrator. The bonus percentage applicable to a bonus right shall be determined from time to time by the Administrator but shall in no event exceed 40 percent of the amount by which the fair market value of the Stock received on exercise of the related option at the time of exercise exceeds the option price of such option.

(c) Bonus Rights in Connection with Stock Bonus. A bonus right granted in connection with Stock awarded as a bonus will entitle the person awarded such Stock to a cash bonus at the time the Stock is awarded, at such time as restrictions, if any, to which the Stock is subject lapse, or at such other time as determined by the Administrator as the bonus right is granted. If Stock awarded is subject to restrictions and is repurchased by the Company or forfeited by the holder the bonus right granted in connection with such Stock shall terminate and may not be exercised. The amount of cash bonus to be awarded and the time such cash bonus is to be paid shall be determined from time to time by the Administrator.

(d) Bonus Rights in Connection with Stock Purchase. The bonus right granted in connection with Stock purchased hereunder (excluding Stock purchased pursuant to an option) shall terminate and may not be exercised in the event the Stock is repurchased by the Company or forfeited by the holder pursuant to restrictions applicable to the Stock. The amount of cash bonus to be awarded and the time such cash bonus is to be paid shall be determined from time to time by the Administrator.

**12. Changes in Capital Structure.** If the outstanding shares of Stock of the Company are hereafter increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any reorganization, merger, consolidation, plan of exchange, recapitalization, reclassification, stock split-up, combination of shares or dividend payable in shares, appropriate adjustment shall be made by the Administrator in the number and kind of shares for which grants, sales and awards may be made under the Plan. In addition, the Administrator shall make appropriate adjustment in the number and kind of shares as to which outstanding grants, sales and awards, or portions thereof then unexercised, shall be exercisable. Adjustments in outstanding options shall be made without change in the total price applicable to the unexercised portion of any option and with a corresponding adjustment in the option price per share and shall neither (i) make the ratio, immediately after the event, of the option price per share to the fair market value per share more favorable to the optionee than that ratio immediately before the event, nor (ii) make the aggregate spread, immediately after the event, between the fair market value of shares as to which the option is exercisable and the option price of such shares more favorable to the optionee than that aggregate spread immediately before the event. The Administrator may also require that any securities issued in respect of or exchanged for Stock issued hereunder that is subject to restrictions be subject to similar restrictions. Notwithstanding the foregoing, the Administrator shall have no obligation to effect any adjustment that would or might result in the issuance of fractional shares, and any fractional shares resulting from any adjustment may be disregarded or provided for in any manner determined by the

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Administrator. Any such adjustment made by the Administrator shall be conclusive. In the event of dissolution of the Company or a merger, consolidation or plan of exchange affecting the Company, in lieu of providing for options as provided above in this paragraph 12, the Administrator may, in its sole discretion, provide a 30-day period prior to such event during which optionees shall have the right to exercise options in whole or in part without any limitation on exercisability.

**13. Corporate Mergers, Acquisitions, etc.** The Administrator may also grant options and stock appreciation rights, award Stock bonuses and issue Stock subject to restrictions having terms, conditions and provisions that vary from those specified in this Plan provided that any options and stock appreciation rights granted, any stock bonuses awarded and any restricted stock issued pursuant to this section are granted in substitution for or in connection with the assumption of, existing options, stock appreciation rights, stock bonuses and restricted stock granted, awarded or issued by another corporation and assumed or otherwise agreed to be provided for by the Company pursuant to or by reason of a transaction involving a corporate merger consolidation, acquisition of property or stock, separation, reorganization or liquidation to which the Company or a subsidiary is a party.

**14. Amendment of Plan.** The Board of Directors may at any time and from time to time modify or amend the Plan in such respects as it shall deem advisable because of changes in the law while the Plan is in effect or for any other reason. Except as provided in paragraphs 8, 10 and 12, however no change in an option already granted or modification of restrictions on Stock already issued shall be made without the written consent of the holder of such option or Stock. Furthermore, unless the Company obtains stockholder approval in such a manner and degree as required by applicable law, no amendment or change shall be made in the Plan that increases the total number of shares that may be awarded or purchased under the Plan or that otherwise requires stockholder approval under applicable law.

**15. Approvals.** The obligations of the Company under the Plan are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection any grant, sale or award hereunder, or the listing of such shares of said exchange. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver shares of Common Stock under the Plan if the Company is advised by its legal counsel that such issuance or delivery would violate applicable state or federal securities laws.

**16. Employment Rights.** Nothing in the Plan, nor any grant, award or sale hereunder, shall confer upon (i) any employee any right to be continued in the employment of the Company or any parent or subsidiary of the Company, or shall interfere in any way with the right of the Company or any parent or subsidiary of the Company by whom such employee is employed to terminate such employee's employment at any time, for any reason, with or without cause, or to increase or decrease such employee's compensation, or (ii) any person engaged by the Company any right to be retained or employed by the Company or to the continuation, extension, renewal, or modification of any compensation, contract, or arrangement with or by the Company.

**17. Rights as a Stockholder.** The holder of an option, the recipient of Stock awarded as a bonus or the purchaser of Stock shall have no rights as a stockholder with respect to any shares covered by any grant, sale or award until the date of issue of a stock certificate to him or her for such shares. Except as otherwise expressly provided in the Plan, no adjustment shall be made for dividends or other rights for which the record date is prior to the date such stock certificate is issued.

**18. Stock Withholding to Satisfy Withholding Tax Obligations.**

(a) Ability to Use Stock to Satisfy Withholding. The Company may require any recipient of a grant, sale or award under the Plan to pay to the Company amounts necessary to satisfy any applicable federal, state or local tax withholding requirements. At the discretion of the Administrator, optionees and award recipients may satisfy withholding obligations as provided in this Section 18. When an optionee or award recipient incurs tax liability in connection with a grant, sale or award, which tax liability is subject to tax withholding under applicable tax laws (including federal, state and local laws), the optionee may satisfy the withholding tax obligation (up to an amount calculated by applying such optionee's maximum marginal tax rate) by electing to have the Company withhold from the Stock to be issued in connection with a grant, sale or award that number of shares, or by delivering to the Company that number of previously owned shares (which, in the case of Stock acquired directly or indirectly from the Company, has been held for at least six months), having a fair market value equal to the amount required to be withheld. The fair market value of the shares to be withheld or delivered, as the case may be, shall be determined on the date that the amount of tax to be withheld is determined (the "Tax Date").

(b) Election to Have Stock Withheld. All elections by an optionee to have Stock withheld or to deliver previously owned Shares pursuant to this Section 18 shall be made in writing in a form acceptable to the Administrator and shall be subject to the following restrictions:

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(i) the election must be made on or prior to the applicable Tax Date;

(ii) all elections shall be subject to the consent or disapproval of the Administrator; and

(iii) if the optionee is subject to liability under Section 16 of the Exchange Act, the election must comply with the applicable provisions of Rule 16b -3 and shall be subject to such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption from Section 16 of the Exchange Act with respect to Plan transactions.

(c) Section 83(b) Elections. In the event that (i) an election to have Shares withheld is made by an optionee, (ii) no election is filed under Section 83(b) of the Code by such optionee and (iii) the Tax Date is deferred under Section 83 of the Code, the optionee shall receive the full number of shares subject to the grant, sale or award, as the case may be, but such optionee shall be unconditionally obligated to tender back to the Company the proper number of shares on the Tax Date.

**19. Rule 16b-3.** Grants, sales and awards to Insiders must comply with the applicable provisions of Rule 16b -3 and shall contain such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption from Section 16 of the Exchange Act with respect to Plan transactions.

## **20. Performance-Based Compensation.**

(a) The following limitations shall apply to grants of o  
the Company.

(i) No employee shall be granted, in any fiscal year of the Company, options or stock appreciation rights to purchase, in the aggregate, more than 1,000,000 shares of Stock.

(ii) In connection with his or her initial employment, an employee may be granted options and stock appreciation rights to purchase, in the aggregate, up to an additional 1,000,000 shares of Stock which shall not count against the limit set forth in subsection (i) above.

(iii) The foregoing limitations shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 12.

(iv) If an option or stock appreciation right is cancelled in the same fiscal year of the Company in which it was granted (other than in connection with a transaction described in Section 12), the cancelled option will be counted against the limits set forth in subsections (i) and (ii) above. For this purpose, if the exercise price of an option is reduced, the transaction will be treated as a cancellation of the option and the grant of a new option.

(b) Other Grants, Awards and Sales. The Administrator shall have the discretion to set Performance Goals (as defined below) which, depending on the extent to which they are met during the Performance Period (as defined below), shall determine the number or value of grants, awards or sales (excluding options) that shall be made to Covered Employees (as defined below). The Performance Goals shall be set by the Administrator on or before the latest date permissible to enable the awards or sales to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code. Each grant, sale or award pursuant to this Section 20(b) shall be evidenced by an agreement that shall specify the Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, shall determine. To the extent necessary to qualify grants, awards or sales as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Administrator shall certify in writing that the Performance Goals applicable to such grant, sale or award for the relevant Performance Period have been satisfied. Notwithstanding anything to the contrary contained herein, the maximum value of all grants, awards or sales pursuant to this Section 20(b) that an individual may receive for a fiscal year is 2.5% of operating profit for such fiscal year.

(c) Definitions. As used herein, the following definitions shall apply:

(i) "Covered Employee" means a "covered employee" within the meaning of Section 162(m) of the Code.

(ii) "Performance Goal" means the goal or goals determined by the Administrator, in its discretion, to be applicable with respect to a grant, sale or award intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code pursuant to this Section 20(b). As determined by the Administrator, the Performance Goal(s) applicable to a grant, sale or award shall provide for a targeted level or levels of achievement based upon any or all of the following

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for the Performance Period: corporate profitability; growth in sales; growth in income; share price appreciation; and return on investment. The Performance Goal(s) may differ from employee to employee and from grant, sale or award to grant, sale or award.

(iii) "Performance Period" means the period of time during which the Performance Goals must be met.

**21. Minimum Vesting/Restriction Periods for Executive Officers.** Each grant of stock options or stock appreciation rights, award of bonus Stock or sale of Stock made under the Plan to an employee who is an executive officer as defined in Rule 3b-7 of the Exchange Act that will vest or cease to be subject to a repurchase or forfeiture restriction based solely on such employee's continuous service to the Company or any parent or subsidiary of the Company shall be subject to a minimum vesting condition or repurchase or forfeiture restriction, as applicable, that will lapse no more rapidly than ratably over a four-year period after the Grant Date. The Administrator may waive the applicable vesting condition or repurchase or forfeiture restrictions during the applicable restriction period only in connection with a merger or similar corporate transaction contemplated by Section 12 of the Plan or in the event of such employee's termination of employment with the Company or any parent or subsidiary of the Company without cause or by reason of such employee's death, disability or retirement.

**LATTICE SEMICONDUCTOR CORPORATION**  
**2001 OUTSIDE DIRECTORS' STOCK OPTION PLAN**

*Amended and restated effective as of the date of the 2006 annual stockholders' meeting*

1. Purposes of the Plan. The purposes of this 2001 Outside Directors' Stock Option Plan are to attract and retain the best available personnel for service as Outside Directors (as defined herein) of the Company, to provide additional incentive to the Outside Directors of the Company to serve as Directors, and to encourage their continued service on the Board.

All options granted hereunder shall be "non-statutory stock options."

2. Definitions. As used herein, the following definitions shall apply:

- (a) "Board" means the Board of Directors of the Company.
  - (b) "Code" means the Internal Revenue Code of 1986, as amended.
  - (c) "Common Stock" means the common stock of the Company.
  - (d) "Company" means Lattice Semiconductor Corporation, a Delaware corporation.
  - (e) "Continuous Status as a Director" means the absence of any interruption or termination of service as a Director.
  - (f) "Director" means a member of the Board.
  - (g) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. The payment of a Director's fee by the Company shall not be sufficient in and of itself to constitute "employment" by the Company.
  - (h) "Exchange Act" means the Securities Exchange Act of 1934, as amended.
  - (i) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:
    - (i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, or, if the day of determination is not a market trading day, on the first market trading day following the day of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable;
    - (ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock shall be the mean between the high bid and low asked prices for the Common Stock for the last market trading day prior to the time of determination, or, if the day of determination is not a market trading day, on the first market trading day following the day of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable; or
    - (iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Board.
  - (j) "Option" means a stock option granted pursuant to the Plan.
  - (k) "Optioned Stock" means the Common Stock subject to an Option.
  - (l) "Optionee" means an Outside Director who receives an Option.
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- (m) “Outside Director” means a Director who is not an Employee.
- (n) “Parent” means a “parent corporation,” whether now or hereafter existing, as defined in Section 424(e) of the Code.
- (o) “Plan” means this 2001 Outside Directors' Stock Option Plan.
- (i) “Share” means a share of the Common Stock, as adjusted in accordance with Section 10 of the Plan.
- (p) “Subsidiary” means a “subsidiary corporation,” whether now or hereafter existing, as defined in Section 424(f) of the Internal Revenue Code of 1986.

3. Stock Subject to the Plan. Subject to the provisions of Section 10 of the Plan, the maximum aggregate number of Shares which may be optioned and sold under the Plan is one million (1,000,000) Shares (the “Pool”). The Shares may be authorized but unissued, or reacquired Common Stock.

If an Option should expire or become unexercisable for any reason without having been exercised in full, the unpurchased Shares which were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. Shares that have actually been issued under the Plan shall not be returned to the Plan and shall not become available for future distribution under the Plan.

4. Administration of and Grants of Options under the Plan.

(a) Administrator. Except as otherwise required herein, the Plan shall be administered by the Board.

(b) Procedure for Grants. All grants of Options to Outside Directors made on or after the date of obtaining stockholder approval of the amended Plan in 2006 shall be automatic and non-discretionary and shall be made strictly in accordance with the following provisions (all grants made prior to the 2006 stockholder approval date shall be governed by the plan as in effect prior to such amendments):

(i) No person shall have any discretion to select which Outside Directors shall be granted Options or to determine the number of Shares to be covered by Options granted to Outside Directors, the exercise price thereof or the timing of the grant of such Options.

(ii) Directors' First Option.

(A) Grant. Each Outside Director shall automatically be granted an Option to purchase ninety thousand (90,000) Shares (the “Directors' First Option”) on the date of the first meeting of the Board coinciding with or following the date on which he/she first becomes an Outside Director.

(B) Terms. The term of the Directors' First Option granted hereunder shall be ten (10) years and the Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 8 hereof. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the Directors' First Option shall become exercisable in installments cumulatively with respect to 25% of the Optioned Stock on the date of grant, and as to an additional 1/16th of the Optioned Stock each three (3) months thereafter, so that one hundred percent (100%) of the Optioned Stock shall be exercisable on the third anniversary of the date of grant; provided that the Optionee continues to serve as a Director on such dates; provided, further, that in no event shall any Option be exercisable prior to obtaining stockholder approval of the Plan.

(iii) Replenishment Option.

(A) Grant. In addition, each Outside Director shall automatically be granted an additional Option to purchase twenty-two thousand five hundred (22,500) Shares (the “Replenishment Option”) on the date of the 3rd Quarter Meeting of each fiscal year, provided that such Outside Director at such date continues to serve as a Director; provided, however, that a Director shall not receive a Replenishment Option in the same fiscal year in which he/she has received a Directors' First Option nor shall a Director receive a Replenishment Option in the

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following fiscal year if such Director received a Directors' First Option at the meeting of the Board in the fourth (4<sup>th</sup>) quarter of the preceding fiscal year.

(B) Terms. The term of the Replenishment Option granted hereunder shall be ten (10) years and the Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 8 hereof. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the Replenishment Option shall become exercisable in installments cumulatively with respect to 1/4<sup>th</sup> of the Optioned Stock twenty-seven (27) months after the date of grant (the "Initial Vesting Date") and as to an additional 1/4<sup>th</sup> of the Optioned Stock each three (3) months thereafter, so that one hundred percent (100%) of the Optioned Stock shall be exercisable on the third anniversary of the date of grant; provided that the Optionee continues to serve as a Director on such dates; provided, further, that in no event shall any Option be exercisable prior to obtaining stockholder approval of the Plan.

(iv) Prorated Replenishment Option.

(C) Grant. Each Outside Director who is granted a Directors' First Option in a meeting of the Board in either the first (1<sup>st</sup>), second (2<sup>nd</sup>) or fourth (4<sup>th</sup>) quarters of any fiscal year, shall automatically be granted a "Prorated Replenishment Option" (as defined below) on the date of the following 3<sup>rd</sup> Quarter Meeting. A Prorated Replenishment Option shall mean an option to purchase: (i) eleven thousand two hundred and fifty (11,250) Shares, if the grant date of the Directors' First Option is the date of the meeting of the Board in the first (1<sup>st</sup>) quarter of the Company's fiscal year (the "First Quarter Prorated Replenishment Option"); (ii) five thousand six hundred and twenty-five (5,625) Shares if the grant date of the Directors' First Option is the date of the meeting of the Board in the second (2<sup>nd</sup>) quarter of the Company's fiscal year (the "Second Quarter Prorated Replenishment Option"); or (iii) sixteen thousand eight hundred and seventy-five (16,875) Shares, if the grant date of the Directors' First Option is the date of the meeting of the Board in the fourth (4<sup>th</sup>) quarter of the Company's fiscal year (the "Fourth Quarter Prorated Replenishment Option").

(D) Terms. The term of the Prorated Replenishment Option granted hereunder shall be ten (10) years and the Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 8 hereof. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the First Quarter Prorated Replenishment Option shall become exercisable in installments cumulatively with respect to 1/2 of the Optioned Stock thirty-three (33) months after the date of grant and as to the remaining 1/2 three (3) months thereafter. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the Second Quarter Prorated Replenishment Option shall become exercisable in full thirty-six (36) months after the date of grant. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the Fourth Quarter Prorated Replenishment Option shall become exercisable in installments cumulatively with respect to 1/3 of the Optioned Stock thirty (30) months after the date of grant and as to an additional 1/3 of the Optioned Stock each three (3) months thereafter; provided that, with respect to any Prorated Replenishment Option, the Optionee continues to serve as a Director on such dates; provided, further, that in no event shall any Option be exercisable prior to obtaining stockholder approval of the Plan.

(v) Adjustment Option.

(A) Grant. Each Outside Director who remains as such through the date of the 3<sup>rd</sup> Quarter Meeting in fiscal year 2006 and who has not received (and is not due to receive) a Directors' First Option on or after the date of the annual stockholder meeting in 2006 shall, on the date of such meeting, receive an additional one-time Option to purchase eighteen thousand (18,000) Shares (the "Adjustment Option").

(B) Terms. The term of the Adjustment Option shall be ten (10) years and the Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 8 hereof. Subject to the accelerated vesting provisions of Sections 8 and 10 hereof, the Adjustment Option shall become exercisable in installments cumulatively with respect to 25% of the Optioned Stock on the date of grant, and as to an additional 1/16th of the Optioned Stock each three (3) months thereafter, so that one hundred percent (100%) of the Optioned Stock shall be exercisable on the third anniversary of the date of grant; provided that the Optionee continues to serve as a Director on such dates; provided, further, that in no event shall any Option be exercisable prior to obtaining stockholder approval of the Plan.

(vi) In the event that any Option granted under the Plan would cause the number of Shares subject to outstanding Options plus the number of Shares previously purchased under Options to exceed the Pool, then, unless additional shares have become available under the Plan, the remaining Shares available for Option grant shall be granted under Options to the Outside Directors on a pro rata basis. No further grants shall be made until such time, if any, as additional

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Shares become available for grant under the Plan through an increase in the number of Shares which may be issued under the Plan or through cancellation or expiration of Options previously granted hereunder.

(c) Powers of the Board. Subject to the provisions and restrictions of the Plan, the Board shall have the authority, in its discretion: (i) to determine, upon review of relevant information and in accordance with Section 2(i) of the Plan, the Fair Market Value of the Common Stock; (ii) to interpret the Plan; (iii) to prescribe, amend and rescind rules and regulations relating to the Plan; (iv) to authorize any person to execute on behalf of the Company any instrument required to effectuate the grant of an Option previously granted hereunder; (v) to extend the length of time an Option remains exercisable after the termination of an Optionee's status as a Director; and (vi) to make all other determinations deemed necessary or advisable for the administration of the Plan.

(d) Effect of Board's Decision. All decisions, determinations and interpretations of the Board shall be final.

5. Eligibility. Options may be granted only to Outside Directors. All Options shall be automatically granted in accordance with the terms set forth in Section 4(b) hereof.

The Plan shall not confer upon any Optionee any right with respect to continuation of service as a Director or nomination to serve as a Director, nor shall it interfere in any way with any rights which the Director or the Company may have to terminate the Director's relationship with the Company at any time.

6. Term of Plan. The Plan shall become effective upon the earlier to occur of its adoption by the Board or its approval by the stockholders of the Company as described in Section 16 of the Plan. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 11 of the Plan.

7. Exercise Price and Consideration.

(a) Exercise Price. The per Share exercise price for Optioned Stock shall be 100% of the Fair Market Value per Share on the date of grant of the Option.

(b) Form of Consideration. The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Board and may consist of (i) cash, (ii) check, (iii) other shares which (x) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six (6) months on the date of surrender, and (y) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised, (iv) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan, or (v) any combination of the foregoing methods of payment.

8. Exercise of Option.

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable at such times as are set forth in Section 4(b) hereof; provided, however, that no Options shall be exercisable until stockholder approval of the Plan in accordance with Section 16 hereof has been obtained.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and full payment for the Shares with respect to which the Option is exercised has been received by the Company. Full payment may consist of any consideration and method of payment allowable under Section 7(b) of the Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. A share certificate for the number of Shares so acquired shall be issued to the Optionee as soon as practicable after exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 10 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares which thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

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(b) Termination of Continuous Status as a Director. Subject to Section 10 hereof, in the event an Optionee's Continuous Status as a Director terminates (other than upon the Optionee's death or total and permanent disability (as defined in Section 22(e)(3) of the Code)), the Optionee may exercise his or her Option, but only within three (3) months from the date of such termination, and only to the extent that the Optionee was entitled to exercise it at the date of such termination (but in no event later than the expiration of its ten (10) year term). To the extent that the Optionee was not entitled to exercise an Option at the date of such termination, or to the extent that the Optionee does not exercise such Option (to the extent otherwise so entitled) within the time specified herein, the Option shall terminate.

(c) Disability of Optionee. In the event Optionee's Continuous Status as a Director terminates as a result of total and permanent disability (as defined in Section 22(e)(3) of the Code), the Optionee may exercise his or her Option, including portions not yet vested, prior to the earlier of the expiration of twelve (12) months from the date of termination or the expiration of the Option. To the extent that the Optionee does not exercise such Option within the time specified herein, the Option shall terminate.

(d) Death of Optionee. In the event of an Optionee's death, the Optionee's estate or a person who acquired the right to exercise the Option by bequest or inheritance may exercise the Option, including portions not yet vested, prior to the earlier of the expiration of twelve (12) months from the date of termination or the expiration of the Option. To the extent that the Optionee's estate or a person who acquired the right to exercise such Option does not exercise such Option within the time specified herein, the Option shall terminate.

9. Non-Transferability of Options. The Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee.

10. Adjustments Upon Changes in Capitalization, Dissolution, Merger or Asset Sale.

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of Shares covered by each outstanding Option, the number of Shares for which Options shall be automatically granted pursuant to Section 4(b) hereof and the number of Shares which have been authorized for issuance under the Plan but as to which no Options have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per Share covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued Shares resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued Shares effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to an Option.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, to the extent that an Option has not been previously exercised, it will terminate immediately prior to the consummation of such proposed action; provided, however, that the Company shall give each Optionee notice of such dissolution or liquidation at least thirty (30) days prior to the consummation of such dissolution or liquidation and, upon receipt of such notice, all options shall become fully exercisable.

(c) Merger or Asset Sale. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, each outstanding Option which is not fully exercisable shall be accelerated and become fully exercisable.

11. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend, or discontinue the Plan, but no amendment, alteration, suspension, or discontinuation shall be made which would impair the rights of any Optionee under any grant theretofore made, without his or her consent. In addition, to the extent necessary and desirable to comply with any applicable law, regulation or stock exchange rule, the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as is required.

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(b) Effect of Amendment, Etc. Any such amendment, alteration, suspension or discontinuation of the Plan shall not affect Options already granted and such Options shall remain in full force and effect as if this Plan had not been amended, altered, suspended or discontinued.

12. Time of Granting Options. The date of grant of an Option shall, for all purposes, be the date determined in accordance with Section 4(b) hereof. Notice of the determination shall be given to each Outside Director to whom an Option is so granted within a reasonable time after the date of such grant.

13. Conditions Upon Issuance of Shares. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, state securities laws, and the requirements of any stock exchange or quotation system upon which the Shares may then be listed or quoted, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares, if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned relevant provisions of law.

Inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the

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Company of any liability in respect of the failure to issue or sell such Shares as to which such requi-site authority shall not have been obtained.

14. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such num-ber of Shares as shall be sufficient to satisfy the requirements of the Plan.

15. Option Agreement. Options shall be evidenced by written option agreements in such form as the Board shall approve.

16. Stockholder Approval. Effectiveness of the Plan shall be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval shall be obtained in the degree and manner required under applicable state and federal law and any stock exchange rules.

17. No Option Repricing Without Stockholder Approval. In no event shall the Board have the right, without stockholder approval, to (i) lower the price of an Option granted under the Plan after it is granted, except in connection with adjustments provided in Section 10; (ii) take any other action with respect to an Option granted under the Plan that is treated as a repricing under generally accepted accounting principles; or (iii) cancel an Option granted under the Plan at a time when its strike price exceeds the fair market value of the underlying Shares, in exchange for another option, restricted stock, or other equity, unless the cancellation and exchange occurs in connection with a merger, acquisition, spin-off or other similar corporate transaction.

## LATTICE SEMICONDUCTOR CORPORATION

## 2001 STOCK PLAN

(as amended August 7, 2001)

1. Purposes of the Plan. The purposes of this 2001 Stock Plan are:
- to attract and retain the best available personnel for positions of substantial responsibility,
  - to provide additional incentive to Employees and Consultants, and
  - to promote the success of the Company's business.

Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant. Stock Purchase Rights may also be granted under the Plan.

2. Definitions. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees as shall be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means the requirements relating to the administration of stock option plans under state corporate laws of the United States, U.S. federal and state securities laws, the Code, any other applicable federal or state law, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Options or Stock Purchase Rights are, or will be, granted under the Plan.

(c) "Board" means the Board of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended.

(e) "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 of the Plan.

(f) "Common Stock" means the common stock of the Company.

(g) "Company" means Lattice Semiconductor Corporation, a Delaware corporation.

(h) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

(i) "Director" means a member of the Board.

(j) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(k) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed ninety days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, on the 181st day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(l) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(m) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such

exchange or system on the day of determination, or, if the day of determination is not a market trading day, on the first market day following the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Common Stock shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination, or, if the day of determination is not a market trading day, on the first market trading day following the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Administrator.

(n) “Incentive Stock Option” means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(o) “Immediate Family” means the spouse, lineal descendants, father, mother, brothers and sisters of the Optionee.

(p) “Nonstatutory Stock Option” means an Option not intended to qualify as an Incentive Stock Option.

(q) “Notice of Grant” means a written or electronic notice evidencing certain terms and conditions of an individual Option or Stock Purchase Right grant. The Notice of Grant is part of the Option Agreement.

(r) “Officer” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(s) “Option” means a stock option granted pursuant to the Plan.

(t) “Option Agreement” means an agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(u) “Optioned Stock” means the Common Stock subject to an Option or Stock Purchase Right.

(v) “Optionee” means the holder of an outstanding Option or Stock Purchase Right granted under the Plan.

(w) “Parent” means a “parent corporation,” whether now or hereafter existing, as defined in Section 424(e) of the Code.

(x) “Plan” means this Lattice Semiconductor Corporation 2001 Stock Plan.

(y) “Restricted Stock” means shares of Common Stock acquired pursuant to a grant of Stock Purchase Rights under Section 11 of the Plan.

(z) “Restricted Stock Purchase Agreement” means a written agreement between the Company and the Optionee evidencing the terms and restrictions applying to stock purchased under a Stock Purchase Right. The Restricted Stock Purchase Agreement is subject to the terms and conditions of the Plan and the Notice of Grant.

(aa) “Rule 16b-3” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(bb) “Section 16(b)” means Section 16(b) of the Exchange Act.

(cc) “Service Provider” means an Employee or Consultant.

(dd) “Share” means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(ee) “Stock Purchase Right” means the right to purchase Common Stock pursuant to Section 11 of the Plan, as evidenced by a Notice of Grant.

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(ff) “Subsidiary” means a “subsidiary corporation”, whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be optioned and sold under the Plan is nine million (9,000,000) Shares. The Shares may be authorized, but unissued, or reacquired Common Stock.

If an Option or Stock Purchase Right expires or becomes unexercisable without having been exercised in full, the unpurchased Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated); provided, however, that Shares that have actually been issued under the Plan, whether upon exercise of an Option or Right, shall not be returned to the Plan and shall not become available for future distribution under the Plan, except that if Shares of Restricted Stock are repurchased by the Company at their original purchase price, such Shares shall become available for future grant under the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Options granted hereunder as “performance-based compensation” within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more “outside directors” within the meaning of Section 162(m) of the Code.

(iii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.

(iv) Other Administration. Other than as provided above, the Plan shall be administered by (A) the Board or (B) a Committee, which committee shall be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Options and Stock Purchase Rights may be granted hereunder;

(iii) to determine the number of shares of Common Stock to be covered by each Option and Stock Purchase Right granted hereunder;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Option or Stock Purchase Right granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Options or Stock Purchase Rights may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or Stock Purchase Right or the shares of Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vi) to construe and interpret the terms of the Plan and awards granted pursuant to the Plan;

(vii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws;

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(viii) to modify or amend each Option or Stock Purchase Right (subject to Section 15 of the Plan), including the discretionary authority to extend the post-termination exercisability period of Options longer than is otherwise provided for in the Plan;

(ix) to allow Optionees to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Option or Stock Purchase Right that number of Shares having a Fair Market Value equal to the amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by an Optionee to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable;

(x) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Option or Stock Purchase Right previously granted by the Administrator;

(xi) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Limitations on the Powers of the Administrator. No person shall have any discretion to reduce the exercise price of any Option or Stock Purchase Right regardless of any decline in the Fair Market Value of the Common Stock covered by such Option or Stock Purchase Right since the date of grant.

(d) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations shall be final and binding on all Optionees and any other holders of Options or Stock Purchase Rights.

5. Eligibility. Nonstatutory Stock Options and Stock Purchase Rights may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Limitations.

(a) Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(b) Neither the Plan nor any Option or Stock Purchase Right shall confer upon an Optionee any right with respect to continuing the Optionee's relationship as a Service Provider with the Company, nor shall they interfere in any way with the Optionee's right or the Company's right to terminate such relationship at any time, with or without cause.

(c) The following limitations shall apply to grants of Options:

(i) No Service Provider shall be granted, in any fiscal year of the Company, Options to purchase more than 2,000,000 Shares.

(ii) In connection with his or her initial service, a Service Provider may be granted Options to purchase up to an additional 2,000,000 Shares, which shall not count against the limit set forth in subsection (i) above.

(iii) The foregoing limitations shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 13.

(iv) If an Option is cancelled in the same fiscal year of the Company in which it was granted (other than in connection with a transaction described in Section 13), the cancelled Option will be counted against the limits set forth in subsections (i) and (ii) above.

(d) The number of shares granted pursuant to Stock Purchase Rights under the Plan shall not exceed five percent (5%) of the total shares available for issuance under the Plan.

7. Term of Plan. Subject to Section 19 of the Plan, the Plan shall become effective upon its adoption by the Board. It shall continue in effect for a term of ten (10) years unless terminated earlier under Section 15 of the Plan.

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8. Term of Option. The term of each Option shall be stated in the Option Agreement. In the case of an Incentive Stock Option, the term shall be ten (10) years from the date of grant or such shorter term as may be provided in the Option Agreement. Moreover, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.

9. Option Exercise Price and Consideration.

(a) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be determined by the Administrator, subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a merger or other corporate transaction.

(b) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator shall fix the period within which the Option may be exercised and shall determine any conditions that must be satisfied before the Option may be exercised.

(c) Form of Consideration. The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator shall determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of:

(i) cash;

(ii) check;

(iii) promissory note;

(iv) other Shares which (A) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six months on the date of surrender, and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised;

(v) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan;

(vi) a reduction in the amount of any Company liability to the Optionee, including any liability attributable to the Optionee's participation in any Company-sponsored deferred compensation program or arrangement;

(vii) any combination of the foregoing methods of payment; or

(viii) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws.

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10. Exercise of Option.

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. An Option may not be exercised for a fraction of a Share.

An Option shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Shares issued upon exercise of an Option shall be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

Exercising an Option in any manner shall decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Relationship as a Service Provider. If an Optionee ceases to be a Service Provider, other than upon the Optionee's death or Disability, the Optionee may exercise his or her Option prior to the earlier of its expiration date or the date specified in the Option Agreement, to the extent that the Option is vested on the date of termination. If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified by the Administrator, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(c) Disability of Optionee. If an Optionee ceases to be a Service Provider as a result of the Optionee's Disability, the Option, including portions not yet vested, may be exercised prior to the earlier of the expiration of twelve (12) months from the date of termination or the expiration of the Option. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(d) Death of Optionee. If an Optionee dies while a Service Provider, the Option, including portions not yet vested, may be exercised prior to the earlier of the expiration of twelve (12) months from the date of death or the expiration of the Option. The Option may be exercised by the executor or administrator of the Optionee's estate or, if none, by the person(s) entitled to exercise the Option under the Optionee's will or the laws of descent or distribution. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(e) No Option Repricing Without Stockholder Approval. In no event shall the Administrator have the right, without stockholder approval, to (i) lower the price of an Option granted under the Plan after it is granted, except in connection with adjustments provided in Section 13; (ii) take any other action with respect to an Option granted under the Plan that is treated as a repricing under generally accepted accounting principles; or (iii) cancel an Option granted under the Plan at a time when its strike price exceeds the fair market value of the underlying Shares, in exchange for another option, restricted stock, or other equity, unless the cancellation and exchange occurs in connection with a merger, acquisition, spin-off or other similar corporate transaction.

11. Stock Purchase Rights.

(a) Rights to Purchase. Stock Purchase Rights may be issued either alone, in addition to, or in tandem with other awards granted under the Plan and/or cash awards made outside of the Plan. After the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing or electronically, by means of a Notice of Grant, of the terms, conditions and restrictions related to the offer, including the number of Shares that the offeree shall be entitled to purchase, the price to be paid, and the time within which the offeree must accept such offer. The offer shall be accepted by execution of a Restricted Stock Purchase Agreement in the form determined by the Administrator.

(b) Repurchase Option. Unless the Administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's service with the Company for any reason (other than death or Disability). The purchase price for Shares repurchased pursuant to

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the Restricted Stock Purchase Agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at a rate determined by the Administrator.

(c) Other Provisions. The Restricted Stock Purchase Agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion.

(d) Rights as a Stockholder. Once the Stock Purchase Right is exercised, the purchaser shall have the rights equivalent to those of a stockholder, and shall be a stockholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised, except as provided in Section 13 of the Plan.

12. Non-Transferability of Options and Stock Purchase Rights. During the lifetime of the Optionee, the Option shall be exercisable only by the Optionee or the Optionee's guardian, legal representative or permitted transferees. Except as specified below, an Option or Stock Purchase Right may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution. At the sole discretion of the Administrator or its appointee, the Administrator or its appointee may allow, by means of a writing to the Optionee, for all or part of a vested Nonstatutory Stock Option to be assigned or transferred, including by means of sale, during an Optionee's lifetime to a member of the Optionee's Immediate Family or to a trust, LLC or partnership for the benefit of any one or more members of such Optionee's Immediate Family. If the Administrator or its appointee makes an Option or Stock Purchase Right transferable, such Option or Stock Purchase Right shall contain such additional terms and conditions as the Administrator deems appropriate. In such case, the transferee shall receive and hold the Option subject to the provisions of this Section 12 and there shall be no further assignment or transfer of the Option. The terms of Options granted hereunder shall be binding upon the transferees, purchasers, executors, administrators, heirs, successors and assigns of the Optionee.

13. Adjustments Upon Changes in Capitalization, Dissolution, Merger or Asset Sale .

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option and Stock Purchase Right, and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Options or Stock Purchase Rights have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option or Stock Purchase Right, as well as the price per share of Common Stock covered by each such outstanding Option or Stock Purchase Right, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a reorganization, merger, consolidation, plan of exchange, recapitalization, stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option or Stock Purchase Right.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Optionee as soon as practicable prior to the effective date of such proposed transaction. The Administrator in its discretion may provide for an Optionee to have the right to exercise his or her Option until thirty (30) days prior to such transaction as to all of the Optioned Stock covered thereby, including Shares as to which the Option would not otherwise be exercisable. In addition, the Administrator may provide that any Company repurchase option applicable to any Shares purchased upon exercise of an Option or Stock Purchase Right shall lapse as to all such Shares, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Option or Stock Purchase Right will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Asset Sale. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, each outstanding Option and Stock Purchase Right shall be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the Option or Stock Purchase Right, the Optionee shall fully vest in and have the right to exercise the Option or Stock Purchase Right as to all of the Optioned Stock, including Shares as to which it would not otherwise be vested or exercisable. If an Option or Stock Purchase Right becomes fully vested and exercisable in lieu of assumption or substitution in the event of a merger or sale of assets, the Administrator shall notify the Optionee in writing or electronically that the Option or Stock Purchase Right shall be fully vested and exercisable for a period of thirty (30) days from the date of such notice, and the Option or Stock Purchase Right shall terminate upon the expiration of such period. For

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the purposes of this paragraph, the Option or Stock Purchase Right shall be considered assumed if, following the merger or sale of assets, the option or right confers the right to purchase or receive, for each Share of Optioned Stock subject to the Option or Stock Purchase Right immediately prior to the merger or sale of assets, the consideration (whether stock, cash, or other securities or property) received in the merger or sale of assets by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or sale of assets is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Option or Stock Purchase Right, for each Share of Optioned Stock subject to the Option or Stock Purchase Right, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or sale of assets.

14. Date of Grant. The date of grant of an Option or Stock Purchase Right shall be, for all purposes, the date on which the Administrator makes the determination granting such Option or Stock Purchase Right, or such other later date as is determined by the Administrator. Notice of the determination shall be provided to each Optionee within a reasonable time after the date of such grant.

15. Amendment and Termination of the Plan. The Board may amend, alter, or suspend or terminate the Plan, but no amendment, alteration or discontinuation shall be made which would impair the rights of any Optionee under any award theretofore granted without the Optionee's or recipient's consent, except such an amendment made to cause the Plan to comply with applicable law, stock exchange rules or accounting rules. In addition, no such amendment shall be made without the approval of the Company's stockholders to the extent such approval is required by law or agreement or if such amendment would:

- (i) expand the classes of persons to whom awards may be made under Section 5 of this Plan;
- (ii) increase the number of shares of Common Stock authorized for grant under Section 3 of this Plan;
- (iii) increase the number of shares which may be granted under awards to any one participant under Section 6(c) of this Plan;
- (iv) allow the creation of additional types of awards;
- (v) change the provisions of Section 4(c); or
- (vi) change any of the provisions of this paragraph of Section 15.

The Administrator may amend the terms of any Option or other award theretofore granted, prospectively or retroactively, but no such amendment (a) shall cause a qualified performance-based award to cease to qualify for the Section 162(m) exemption or (b) impair the rights of any holder without the holder's consent except such an amendment made to cause the Plan or award to qualify for any exemption provided by Rule 16b-3 or (c) modify the terms of any Options or other award in a manner inconsistent with the provisions of this Plan.

Subject to the above provisions, the Board shall have authority to amend the Plan to take into account changes in law and tax and accounting rules as well as other developments, and to grant awards which qualify for beneficial treatment under such rules without stockholder approval.

16. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares shall not be issued pursuant to the exercise of an Option or Stock Purchase Right unless the exercise of such Option or Stock Purchase Right and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Option or Stock Purchase Right, the Company may require the person exercising such Option or Stock Purchase Right to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

17. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares

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hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

18. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

19. Stockholder Approval. The Plan shall be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval shall be obtained in the manner and to the degree required under Applicable Laws.

**LATTICE SEMICONDUCTOR CORPORATION  
SUBSIDIARIES OF THE REGISTRANT**

|     | <b>Name</b>                                    | <b>Jurisdiction of Incorporation</b> |
|-----|--|--------------------------------------|
| 1.  | Lattice Semiconductor GmbH                     | Germany                              |
| 2.  | Lattice Semiconducteurs SARL                   | France                               |
| 3.  | Lattice Semiconductor AB                       | Sweden                               |
| 4.  | Lattice Semiconductor Asia Limited             | Hong Kong                            |
| 5.  | Lattice Semiconductor GK                       | Japan                                |
| 6.  | Lattice Semiconductor (Shanghai) Co. Ltd.      | China                                |
| 7.  | Lattice Semiconductor UK Limited               | United Kingdom                       |
| 8.  | Lattice Semiconductor SRL                      | Italy                                |
| 9.  | Lattice Semiconductor International LLC        | Delaware, USA                        |
| 10. | Lattice Semiconductor Canada Corporation       | Canada                               |
| 11. | Lattice Semiconductor (Singapore) Pte. Ltd.    | Singapore                            |
| 12. | Lattice SG Pte. Ltd.                           | Singapore                            |
| 13. | Lattice Semiconductor (PH) Corporation         | Philippines                          |
| 14. | Lattice Semiconductor Limited                  | Bermuda                              |
| 15. | Chengdu SiliconBlue Microelectronics Co., Ltd. | China                                |
| 16. | SiliconBlue Technologies (Hong Kong) Ltd.      | Hong Kong                            |
| 17. | SiliconBlue Technologies Korea Co. Ltd.        | South Korea                          |
| 18. | Lattice Semiconductor (India) Pvt. Ltd.        | India                                |

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Lattice Semiconductor Corporation:

We consent to the incorporation by reference in the registration statements on Form S-8 (No. 33-33933, No. 33-35259, No. 33-38521, No. 33-76358, No. 33-51232, No. 33-69496, No. 333-15737, No. 333-40031, No. 333-69467, No. 333-67274, No. 333-99247, No. 333-120959, No. 333-143387, No. 333-176133, and No. 333-182047 of Lattice Semiconductor Corporation of our reports dated March 8, 2013, with respect to the consolidated balance sheets of Lattice Semiconductor Corporation and subsidiaries as of December 29, 2012 and December 31, 2011, and the related consolidated statements of operations and comprehensive (loss) income, changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 29, 2012, and the related consolidated financial statement schedule, and the effectiveness of internal control over financial reporting as of December 29, 2012, which reports appear in the December 29, 2012 annual report on Form 10-K of Lattice Semiconductor Corporation.

/s/ KPMG LLP

Portland, Oregon  
March 8, 2013

## CERTIFICATION

I, Darin G. Billerbeck, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lattice Semiconductor Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2013

/s/ DARIN G. BILLERBECK

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Darin G. Billerbeck

*President and Chief Executive Officer*

## CERTIFICATION

I, Joe Bedewi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lattice Semiconductor Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2013

/s/ JOE BEDEWI

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Joe Bedewi

*Corporate Vice President and Chief Financial Officer*

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Lattice Semiconductor Corporation (the Company) on Form 10-K for the year ended December 29, 2012 (the Report), I, Darin G. Billerbeck, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ DARIN G. BILLERBECK

Darin G. Billerbeck

*President and Chief Executive Officer*

Date: March 8, 2013

**CERTIFICATION OF CHIEF FINANCIAL OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Lattice Semiconductor Corporation (the Company) on Form 10-K for the year ended December 29, 2012 (the Report), I, Joe Bedewi, Corporate Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ JOE BEDEWI

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Joe Bedewi

*Corporate Vice President and Chief Financial Officer*

Date: March 8, 2013



