

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 31, 2022

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
FOR THE TRANSITION PERIOD FROM \_\_\_\_\_ TO \_\_\_\_\_

Commission file number: 000-18032



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

Delaware  
(State of Incorporation)  
5555 NE Moore Court, Hillsboro, Oregon  
(Address of principal executive offices)

93-0835214  
(I.R.S. Employer Identification Number)  
97124-6421  
(Zip Code)

Registrant's telephone number, including area code: (503) 268-8000

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

(Title of Class)	(Trading Symbol)	(Name of each exchange on which registered)
Common Stock, \$.01 par value	LSCC	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 every Interactive Data File required to be submitted 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 such files). Yes  No

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

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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 July 2, 2022 \$ 4,910,050,770  
Number of shares of common stock outstanding as of February 13, 2023 137,382,419

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 2023 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.

**LATTICE SEMICONDUCTOR CORPORATION**  
**ANNUAL REPORT ON FORM 10-K**  
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## Note Regarding 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. These involve estimates, assumptions, risks, and uncertainties. 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 “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “plan,” “possible,” “predict,” “projects,” “may,” “will,” “should,” “continue,” “ongoing,” “future,” “potential,” and similar words or phrases to identify forward-looking statements.

Forward-looking statements include, but are not limited to, statements about: our target or expected financial performance and our ability to achieve those results; future impacts of the ongoing COVID-19 pandemic, as well as other pandemics, epidemics, and other public health problems; future impacts of the ongoing military conflict between Ukraine and Russia and the outbreak of new, or expansion of current, military conflicts or terrorism; the impact of any continuing trade or travel restrictions on the export and import of products between the U.S. and China; the impact of any deterioration in relations between Taiwan and China, and other factors affecting military, political, or economic conditions in Taiwan or elsewhere in Asia; the impact of increased inflation; the effects of climate change and disruptive natural disasters on us, our suppliers, and our consumers, including as a result of actions by governments, businesses, and consumers in response; our business strategy; the impact of tariffs, trade sanctions, license requirements or similar actions on our suppliers and customers; our opportunities to increase our addressable market; our expectations and strategies regarding market trends and opportunities, including market segment drivers such as 5G infrastructure deployments, cloud and enterprise servers, client computing platforms, Industrial Internet of Things, factory automation, automotive electronics, smart homes and prosumers; our beliefs about who we may compete with and whether we are differentiated from those competitors, as well as their potential capabilities; our expectations regarding our customer base and the impacts of our customers' actions on our business; our expectations regarding both new and existing product offerings; our gross margin growth and our strategies to achieve gross margin growth and other financial results; our future investments in research and development; our ability to take advantage of the process technology development efforts of semiconductor foundries and apply those technologies when they become most economically beneficial to us and to our customers; the impact of changing foundries or OSATs or their failure to manufacture sufficient quantities of our products at acceptable yields, as well as the impact of problems with other subcontractors or distributors; the impact if we are unable to detect product defects; the impact if our insurance proves to be inadequate to resolve claims against us; whether we will experience seasonality or cyclicalities and the resulting effects on our business; our expectations about our patent portfolio, including the expiration of patents, whether, when and where we will make future filings, and the value of the patents and associated licensing agreements generally and to our business, as well as risks arising from the licensing and sale of our patents; our ability to attract and retain personnel and their importance to our performance; future financial results or accounting treatments; our judgments involved in accounting matters, including revenue recognition, inventories and cost of revenue, and income taxes; actions we may take regarding the design and continued effectiveness of our internal controls over financial reporting; our use of cash; our beliefs regarding the adequacy of our liquidity, capital resources and facilities; the impact of our debt on our future operating and financial performance, as well as the impact if we breach a loan covenant; whether we will consider and act upon acquisition opportunities to extend our product, technology and product offerings and the impact of such opportunities on our business; our expectations regarding taxes, including unrecognized tax benefits, and tax adjustments and allowances; whether we will pursue future stock repurchases and how any future repurchases will be funded; the future price volatility of our stock and the effects of that volatility; our ability to prevent and respond to information technology system failures, security breaches and incidents, cyber-attacks or fraud; the impact of laws and regulations addressing privacy, data protection, and cybersecurity and our ability to comply with the same; our ability to comply with other laws and regulations, the costs of such compliance, and costs incurred if we fail to comply with such laws and regulations; and our beliefs regarding legal proceedings.

These forward-looking statements are based on estimates and assumptions that are subject to risks and uncertainties that could cause actual results to differ materially from those statements expressed in the forward-looking statements. The key factors, among others, that could cause our actual results to differ materially from the forward-looking statements include the effects of pandemics or widespread global health problems and the actions by governments, businesses, and individuals in response to the situation; global economic conditions and uncertainty, including as a result of trade-related restrictions or tariffs; the concentration of our sales in certain end markets, particularly as it relates to the concentration of our sales in the Asia Pacific region; market acceptance and demand for our existing and new products; market and technology trends; our ability to achieve yield and quality improvements; our ability to protect, license and sell our intellectual property; shortages or increased costs in our supply chain; any disruption of our distribution channels; the impact of competitive products and pricing, especially by companies with great resources than us; unanticipated warranty claims; the effect of any downturn in the economy on capital markets and credit markets; our failure to prevent or adequately respond to information technology system failures, security breaches and incidents, cyber-attacks, or fraud; physical and transition disruptions and costs associated with climate change; unanticipated taxation requirements or positions of the U.S. Internal Revenue Service or other taxing authority; unanticipated effects of tax reform; unfavorable results of legal proceedings; our ability to attract and retain key personnel; the sufficiency of our insurance coverage; the impact of our outstanding indebtedness on our strategic flexibility, liquidity and results of operations; inflationary pressures; the impact of strategic transactions; or unexpected impacts of accounting guidance. In addition, actual results are subject to other risks and uncertainties that relate more broadly to our overall business, including those more fully described herein and that are otherwise described from time to time in our filings with the Securities and Exchange Commission (“SEC”), including, but not limited to, the items discussed in Part I, Item 1A, “Risk Factors,” in this Annual Report on Form 10-K.

You should not unduly rely on forward-looking statements because our actual results could differ materially from those expressed by us. In addition, any forward-looking statement applies only as of the date of this filing. We do not plan to, and undertake no obligation to, update any forward-looking statements to reflect new information or new events, circumstances or developments, or otherwise.

# PART I

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## Item 1. Business

### Overview

Lattice Semiconductor Corporation and its subsidiaries ("Lattice," the "Company," "we," "us," or "our") develop technologies that we monetize through differentiated programmable logic semiconductor products, system solutions, design services, and licenses. Lattice is the low power programmable leader. We solve customer problems across the network, from the Edge to the Cloud, in the growing Communications, Computing, Industrial, Automotive, and Consumer markets. Our technology, long-standing relationships, and commitment to world-class support enable our customers to create a smart, secure, and connected world.

Our field programmable gate array ("FPGA") devices enable us to provide our customers with a strong, growing base of control, connect, and compute technologies. We believe there are multiple growth areas that will allow us to increase our addressable market. In particular, we believe there are several emerging trends in servers, infrastructure, and smart devices that are opportunities for Lattice:

- With the growth of hyperscale datacenters, our "processor agnostic" solutions are ideal for control and connect functions in enterprise and datacenter server applications.
- With the expected continued Communications infrastructure build-out from 5G deployment and beyond, as well as continued datacenter network expansion, Lattice solutions are being adopted to control and connect a variety of functions in critical systems.
- With the increase in electrification and the proliferation of sensors in smart factories, smart homes, and automobiles, our low power, small form factor solutions are ideal for everything from battery powered systems and sensor applications to embedded vision.
- With the increase in artificial intelligence ("AI") and a multitude of applications at the network edge, Lattice devices support applications like face detection, image recognition, and video analytics.
- With the demand for more hardware security in the Communications, Computing, Industrial, Automotive, and Consumer markets, our devices provide enhanced platform security.

To serve these emerging needs, customer solutions require power efficiency, memory bandwidth, processing power, and the ability to integrate complex functionality into a highly compact footprint. These requirements align with the capabilities of our FPGA devices. Our flexible, low power, small form factor, performance optimized FPGAs put us in a unique position to meet these growing market needs.

### Our Markets and Customers

We sell our products globally in three end market groups: Communications and Computing, Industrial and Automotive, and Consumer. We also provide Intellectual Property ("IP") licensing and services to these end markets.

In the **Communications and Computing Market**, our solutions play key roles in computing systems such as servers and client devices, 5G wireless infrastructure, switches, routers, and other related applications.

Our Communications and Computing customers need to address a variety of challenges.

- As client compute devices become smaller and smarter, there is a need for small form factor devices with power efficiency to interface with a variety of sensors and add intelligence.
- As server architectures become increasingly complex, customers need simplified control logic, enhanced hardware platform security, system status monitoring, and rigorous power and thermal management.
- Networks typically require progressively higher bandwidth and increased reliability as more data is demanded by connected devices.
- As wireless cellular sites become more compact, there is a growing requirement for smaller form factors optimized for low power consumption and thermal management.

Lattice FPGAs solve these customer problems. Our FPGAs are optimized for input/output ("I/O") expansion, hardware acceleration, and hardware management. Our FPGAs consume power at very low rates, which reduces operating costs. Their small form factor enables higher functional density in less space. Finally, our FPGAs are I/O rich, which allows for more connections with system application specific integrated circuits ("ASICs") and application specific standard products ("ASSPs").

Examples of where our products enable intelligent automation in the **Industrial and Automotive Market** include Industrial Internet of Things ("IoT"), machine vision, robotics, factory automation, advanced driver assistance systems ("ADAS"), and automotive infotainment.

Our Industrial and Automotive customers face numerous challenges:

- As factories automate to improve efficiency and employee safety, sensors, machine vision, and robotics are proliferating, in turn requiring increasing amounts of data to be gathered, connected, and processed.
- Automobiles and other forms of transportation are also becoming smarter and more connected. Drivers and passengers are demanding better in-cabin experiences including entertainment, diagnostics, and enhanced safety — often involving multiple displays, cameras, and sensors.
- As factories and automotive manufacturers continue their evolution of computerization, power reduction, faster time to design-in and market, lower costs are becoming increasingly normal.

Our product portfolio helps solve these challenges. Our small-sized, low-power FPGAs not only provide the I/O expansion, bridging, connectivity, and processing inherent in FPGAs, but they also form the backbone of several integrated solutions, including motor control, complete High Definition ("HD") camera and DVR solutions on a single FPGA device, and Human-Machine Interfaces ("HMI") on a chip.

In the **Consumer Market**, you can find our solutions making products smarter and smaller, including smart home devices, prosumer devices, sound bars, high end projectors, Augmented Reality ("AR") / Virtual Reality ("VR"), and wearables.

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

- More intelligence and computing power. Products need to be "always-on" and "always-aware."
- Longer battery lives for handheld devices and reduced energy consumption for plugged-in devices.
- Real-time transmission of higher resolution video content on larger screen sizes.
- Fast design cycles. Products must be quickly and easily differentiated.
- Smaller form factors. Products need to lay flatter on the wall or fit more easily into pockets.
- Various levels of video processing and analytics.

Lattice FPGAs bring multiple benefits to these customers. An FPGA's parallel architecture enables faster processing than competing devices, such as microcontrollers, allowing for a user experience with shorter pauses and fewer delays. Our FPGAs are among the most power efficient in the industry, enabling the application processor and other high-power components to remain dormant longer, resulting in longer battery life. Finally, with some of the industry's smallest packages, we enable thinner and more compact end products.

Our proprietary solutions help our customers get their products to market faster than typical development cycles of custom ASICs. With re-programmability and flexibility, our FPGAs inherently allow our customers to have quicker product development. The time-to-market advantages of Lattice's solutions are critical given the shorter product life cycles in our customers' end markets.

## **Our Products, Services, and Competition**

We are focused on delivering FPGAs and related solutions to help solve our customers' problems. We also serve our customers with IP licensing and various other services.

### **Field Programmable Gate Arrays ("FPGAs")**

FPGAs are regular arrays of logic that can be custom-configured by the user through software. This programmability allows our customers flexibility and reduced time to market while allowing us to offer the chips to many different customers in many different markets. Lattice FPGA product families include:

- **The Lattice Avant™, Certus™ and LatticeECP™ device families** are our "General Purpose FPGAs" and address a broad range of applications across multiple markets. They offer customers the optimal cost per gate, Digital Signal Processing ("DSP") capability, and Serialize-Deserialize ("SERDES") connectivity. ECP devices are optimized for the Communications and Computing market but also find significant use in the Industrial, Automotive, and Consumer markets. The latest introduction in our general purpose family, Lattice Avant-E™ FPGAs, are designed to solve key customer challenges at the Edge by combining class-leading power efficiency, size and performance with an optimized feature set tailored to the needs of mid-range FPGA Edge applications like data processing and AI.
- **The Lattice Mach™ device family** are our "Control & Security FPGAs" and are designed for platform management and security applications. They are control-oriented and offer optimized cost per I/O and cost per look-up table. Mach™ FPGAs are widely used across our three end market groups: Communications and Computing, Industrial and Automotive, and Consumer. Lattice MachXO5™-NX family, the fifth device built on the award-winning Lattice Nexus™ platform are our latest addition to the Mach™ FPGA family, enabling the latest generation of secure control through increased logic and memory resources, robust 3.3 V I/O support, and a differentiated security feature set.

- [The Lattice iCE™ device family](#), are our “Ultra Low Power FPGAs.” Their small size and ultra-low power make them the optimal products for each of our core segments where small form factor and customizing is required. The latest member of the family, the iCE40 UltraPlus™ device, is focused on IoT Edge devices with its AI capabilities, low power, and small form factor.
- [The Lattice CrossLink™ device family](#) are our "Video Connectivity FPGAs" and are optimized for high-speed video and sensor applications. CrossLink combines the power and speed benefits of hardened video camera and display bridging cores with the flexibility of FPGA fabric. Lattice CrossLinkPlus™ devices provide users with instant-on capabilities for video display. Lattice CrossLink-NX™ FPGAs, built on the Lattice Nexus platform, provide the lowest power in the smallest packages in its class, higher performance, and high reliability. These products are designed for Computing, Industrial, Automotive, and Consumer markets, but also find use in Communications.

To enable our customers to get to market faster we support our FPGAs with IP cores, reference designs, development kits, and design software. We are investing in our design software, such as Lattice Radiant™, to deliver best-in-class tools that enable predictable design convergence, and Lattice Propel™ for unparalleled ease in creating embedded processor-based designs. We have developed integrated system-level solution stacks, such as Lattice ORAN™ for robust control data security, flexible fronthaul synchronization, and low power hardware acceleration for secure, adaptable, Open Radio Access Network (ORAN) deployment, as well as Lattice sensAI™ for Edge AI applications, Lattice mVision™ for low power embedded vision, Lattice Sentry™ for implementing hardware security, and Lattice Automate™ for industrial automation and robotics. We combine all of these elements to solve specific customer problems such as the need to quickly implement low power AI inferencing in Edge applications. Further, we have application software such as Glance by Mirametrix™ that allows users to control the AI and computer vision experience of their end systems.

Depending on the application, we may compete with other FPGA vendors, as well as producers of ASICs, ASSPs, and microcontrollers. We believe that Lattice has developed products and solutions with differentiated advantages.

### **Legacy Semiconductor Products**

We also sell Video Connectivity ASSPs, although we are not developing new products in this area and their support requirements are minimal.

### **IP Licensing and Services**

Lattice has a broad set of technological capabilities and many U.S. and international patents. We generate revenue from our technology portfolio via upfront fees and on-going royalty payments through the following activities:

- [Standard IP Licensing](#) - these activities include our participation in two consortia for the licensing of High-Definition Multimedia Interface™ ("HDMI") and Mobile High-Definition Link™ ("MHL") standard technologies to customers who adopt the technology into their products and voluntarily report their usage and royalties. The royalties are split among consortium members, including us.
- [IP Core Licensing](#) - some customers need Lattice's technology for specific functions or features, but for various reasons are not able to use our silicon solutions. In those cases, we may license our IP cores, which they can integrate into their own ASICs. In contrast to the use of consortia, these licensing activities are generally performed internally.
- [Patent Monetization](#) - we consider sales of certain patents from our portfolio generally for technology that we are no longer actively developing. The revenue from these sales generally consists of upfront payments and potential future royalties.
- [IP Services](#) - we undergo projects and design services for customers who wish to develop specific solutions that harness our proven technology and expertise.

### **Research and Development**

We place a substantial emphasis on new product development, where return on investment is the key driver. We believe that continued investment in research and development is required to maintain and improve our competitive position. Our research and development activities are focused on new proprietary products, advanced packaging, existing product enhancements, software development tools, soft IP cores, and application focused hardware and software solutions. These research and development activities occur primarily at our sites in Hillsboro, Oregon; San Jose, California; Montreal, Canada; Shanghai, China; Muntinlupa City, Philippines; and Penang, Malaysia.

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

### **Operations**

We operate primarily as a fabless semiconductor provider and, therefore, we maintain strategic relationships with large, established semiconductor foundries to source our finished silicon wafers and manufacture our silicon products. This strategy allows us to focus our internal resources on product and market development and eliminate the fixed cost of owning and operating manufacturing facilities. We are able to take advantage of the ongoing advanced process technology development efforts of semiconductor foundries and apply those technologies when they become most economically beneficial to us and to our customers.

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

#### Wafer Fabrication

Lattice partners with Taiwan Semiconductor Manufacturing Company ("TSMC") to develop and manufacture on 16nm technology, which is used in our Avant platform of FPGA products, and to manufacture our 350nm, 130nm, 55nm and 40nm products. We partner with Samsung Semiconductor ("Samsung") to develop and manufacture the first low-power FPGA on 28nm fully depleted silicon-on-insulator ("FD-SOI") technology, which is used in our Nexus platform of FPGA products. We partner with United Microelectronics Corporation ("UMC") and its subsidiary United Semiconductor Japan Corporation ("USJC") to manufacture our products on its 130nm, 90nm, 65nm, and 40nm CMOS process technologies, as well as embedded flash memory in these process nodes. We partner with Seiko Epson ("Epson") to manufacture our 500nm, 350nm, 250nm and 180nm products.

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

#### Assembly

All of our assembly and test operations are performed by industry-leading outsourced assembly and test suppliers ("OSATs") with our primary supplier being Advanced Semiconductor Engineering, Inc. ("ASE"). We perform certain test operations as well as reliability and quality assurance processes internally during the development process. We have achieved and maintained ISO9001:2015 Quality Management Systems Certification and released a line of products qualified to the AEC-Q100 Reliability Standard in support of Automotive product offerings in addition to ISO26262 certification on both Automotive products and software.

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 two major assembly partners, ASE and Amkor Technology ("Amkor") and are second sourced where volume and customer requirements are necessary. All ASE and Amkor manufacturing of our products is in Asia. 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 (Sort and Final Test)

We electrically sort test the die on most wafers prior to shipment for assembly. Wafer sort testing is primarily performed by ASE in Taiwan and Malaysia, Amkor in Japan, and our second source, King Yuan Electronics Co. ("KYEC") in Taiwan.

Following assembly, but prior to customer shipment, each product undergoes final testing and quality assurance procedures. Final testing is performed by ASE and Amkor.

#### **Sales and Revenue**

We generate revenue by monetizing our technology designs and patents through product and technology sales. This involves distribution channel and direct sales of silicon-based hardware and silicon-enabling products, as well as the licensing or sale of IP that we have developed or acquired, some of which we use in our products, and certain design services that we may provide.

#### Sales and Customers

We primarily sell our products to customers from Lattice Semiconductor Corporation or our wholly-owned subsidiary, Lattice SG Pte. Ltd. Independent distributors are significant customers, and a substantial portion of our sales are made into this channel. Additionally, we sell both directly and through a network of independent manufacturers' representatives. We also employ a direct sales management and field applications engineering organization to support our end customers and indirect sales resources. End customers for our products are primarily Original Equipment Manufacturers ("OEMs") in the Communications and Computing, Industrial and Automotive, and Consumer end markets. Our sales team attempts to drive multi-generational design wins within these OEMs and leverages our distribution partners to grow our broad customer base.

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.



In fiscal years 2022, 2021, and 2020, sales to distributors accounted for approximately 89%, 87%, and 83%, respectively, of our net revenue. 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 multiple global distributors. We also have regional distribution in Asia, Japan, Europe, and Israel, and we sell through three major on-line distributors. Revenue from foreign sales as a percentage of total revenue was 86%, 88%, and 89% for fiscal 2022, 2021, and 2020, respectively. We assign revenue to geographies based on ship-to location of our customers. Both foreign and domestic sales are denominated in U.S. dollars.

#### Backlog

Our backlog consists of orders from distributors and certain OEMs that generally require delivery within the next year. Historically, our backlog has not been a predictor of future sales or customer demand for the following reasons:

- Purchase orders, consistent with common industry practices, generally can be revised or canceled up to 60 days before the scheduled delivery date without significant penalty.
- A portion of our revenue comes from our "turns business," where the product is ordered and delivered within the same quarter.

#### Seasonality

We periodically experience variability in our sales volumes and financial results due to seasonal trends in the end markets we serve, the cyclical nature of the semiconductor industry, and general economic conditions.

#### **IP, Patents, and Licensing**

We seek to protect our products, technologies, and IP primarily through patents, trade secrets, copyrights, trademark registrations, licensing restrictions, confidentiality agreements, and other approaches designed to protect proprietary information. We hold numerous United States and international patents and have patent applications pending in the United States and internationally. In addition to protecting innovations designed into our products, our ownership and maintenance of patents is an important factor in the determination of our share of the royalties from the implementation of the HDMI standard. Our current patents will expire at various times over the next 20 years, subject to our payment of periodic maintenance fees. We believe that our patents have value, and we expect to file future patent applications in both the United States and abroad on significant inventions, as we deem appropriate. We have acquired various licenses from third parties to certain technologies that are implemented in IP cores or embedded in our products. These licenses support our continuing ability to make and sell these products to our customers. While our various IP rights are important to our success, we believe our business as a whole is not materially dependent on any particular patent or license, or any particular group of patents or licenses.

#### **Human Capital Management**

We provide a safe and positive work environment that emphasizes respect for individuals, ethical conduct, and learning and development that is facilitated by a direct employee engagement model. The health and safety of our employees is of utmost importance to us. We have aligned to local COVID-19 guidance to return to normal operations while maintaining actions to safeguard the health and well-being of our employees and our business. Recognizing and respecting our global presence, we strive to maintain a diverse and inclusive workforce everywhere we operate. As of December 31, 2022, we had 949 employees worldwide.

We believe our employees are the foundation of our success and that our future growth depends, in part, on our ability to continue to attract and retain key executive, technical, sales, and management personnel. Due to our growth and cadence of new product introductions we are particularly focused on highly skilled engineers involved in the design, development, and support of new and existing products and processes. In order for us to attract the best talent, we provide a collaborative, diverse, inclusive, and innovative work environment, competitive compensation, and recognition to give our employees the opportunity to grow. We are focused on developing diverse teams and continuing to build an inclusive culture that inspires leadership, encourages innovative thinking, and supports the development and advancement of all.

Our human capital management objectives include identifying, recruiting, incentivizing, and integrating our existing and future employees. We strive to attract and retain talented employees by offering competitive compensation and benefits that support their health, financial, and emotional well-being. Our compensation philosophy is based on rewarding each employee's individual and team contributions and striving to achieve equal pay for equal work. We use a combination of fixed and variable pay including base salary, bonuses, performance awards, and stock-based compensation. The principal purposes of our equity incentive plans are to attract, retain, and motivate employees through the granting of stock-based compensation awards. We offer employees benefits that vary by country and are designed to address local laws and cultures and to be competitive in the marketplace.



**Corporate Information and Public Information Availability**

Our corporate headquarters are located at 5555 NE Moore Court, Hillsboro, Oregon 97124, and our website is [www.latticesemi.com](http://www.latticesemi.com). Information contained or referenced on our website is not incorporated by reference into, and does not form a part of, this Annual Report on Form 10-K. Our common stock trades on the NASDAQ Global Select Market under the symbol LSCC.

We make available, free of charge through the Investor Relations section of our website at [ir.latticesemi.com](http://ir.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 NE Moore Court, Hillsboro, Oregon 97124, telephone (503) 268-8000. Our SEC filings are also available at the SEC's website at [www.sec.gov](http://www.sec.gov).

Our Investor Relations website also provides notifications of news or announcements regarding our financial performance and other items that may be material or of interest to our investors and for complying with our disclosure obligations under Regulation FD, including SEC filings, press releases, earnings releases, and webcasts of our earnings calls. Further, corporate governance information, including our corporate governance policies, director code of ethics, code of conduct, board committee charters, conflict minerals report and conflict minerals policy, is also available on the investor relations section of our website.

The content on any website referred to in this filing is not incorporated by reference into this filing unless expressly noted otherwise.

## ITEM 1A. Risk Factors

The following risk factors and all of the other information included in this Annual Report on Form 10-K should be carefully considered in their entirety before making an investment decision relating to our common stock. If any of the risks described below occur, our business, financial condition, operating results, and cash flows could be materially adversely affected, and the trading price of our common stock could decline. 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 to be immaterial also may materially adversely affect our business, financial condition, and operating results. Effects from global health, business, or political events, and the related impacts to economic and operating conditions, may further affect the volatility or degree of known and unknown risks.

### Risk Factor Summary

#### Factors Related to Economic, Legal, Regulatory & Political Business Conditions

- Economic, legal, regulatory, political, and business conditions related to our global business.
- The impact of tariffs, trade sanctions or similar actions on our business.
- The impact of pandemics or widespread global health problems on our business.

#### Factors Related to Manufacturing our Products

- Geopolitical exposure of our subcontractors that we rely on to supply silicon wafers, packaging, and testing to manufacture our semiconductor products.
- Our achievement of continued yield and quality improvements to meet our internal cost and customer quality goals, and the potential impact of shortages in, or increased costs of, wafers and other materials.
- Potential warranty claims and other costs related to our products.

#### Factors Related to Intellectual Property and Litigation

- Fluctuations in our revenue and margins caused by the intellectual property licensing component of our business strategy.
- Material fluctuations in our revenue and gross margins caused by intermittent sales of patents and significant licensing transactions.
- The impact of actual and potential litigation and unfavorable results of legal proceedings on our business.
- Variability in our share of royalties for the HDMI standard as a result of our evolving participation in the HDMI standard.
- Our ability to protect our new and existing intellectual property rights.

#### Factors Related to Overall Business & Operations

- Proper functioning of our information technology systems, including in response to data breaches, cyber-attacks, or cyber-fraud.
- The impact of climate change on our business.
- Goodwill impairments and other impairments under U.S. GAAP that may impact our business.
- Changes to financial accounting standards applicable to us and any related changes to our business practices.
- Exposure to unanticipated tax consequences as a result of changes in effective tax rates, tax laws and our global organizational structure and operations.
- Weakness in our internal control over financial reporting and business processes.
- Our ability to compete with others to attract and retain key personnel, and any loss of, or inability to attract, such personnel.
- Our failure to adequately foresee and insure against risks related to our business.
- Limitations to our flexibility caused by our outstanding indebtedness.

#### Factors Related to Our Markets and Product Development

- Cyclical market patterns and potential downturns in our industry or our end markets.
- Our ability to develop and introduce new products that achieve customer and market acceptance.
- Competition with companies that have significantly greater resources than us and numerous other product solutions.
- Our reliance on independent contractors and third parties to provide key services in our product development and operations.

#### Factors Related to Our Sales and Revenue

- Our dependence on our distributors and a concentrated group of end customers.
- Fluctuations in and the unpredictability of our business and our sales cycles.
- Accounting requirements related to sales through our distribution channel.

#### General Risk Factors

- Our operations are subject to the effects of rising inflation and recessionary concerns.
- Disruptions to our worldwide operations and supply chain due to natural or human-induced disasters.
- The trading price of our common stock has been and may continue to be subject to volatility.
- Disruption in and impacts of acquisitions, divestitures, strategic investments and strategic partnerships on our business.

## **Factors Related to Economic, Legal, Regulatory & Political Business Conditions**

***Our global business operations expose us to various economic, legal, regulatory, political, and business risks, which could impact our business, operating results and financial condition.***

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

Worldwide political and economic conditions may create uncertainties that could adversely affect our business. For example, the continuing military conflict between Ukraine and Russia, as well as the financial and trade-related restrictions associated with Russia and Belarus and economic sanctions on certain individuals and entities in Russia and Belarus, may further disrupt global supply chains and could result in shortages of key materials that our suppliers and foundry partners require to satisfy our needs. Additionally, the U.S. government announced new controls regarding semiconductor- and supercomputer-related products and new restrictions affecting U.S. persons' ability to send certain chips and chip-related technology and software to China without an export license. These controls may also impact the global supply chain and could result in shortages of key materials that our suppliers and foundry partners require to satisfy our needs. Any deterioration in the relations between Taiwan and China, and other factors affecting military, political or economic conditions in Taiwan or elsewhere in Asia, could adversely impact our third-party manufacturing partners and suppliers located in the region, which could disrupt our business operations. Countries in Europe and Asia have proposed, or recently adopted, significant increases in their military budgets and the outbreak of new, or expansion of current, military conflicts could adversely affect our business. Furthermore, adverse macroeconomic conditions, such as rising inflation and labor shortages, may affect demand for our products or increase our product or labor costs, negatively impacting our revenues, gross margins, and overall financial results.

Our domestic and international business activities are subject to economic, political and regulatory risks, including: increased inflation; volatility in financial markets; fluctuations in consumer liquidity; changes in interest rates; price increases for materials and components; trade barriers or changes in trade policies; political instability; acts of war or terrorism; natural disasters; economic sanctions; weak economic conditions; environmental regulations; labor regulations; disruptions to labor markets; import and export regulations; tax or freight rates; duties; trade restrictions; interruptions in transportation or infrastructure; anti-corruption laws; domestic and foreign governmental regulations; potential vulnerability of and reduced protection for intellectual property; disruptions or delays in production or shipments; and instability or fluctuations in currency exchange rates, any of which could lead to decreased demand for our products or a change in our results of operation. Although our business has not been materially impacted by supply chain constraints, inflation, or labor market disruptions, events outside of our control could have a material adverse impact on our business, operating results, and financial condition in the future. Uncertainty about future political and economic conditions makes forecasting demand and providing guidance difficult. Accordingly, our expectations are subject to change without warning and investors are cautioned not to place undue reliance on them.

If we fail to comply with the many laws and regulations to which we are subject, both within the United States and internationally, we may be subject to significant fines, penalties or liabilities for noncompliance, which could harm our business and financial results. For example, effective May 2018, the European Union adopted the General Data Protection Regulation ("GDPR"), which established new requirements regarding the handling of personal data and non-compliance monetary penalties of up to the higher of 20 million Euros or 4% of worldwide revenue. Effective January 2020, California adopted the California Consumer Privacy Act ("CCPA"), which imposes significant fines and penalties for violations. Additionally, the California Privacy Rights Act, which extends and expands the CCPA, became effective January 2023. Other states in the United States have proposed, and in certain cases enacted, legislation similar to the CCPA. Other countries outside of the European Union, including the United Kingdom, China, and Brazil, also have enacted robust legislation addressing privacy, data protection, and cybersecurity and providing for substantial penalties for noncompliance. We anticipate that our efforts to comply with evolving laws and regulations addressing privacy, data protection, and cybersecurity will be a rigorous and time-intensive process that may increase our cost of doing business and may require us to change our policies and practices. Additionally, as a public company, we are subject to the requirements of federal securities laws, requirements of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the rules and regulations of the SEC, and the listing standards of the Nasdaq Stock Market. Noncompliance with these requirements could result in penalties, fines, liabilities, or reputational harm, which could harm our business or financial results.

Any inability or perceived inability to adequately comply with applicable laws or regulations could result in claims, demands, and litigation by private actors or governmental authorities, investigations and other proceedings by governmental authorities, injunctive relief, fines, penalties, and other liabilities, any of which may harm our reputation and market position and could adversely affect our business, financial condition, and results of operations.

***Our business could suffer as a result of tariffs and trade sanctions or similar actions.***

The imposition by the United States of tariffs, sanctions or other restrictions on goods imported from outside of the United States or countermeasures imposed in response to such government actions could adversely affect our operations or our ability to sell our products globally, which could adversely affect our operating results and financial condition. The materials subject to these tariffs may impact the cost of raw materials used by our suppliers or in our customers' products. The imposition of further tariffs by the United States on a broader range of imports, or further retaliatory trade measures taken in response to additional tariffs, could increase costs in our supply chain or reduce demand of our customers' products, either of which could adversely affect our results of operations.

Our customers or suppliers could also become subject to U.S. regulatory scrutiny or export restrictions. For example, in 2019 the U.S. Justice Department filed criminal charges against one of our customers in China and imposed a licensing requirement on this customer with a policy of denial for some items, which has limited our ability to do business with this customer. In 2020, the U.S. imposed additional regulatory restrictions on the sale of U.S. controlled technology to customers in China, including establishing additional licensing requirements for the sale of U.S.-originated technology for certain applications or to companies that participate in the Chinese national security supply chain and limiting the fabrication of devices for certain Chinese companies where U.S. technology is involved in the fabrication process. Furthermore, in August 2020 the U.S. established additional licensing requirements for one of our China customers and its affiliates that limit any sales of products to that customer or for that customer's products absent a license. The U.S. government may add additional Chinese companies to its restricted entity list or impose additional licensing requirements that we may be unable to meet in a timely manner or at all. Additionally, in October 2022 the U.S. government announced new controls regarding semiconductor- and supercomputer-related products and new restrictions affecting U.S. persons' ability to send certain chips and chip-related technology and software to China without an export license, which may impact the global supply chain and could negatively affect our business.

Where license requirements are imposed, there can be no assurance that the U.S. government will grant licenses to permit the continuation of business with these customers. Future sanctions similar to those imposed in the past and to those recently imposed could adversely affect our ability to earn revenue from these and similar customers. In addition, the imposition of sanctions or other restrictions on customers in China may cause those customers to seek domestic alternatives to our products and those of other United States semiconductor companies. Further, the Chinese government has developed an unreliable entity list, which limits the ability of companies on the list to engage in business with Chinese customers. We cannot predict what impact these and future actions, sanctions or criminal charges could have on our customers or suppliers, and therefore our business. If any of our other customers or suppliers become subject to sanctions or other regulatory scrutiny, if our customers are affected by tariffs or other government trade restrictions, or if we become subject to retaliatory regulatory measures, our business and financial condition could be adversely affected.

***Pandemics or other widespread public health problems could adversely affect our business, results of operations, and financial condition in a material way.***

Pandemics, epidemics or other widespread public health problems, such as the ongoing COVID-19 pandemic, could negatively impact our business. Outbreaks have, and could again, result in significant government measures to control the spread of disease, including, among others, restrictions on travel, manufacturing, and the movement of employees. If, for example, pandemics were to occur in ways that significantly disrupt the manufacture, shipment, and buying patterns of our products or the products of our customers, this may materially negatively impact our operating results, including revenue, gross margins, operating margins, cash flows and other operating results, and our overall business. Disruptions to manufacturing and shipping could also constrain our supplies, leading to operational delays, disruptions and inflationary pressures. Our customers may also experience closures of their manufacturing facilities or inability to obtain other components, either of which could negatively impact demand for our solutions.

For example, the spread and impact of the COVID-19 pandemic throughout Asia and other jurisdictions in which we operate continues to fluctuate and its impacts remain uncertain. The majority of our products are manufactured, assembled, and tested by third parties in Asia. In addition, we also have other operations in China, the Philippines, and the United States. We rely on third party vendors for certain logistics and shipping operations throughout the world, including in Malaysia, Singapore, South Korea, Japan, and Taiwan. Recently, China relaxed government restrictions related to controlling the spread of COVID-19, which may result in disruptions to our manufacturing, supply chain and operations.

The ultimate impact of a pandemic on our operations and financial performance depends on many factors that are not within our control, including, but not limited, to: governmental, business, and individuals' responses; general economic uncertainty in key global markets; volatility in financial markets, labor markets, and supply chains; global economic conditions and levels of economic growth; and the pace of recovery when the pandemic subsides. Pandemics may negatively impact the overall economy and, as a result of the foregoing, could negatively impact our operating results and may do so in a material way. In particular, pandemics or other widespread public health problems may increase or change the severity of our other risks reported in this Annual Report on Form 10-K.

## **Factors Related to Manufacturing our Products**

***We rely on subcontractors to supply and fabricate silicon wafers and to perform assembly and test operations for our semiconductor products. If they are unable to do so on a timely and cost-effective basis in sufficient quantities and using competitive technologies, we may incur significant costs or delays.***

We rely on foundries in Japan, Korea and Taiwan to supply and fabricate silicon wafers for our semiconductor products, including Taiwan Semiconductor Manufacturing, Samsung Semiconductor, United Microelectronics Corporation, and Seiko Epson. We rely on our OSATs in Malaysia, Taiwan and Japan to support the packaging and test of our products, including Advanced Semiconductor Engineering and Amkor Technology. Our success is dependent upon our ability to successfully partner with our foundry and OSAT suppliers and their ability to produce wafers and finished semiconductor products with competitive prices and performance attributes, including smaller process geometries, which ability may be impacted by labor market disruptions and rising inflation. Establishing, maintaining and managing multiple foundry and OSAT relationships requires the investment of management resources and costs.

If we fail to maintain our foundry and OSAT relationships, if these partners do not provide facilities and support for our development efforts, if they are insolvent or experience financial difficulty, if their operations are interrupted by the ongoing COVID-19 pandemic, or if we elect or are required to change foundries or OSATs, we may incur significant costs and delays. If our foundry or OSAT partners are unable to, or do not, manufacture sufficient quantities of our products at acceptable yields, we may be required to allocate the affected products among our customers, prematurely limit or discontinue the sales of certain products, or incur significant costs to transfer products to other foundries or OSATs, which could adversely affect our customer relationships and operating results.

***Our margins are dependent on our achieving continued yield and quality improvements, cost reductions, and the supply and cost of wafers and materials.***

We rely on obtaining yield, quality, productivity, and logistic 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 that such cost reductions and new product introductions do not occur in a timely manner, because of inflation, increases in personnel costs, employee turnover, or other factors, or that our products do not achieve market acceptance or market acceptance at acceptable pricing, our margins, operating results, and financial condition could be materially adversely affected.

Furthermore, worldwide manufacturing capacity for our products may be impacted by many factors which may impact availability and cost. If the demand for silicon wafers or assembly material exceeds market supply, or if suppliers increase prices to cover the cost of rising inflation, our supply of silicon wafers or assembly material could quickly become limited or prohibitively expensive. A shortage in manufacturing capacity could hinder our ability to meet product demand and therefore reduce our revenue. Silicon wafers constitute a material portion of our product cost, and if we are unable to purchase wafers at favorable prices, due to supply constraints, inflation, or other factors, our margins, results of operations, and financial condition may be adversely affected.

***We may be subject to warranty claims and other costs related to our products.***

In general, we warrant our products for varying lengths of time against non-conformance to our specifications and certain other defects. Because our products, including hardware, software, and intellectual property cores, are highly complex and increasingly incorporate advanced technology, our quality assurance programs may not detect all defects, whether these are specific manufacturing defects affecting individual products or these are systemic defects that could affect numerous shipments. Our inability to detect a defect could result in a diversion of our engineering resources from product development efforts, increased engineering expenses to remediate the defect, and increased costs due to customer accommodation or inventory impairment charges. On occasion, we have also repaired or replaced certain components, made software fixes, or refunded the purchase price or license fee paid by our customers due to product or software defects. Our insurance may be inadequate to protect against these issues. 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 financial condition and results of operations and may harm our reputation.

## **Factors Related to Intellectual Property and Litigation**

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

Our business strategy includes licensing our intellectual property to companies that incorporate it into their technologies that address multiple markets, including markets where we participate and compete. Our Licensing and services revenue may be impacted by the introduction of new technologies by customers in place of the technologies we license, changes in the law that may weaken our ability to prevent the use of our patented technology by others, the expiration of our patents, and changes of demand or selling prices for products using licensed patents. We cannot assure that our licensing customers will continue to license our technology on commercially favorable terms or at all, or that these customers will introduce and sell products incorporating our technology, accurately report royalties owed to us, pay agreed upon royalties, honor agreed upon market restrictions, or maintain the confidentiality of our proprietary information, or will not infringe upon or misappropriate our intellectual property. Our intellectual property licensing agreements are complex and may depend upon many factors that require significant judgments, including completion of milestones, allocation of values to delivered items and customer acceptance.

***Our sale of patents and intermittent significant licensing transactions can cause material fluctuations in our revenue and gross margins.***

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

Our Licensing and services revenue fluctuates, sometimes significantly, from period to period because it is heavily dependent on a few key transactions being completed in a given period, the timing of which is difficult to predict and may not match our expectations. Licensing and services revenue may include revenue from the sales of patents, which may be difficult to complete and which may have complex terms for the payment which affects revenue recognition. Because of its high margin, the Licensing and services revenue portion of our overall revenue can have a disproportionate impact on gross profit and profitability. In addition, generating revenue from patent sales and intellectual property licenses is a lengthy and complex process that may last beyond the period in which our efforts begin, and the accounting rules governing the recognition of revenue from patent sales and intellectual property licensing transactions are increasingly complex and require significant judgment. As a result, the amount of license revenue recognized in any period may differ significantly from our expectations.

***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 may not yet be resolved, including but not limited to any that are discussed under [Note 15 - Contingencies](#) to our Consolidated Financial Statements in Part II, Item 8 of this report, and additional claims may arise in the future. Results of legal proceedings cannot be predicted with certainty. Regardless of merit or outcome, claims or 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 or enter into a material settlement, 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.

***Our participation in the HDMI standard is evolving, and our share of adopter fees and royalties for the HDMI standard is subject to variability.***

We share HDMI royalties with the other HDMI Founders based on an allocation formula, which is reviewed generally every three years. In the fourth quarter of fiscal 2019, the HDMI Founders adopted a new agreement covering the five-year period beginning January 1, 2018. The HDMI Founders are currently negotiating a new agreement covering the next sharing period beginning January 1, 2023. The amount of our portion of the royalty allocation is dependent on the royalties generated by adopter sales of royalty-bearing HDMI technology, which are subject to variability in economic trends particularly in the market for consumer electronics.

***If we are unable to adequately protect our new and existing intellectual property rights globally, 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 globally. 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.

## **Factors Related to Overall Business & Operations**

***Our business depends on the proper functioning of information technology systems. A failure of these systems, data breaches, cyber-attacks, or cyber-fraud may cause business disruptions, compromise our intellectual property or other sensitive information, or result in losses.***

We rely on various information technology ("IT") networks and systems to manage our operations, including financial reporting, and we regularly make changes to improve them as necessary by periodically implementing new, or upgrading or enhancing existing, operational and IT systems, procedures, and controls. These systems are supported by subcontractors, and they may also be subject to power and telecommunication outages or other general system failures. The legal, regulatory and contractual environments surrounding information security, data privacy, and data protection are complex and evolving. We continue to commit significant resources to implementing new systems to standardize our processes worldwide and to develop our capabilities in these areas. We are focused on realizing the full analytical functionality of these conversions, which can be extremely complex, in part, because of the wide range of legacy systems and processes that must be integrated.

In the normal course of business, we may implement new or updated IT systems and, as a result, we may experience delays or disruptions in the integration of these systems, or the related procedures or controls. The policies and security measures established with our IT systems may be vulnerable to security breaches and incidents, cyber-attacks, or fraud. We may also encounter errors in corruption or loss of data, an inability to accurately process or record transactions, and security or technical reliability issues. All of these could harm our ability to conduct core operating functions such as processing invoices, shipping and receiving, recording and reporting financial and management information on a timely and accurate basis, and could impact our internal control compliance efforts. If the technical solution or end user training are inadequate, it could limit our ability to manufacture and ship products as planned. Moreover, the proper functioning of the internal processes that the IT systems and networks support relies on qualified employees. Competition for qualified employees has generally increased across the economy in the United States, which, if we experience employee turnover, could lead to disruptions in our processes, inadequate end user training or difficulty updating our IT systems and networks.

We maintain sensitive data on our networks and on the networks of our business partners and third-party providers, including proprietary and confidential information relating to our intellectual property, personnel, and business, and that of our customers and third-party providers. Companies have been increasingly subject to a wide variety of security incidents, cyber-attacks, hacking, phishing, malware, ransomware, and other attempts to gain unauthorized access to systems or data, or to engage in fraudulent behavior. Cyber-attacks have become more prevalent, sophisticated and much harder to detect and defend against and it is often difficult to anticipate or detect such incidents on a timely basis and to assess the damage caused by them. In addition, our agreements with third-party providers, including but not limited to the liability limitations and insurance provisions contained in such agreements, may be inadequate to cover the liability, if any, associated with any security breaches. Increasing geopolitical tensions or conflicts have also created, and may continue to create, a heightened risk of cyberattacks. Our policies and security measures cannot guarantee security, and our information technology infrastructure, including our networks and systems, may be vulnerable to security breaches and incidents, cyber-attacks, or fraud. In the past, third parties have attempted to penetrate and/or infect our network and systems with malicious software and phishing attacks in an effort to gain access to our network and systems. In addition, we are subject to the risk of third parties falsifying invoices and similar fraud, frequently by obtaining unauthorized access to our vendors' and business partners' networks.

In some circumstances, we may partner with third-party providers and provide them with certain data, including sensitive data, or the ability to access or otherwise process such data. These third parties also face substantial security risks from a variety of sources. There can be no assurance that any security measures that we or our third-party service providers have implemented will be effective against current or future security threats, and we cannot guarantee that our systems and networks or those of our third-party service providers have not been breached or otherwise compromised, or that they and any software in our or their supply chains do not contain bugs, vulnerabilities, or compromised code that could result in a breach of or disruption to our systems and networks or the systems and networks of third parties that support us and our services. If any of our third-party providers fails to adopt or adhere to adequate data security practices, or suffers a security breach or incident, any data, including sensitive data, that we provide them or that they otherwise may access or process for us may be improperly accessed, used, disclosed, modified, lost, destroyed, or rendered unavailable. Any security breaches or incidents that we or our third-party providers may suffer could compromise our intellectual property, expose sensitive business information and otherwise result in unauthorized access to or disclosure, modification, misuse, loss or destruction of sensitive information. We may need to expend significant financial and development resources to analyze, correct, eliminate, or work around errors or defects or to eliminate or otherwise address security vulnerabilities, and we and our third-party service providers may face difficulties or delays in identifying or otherwise responding to any potential security breach or incident.



Further, the increase in cyber-attacks has resulted in an increased focus on cybersecurity by certain government agencies. Any cyber-attack or other security breach or incident that we or our third-party providers may suffer, or the perception that any such attack, breach, or incident has occurred, could result in a loss of customer confidence in our security measures, damage to our brand, reputation, and market position, result in unauthorized access to or disclosure, modification, misuse, loss, corruption, unavailability, or destruction of our data or other sensitive data that we or our third-party providers process or maintain, disrupt normal business operations, require us to spend material resources to investigate or correct any breach or incident and to prevent future security breaches and incidents, expose us to legal claims and liabilities, including litigation, regulatory investigations and enforcement actions, and indemnity obligations, and adversely affect our revenues and operating results. Further, any such actual or perceived breach or incident, and any claims, demands, litigation, or investigations or enforcement actions related to cybersecurity could cause us to incur significant remediation costs, result in product development delays, disrupt key business operations, and divert attention of management and key information technology resources. In addition, we may incur loss as a result of cyber-fraud, such as those experienced by other companies by making unauthorized payments irrespective of robust internal controls.

Failure or disruptions of our IT systems or difficulties or delays in maintaining, managing, and integrating them could adversely affect our controls and procedures and could impact our ability to perform necessary operations, which could materially adversely affect our business.

We cannot be certain that our insurance coverage will be adequate for data security liabilities incurred and, will cover any indemnification claims against us relating to any incident, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results, and reputation.

***Climate change may have a long-term impact on our business.***

Climate-related risks are inherent wherever our business is conducted. Global climate change is causing, and is projected to continue to cause, an increase in the frequency and intensity of certain natural disasters and adverse weather, such as drought, wildfires, storms, sea-level rise, flooding, heat waves, and cold waves, occurring more frequently or with greater intensity. Such extreme events are driving changes in market dynamics, stakeholder expectations, and local, national and international climate change policies and regulations, any of which could result in disruptions to us, our suppliers, vendors, customers and logistics hubs, and may impact employees' abilities to commute or to work from home effectively. These disruptions could make it more difficult and costly for us to deliver our products and services, obtain components or other supplies through our supply chain, maintain, or resume operations or perform other critical corporate functions, and could reduce customer demand for our products and services.

The increasing concern over climate change could also result in transition risks such as shifting customer preferences and increased regulatory requirements. Changing customer preferences may result in increased expectations regarding our solutions, products, and services, including the use of packaging materials and other components in our products and their environmental impact. These expectations may cause us to incur additional costs or make other changes to our operations to respond to them, which could adversely affect our financial results. If we fail to manage transition risks and customer expectations in an effective manner, customer demand for our solutions, products, and services could diminish, and our profitability could suffer. Concerns over climate change, as well as the adoption of new laws or regulations, may also impact market dynamics and may result in shifts in customer expectations, preferences, or requirements, which may require us to change our practices or incur increased costs or adversely impact customer demand for our products and services.

Additionally, concerns over climate change have resulted in, and are expected to continue to result in, the adoption of legal and regulatory requirements designed to address climate change, as well as legal and regulatory requirements requiring certain climate-related disclosures. Where new laws or regulations are more stringent than current legal or regulatory requirements, we may experience increased compliance burdens and costs to meet such obligations. Climate change also may reduce the availability or increase the cost of insurance for these negative impacts of natural disasters by contributing to an increase in the incidence and severity of such natural disasters. Ultimately, the impacts of climate change, whether involving physical risks (such as disruptions resulting from climate-related events or rising sea levels) or transition risks (such as regulatory changes, changes in market dynamics or increased operating costs, including the cost of insurance) are expected to be widespread and unpredictable and may materially adversely affect our business and financial results.

***We regularly test for goodwill and other impairments as required under U.S. GAAP, and we may incur future impairments.***

We are required under U.S. GAAP to test goodwill for possible impairment on an annual basis and to test goodwill and long-lived assets, including amortizable intangible assets, for impairment at any other time that circumstances arise indicating the carrying value may not be recoverable. For purposes of testing goodwill for impairment, the Company currently operates as one reporting unit: the core Lattice business, which includes intellectual property and semiconductor devices. There were no impairment charges to goodwill or amortizable intangible assets in fiscal years 2022, 2021, or 2020. There is no certainty that future impairment tests will indicate that goodwill or amortizable intangible assets will be deemed recoverable. As we continue to review our business operations and test for impairment or in connection with possible sales of assets, we may have impairment charges in the future, which may be material.

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

We prepare our consolidated financial statements to conform to generally accepted accounting principles in the United States. These accounting principles are subject to interpretation by the American Institute of Certified Public Accountants, the SEC and various bodies formed to interpret and create accounting rules and regulations. Changes in these rules have occurred in the past and future changes to these rules, or in the guidance relating to interpretation and adoption of the rules, could have a material effect on our financial results and could affect portions of our business differently. Accounting standards also require us to make estimates and assumptions in connection with the preparation of our financial statements, and any changes to those estimates and assumptions could adversely affect our results of operations, cash flows and financial condition.

***Changes in effective tax rates, tax laws and our global organizational structure and operations could expose us to unanticipated tax consequences.***

We are subject to taxation in the United States and other countries. Certain tax positions may remain open to examination for several years. Challenges by tax authorities to our previous tax positions and intercompany transfer pricing arrangements, and continuing assessments of our tax exposures may have an adverse effect on our provision for income taxes and cash tax liability. We have a global tax structure that aligns our corporate structure with our global business operations, and we currently operate legal entities in multiple countries. We may choose to consolidate or integrate certain of these entities, and these integration activities, as well as changes in composition of our earnings in jurisdictions with different tax rates, may impact the taxes we pay or tax provision we record, which could adversely affect our results of operations. Furthermore, various levels of government are focused on tax reform and other legislative actions to increase tax revenue.

We also may be impacted by changes in the tax laws of the United States and foreign jurisdictions. President Biden signed into law the Inflation Reduction Act of 2022 (“IRA”) on August 16, 2022 and the CHIPS and Science Act of 2022 on August 9, 2022. These laws implement new tax provisions, including a 1% excise tax on certain stock repurchases made by publicly traded corporations after December 31, 2022, and provide for various incentives and tax credits. The Organisation for Economic Co-operation and Development, which represents a coalition of member countries, recommended changes to numerous long-standing tax principles, including a 15% global minimum tax. If implemented by taxing authorities, such changes, as well as changes in taxing jurisdictions’ administrative interpretations, decisions, policies, and positions, could have a material adverse effect on our business, results of operations, or financial condition. In addition, future effective tax rates could be affected by changes in the valuation of deferred tax assets and liabilities.

***Weakness in our internal control over financial reporting and business processes could adversely affect our business and financial results.***

We are required to maintain internal controls over financial reporting. We review these controls regularly and deficiencies may be identified from time to time. In the future, we may identify material weaknesses in our internal controls over financial reporting. Any failure to maintain an effective system of internal controls over financial reporting could limit our ability to report our financial results accurately and timely, which could adversely affect our business, financial results, and stock price.

We must also maintain high quality business processes. We rely on our business processes to, among other things, coordinate with our suppliers, manage our supply chain efficiently, manufacture high quality products and comply with various laws and regulations. Any failure to maintain high quality business processes, or to effectively adjust our business processes to changing circumstances and needs, could limit our ability to meet our business’ needs, which could adversely affect our business, financial results, and stock price.

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

We depend on the efforts and abilities of certain key members of management and other technical personnel. Our future success depends, in part, upon our ability to retain such personnel and attract and retain other highly qualified personnel, particularly product engineers who can respond to market demands and required product innovation. Competition for such personnel is intense and has been increasing generally throughout the economy, and we may not be successful in hiring or retaining new or existing qualified personnel. If we lose existing qualified personnel or are unable to hire new qualified personnel, as needed, we could have difficulty competing in our highly competitive and innovative environment.

***Our insurance may not adequately cover certain risks and, as a result, our financial condition and results may be adversely affected.***

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

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

As of December 31, 2022, we had approximately \$130 million outstanding in revolving loans under an amended and restated credit agreement, dated September 1, 2022 (the "2022 Credit Agreement"). Our obligations under the 2022 Credit Agreement are guaranteed by certain of our U.S. subsidiaries meeting materiality thresholds set forth in the 2022 Credit Agreement, and the revolving loans under the 2022 Credit Agreement may be repaid and reborrowed at our discretion, with any remaining outstanding principal amount due and payable on the maturity date of the revolving loan facility on September 1, 2027. Our ability to meet our debt service obligations depends upon our operating and financial performance, which is subject to general economic and competitive conditions and to financial, business and other factors affecting our operations, many of which are beyond our control. If we are unable to service our debt, we may need to sell material assets, restructure or refinance our debt, or seek additional equity capital. Prevailing economic conditions and global credit markets could adversely impact our ability to sell material assets, restructure or refinance our debt on terms acceptable to us, or at all, or we may not be able to restructure or refinance our debt without incurring significant additional fees and expenses.

The 2022 Credit Agreement contains customary affirmative and negative covenants, including covenants limiting the ability of the Company and our subsidiaries to, among other things, incur debt, grant liens, undergo certain fundamental changes, make investments, make certain restricted payments, dispose of assets, enter into transactions with affiliates, and enter into burdensome agreements, in each case, subject to limitations and exceptions set forth in the 2022 Credit Agreement. We are also required to maintain compliance with a total net leverage ratio and an interest coverage ratio, in each case, determined in accordance with the terms of the 2022 Credit Agreement.

The amount and terms of our indebtedness, as well as our credit rating, could have important consequences, including the following:

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

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

## **Factors Related to Our Markets and Product Development**

***The semiconductor industry routinely experiences cyclical market patterns and our products are used across different end markets. A significant downturn in the industry or in any of these end markets could cause a meaningful reduction in demand for our products and adversely affect our operating results.***

Our revenue and gross margin can fluctuate significantly due to downturns in the highly cyclical semiconductor industry. These downturns can be severe and prolonged and can result in price erosion and weak demand for our products. Weak demand for our products resulting from general economic conditions affecting the end markets we serve, or the semiconductor industry specifically, and reduced spending by our customers can result, and in the past has resulted, in diminished product demand, high inventory levels, erosion of average selling prices, excess and obsolete inventories and corresponding inventory write-downs. Our expense levels are based, in part, on our expectations of future sales. Many of our expenses, particularly those relating to facilities, capital equipment, and other overhead, are relatively fixed. We might be unable to reduce spending quickly enough to compensate for reductions in sales. Accordingly, shortfalls in sales could adversely affect our operating results. Furthermore, any significant upturn in the semiconductor industry could result in increased competition for access to raw materials and third-party service providers.

Additionally, our products are used across different end markets, and demand for our products is difficult to predict and may vary within or among our Industrial and Automotive, Communications and Computing, and Consumer end markets. Our target markets may not grow or develop as we currently expect, and demand may increase or change in one or more of our end markets, and changes in demand may reduce our revenue, lower our gross margin and effect our operating results. We have experienced concentrations of revenue at certain customers and within certain end markets, and we regularly compete for design opportunities at these customers and within these markets. Any deterioration in these end markets, reductions in the magnitude of revenue streams, our inability to meet design and pricing requirements, or volatility in demand for our products could lead to a reduction in our revenue and adversely affect our operating results. Our success in our end markets depends on many factors, including the strength or financial performance of the customers in our end markets, our ability to timely meet rapidly changing product requirements, market needs, and our ability to maintain design wins across different markets and customers to dampen the effects of market volatility. 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 may not be reliable predictors of our future results. If we are unable to accomplish any of the foregoing, or to offset the volatility of cyclical changes in the semiconductor industry or our end markets through diversification into other markets, these factors could materially and adversely affect our business, financial condition, and operating results.

***Our success and future revenue depend on our ability to develop and introduce new products that achieve customer and market acceptance.***

We compete in a dynamic environment characterized by rapid technology and product evolution, generally followed by a relatively longer process of ramping up to volume production on advanced technologies. Our end customers' continued use of our products is frequently reevaluated, as certain of our customers' product life cycles are relatively short and they continually develop new products. The selection process for our products to be included in our customers' new products is highly competitive. There are no guarantees that our products will be included in the next generation of products introduced by these customers. Additionally, our markets are also characterized by evolving industry standards and increased demand for higher levels of integration and smaller process geometry. Our competitive position and success depend on our ability to innovate, develop, and introduce new products that compete effectively on the basis of price, density, functionality, power consumption, form factor, and performance, and our addressing the evolving needs of the markets we serve, among other things. With increased introduction of new products, we expect revenue related to mature products to decline over time in a normal product life cycle. As a result, we may be increasingly dependent on revenue derived from our newer products.

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

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

The failure of any of these factors, among others, could adversely affect our product innovation, development and introduction efforts and our financial condition and results of operations.

***We compete against companies that have significantly greater resources than us and numerous other product solutions.***

The semiconductor industry is highly competitive and many of our direct and indirect competitors have substantially greater financial, technological, manufacturing, marketing, and sales resources than us. Consolidation in our industry may increasingly mean that our competitors have greater consolidated resources, or other synergies, including the ability to attract qualified employee or incorporate higher costs into product and service prices, that could put us at a competitive disadvantage. We currently compete directly with companies that have licensed our technology or have developed similar products, as well as numerous semiconductor companies that offer products based on alternative solutions, such as applications processor, application specific standard product, microcontroller, analog, and digital signal processing technologies. Competition from these semiconductor companies may intensify as we offer more products in any of our end markets. These competitors include established, multinational semiconductor companies, as well as emerging companies.

***We depend on independent contractors and third parties to provide key services in our product development and operations, and any disruption of their services, or an increase in cost of these services, could negatively impact our financial condition and results of operations.***

We depend on subcontractors to provide cost effective and efficient services in our product development and supply chain functions, including test and assembly services, software and hardware development, support of intellectual property cores, inventory management, order fulfillment and direct sales logistics.

Our operations and operating results may be adversely affected if we experience problems with our subcontractors that impact the delivery of product to our customers. These problems may include: schedule delays or defects in software or hardware development deliverables; prolonged inability to obtain wafers or packaging materials with competitive performance and cost attributes; inability to achieve adequate yields or timely delivery; inability to meet customer timelines or demands; disruption or defects in assembly, test, or shipping services; or delays in stabilizing manufacturing processes or ramping up volume for new products. If our third-party supply chain providers were to reduce or discontinue services for us or their 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, weak economic conditions, inflation, recession, labor market disruptions, or any other reason, our financial condition and results of operations could be adversely affected.

**Factors Related to Our Sales and Revenue**

***Our revenues depend on our relationships with our distributors and on a concentrated group of end customers. An adverse change in the relationships with, or performance of, our distributors, or any reduction in the use of our products by our end customers, could harm our sales and significantly decrease our revenue.***

We depend on a concentrated group of distributors to sell our products to end customers, complete order fulfillment, maintain sufficient inventory of our products and provide services to our end customers. In fiscal 2022, revenue attributable to sales to distributors accounted for 89% of our total revenue, with two distributors accounting for 59% of total revenue. We have significant outstanding receivables with our top distributors, and expect our distributors to generate a significant portion of our revenue in the future. Any adverse change to our relationships or agreements with our distributors, a failure by one or more of our distributors to perform its obligations to us, or consolidation in the distribution industry could have a material impact on our business, including a reduction in our access to certain end customers, or our ability to sell our products.

If our relationships with any material customers were to diminish, if these customers were to develop their own solutions or adopt alternative solutions or competitors' solutions, if any one or more of our concentrated groups of customers were to experience significantly adverse financial conditions, including as a result of inflation, economic slowdown or recession, or labor market disruptions, or if as a result of trade disputes or sanctions these customers were restricted from purchasing our products, our results could be adversely affected.

In addition, the inability of customers to obtain credit, the insolvency of one or more customers, or tariffs applicable to our customers' products, could impact our sales. Any of these effects could impact our ability to effectively manage inventory levels and collect receivables, require additional restructuring actions, and decrease our revenue and profitability.

***The nature of our business and length of our sales cycle makes our revenue, gross margin, net income, and inventory subject to fluctuation and difficult to accurately predict.***

A number of factors, including how products are manufactured to support end markets, yield, wafer pricing, cost of packaging raw materials, product mix, market acceptance of our new products, competitive pricing dynamics, product quality, geographic and/or end market mix, and pricing strategies, can cause our revenue, gross margins, net income, and inventory to fluctuate significantly either positively or negatively from period to period.

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. During our sales cycle, our customers typically test and evaluate our products prior to deciding to include our products into the design of their own products, and then require additional time to begin volume production of their products. This lengthy sales cycle may cause us to incur significant expenses, which could be exacerbated by rising inflation, experience significant production delays and to incur additional inventory costs before we receive a customer order that may be delayed or never get placed. A key strategic customer may demand certain design or production resources to meet their requirements or work on a specific solution, which could cause delays in our normal development schedule and result in significant investment of our resources or missed opportunities with other potential customers. We may incur these expenses without generating revenue from our products to offset the expenses.

While our sales cycles are typically long, our average product life cycles can be short as a result of the rapidly changing technology environment in which we operate. From time to time, our inventory levels may be higher than historical norms due to inventory build decisions aimed at meeting expected demand, ramping for new products, reducing direct material cost, or enabling responsiveness to expected demand. In the event the expected demand does not materialize, or if our short sales cycle does not generate sufficient revenue, we may be subject to incremental excess and obsolescence costs.

These factors make it difficult for us to accurately forecast future sales and project quarterly revenues. The difficulty in forecasting future sales weakens our ability to project our inventory requirements, which could result, and in the past has resulted, in inventory write-downs or failure to meet customer product demands in a timely manner. While we may issue guidance, difficulty in forecasting financial performance, relative customer and product mix, and the unpredictability of unknown variables and their impact on our financial performance may impair the accuracy of our forward-looking financial measures.

***Accounting requirements related to sales through our distribution channel could result in our reporting revenue in excess of demand.***

Revenue recognition standards require recognition of revenue based on estimates and may require us to record revenue from distributors that is in excess of actual end customer demand. Since we have limited ability to forecast inventory levels of our end customers, we depend on the timeliness and accuracy of resale reports from our distributors. Late or inaccurate resale reports could mask significant build-up of inventories in our distribution channel, have a detrimental effect on our ability to properly recognize revenue, and impact our ability to forecast future sales. An inventory build-up in our distribution channel could result in a slowdown in orders, requests for returns from customers, or requests to move out planned shipments. If our distributors do not ultimately sell the inventory and our estimates change, we could be required to materially correct our recognized revenue in a future period, depending on actual results. Any failure to manage these challenges could disrupt or reduce sales of our products and unfavorably impact our financial results.

**General Risk Factors**

***Our operations are subject to the effects of inflationary pressures and recessionary concerns.***

Global economic conditions have recently experienced historically high levels of inflation, and there is increasing concern about the potential for recession. Recent inflation is primarily believed to be the result of the economic impacts from the ongoing COVID-19 pandemic, including the global supply chain disruptions, strong economic recovery and associated widespread demand for goods, and government stimulus packages, among other factors. For instance, global supply chain disruptions have resulted in shortages in materials and services. Such shortages have resulted in inflationary cost increases for labor, materials, and services across the economy, and could continue to cause costs to increase as well as scarcity of certain products. If the inflation rate continues to increase, it will affect our expenses. To the extent inflation results in rising interest rates and has other adverse effects on the market, including the possibility of recession, it may adversely affect our consolidated financial condition and results of operations.

***Business disruptions could seriously harm our future revenue, cash flows, and financial condition and increase our costs and expenses.***

Our worldwide operations and supply chain could be disrupted by natural or human-induced disasters including, but not limited to, earthquakes, tsunamis, or floods; hurricanes, cyclones, or typhoons; fires, or other extreme weather conditions; power or water shortages; telecommunications failures; materials scarcity and price volatility; manufacturing equipment failures; IT system failures; cybersecurity attacks; data breaches; medical epidemics or pandemics (such as COVID-19); terrorist acts, civil unrest, military actions, conflicts, or wars; or other natural or man-made disasters or catastrophic events.

The occurrence of any of these business disruptions could adversely affect our competitive position and result in significant losses, decrease demand for our products, seriously harm our revenue, profitability and financial condition, increase our costs and expenses, make it difficult or impossible to provide services or deliver products to our customers or to receive components from our suppliers, create delays and inefficiencies in our supply chain, result in the need to impose employee travel restrictions, and require substantial expenditures and recovery time in order to fully resume operations. The impacts and frequency of any of the above could furthermore be exacerbated by climate change, particularly in countries where we, or our suppliers or customers, operate that have limited infrastructure and disaster recovery resources.

Our operations and those of our significant suppliers and distributors could be adversely affected if manufacturing, logistics, or other operations in key locations, including logistics hubs in Asia, are disrupted for any reason, such as those described above or other economic, business, labor, environmental, public health, regulatory or political reasons. In addition, even if our operations are unaffected or recover quickly, if our customers cannot timely resume their own operations due to a catastrophic event, they may reduce or cancel their orders, or these events could otherwise result in a decrease in demand for our products. Although it is impossible to completely predict the occurrences or consequences of any such events, forecasting disruptive events and building additional resiliency into our operations accordingly will become an increasing business imperative.

***The trading price of our common stock has been and may continue to be subject to volatility in response to a variety of factors.***

Our common stock has experienced substantial price volatility in the past and may continue to do so in the future. Additionally, the technology industry and the stock market as a whole has experienced extreme volatility that often has been unrelated to the performance of particular companies. The trading price of our common stock may fluctuate widely due to various factors, including, but not limited to, actual or anticipated fluctuations in our financial condition and operating results; changes in financial estimates by us or financial or other market estimates and ratings by securities and other analysts; our ability to develop new products, enter new market segments, gain market share, manage cyber-security and litigation risk, diversify our customer base, and successfully secure manufacturing capacity; news regarding our products or products of our competitors; any mergers, acquisitions or divestitures of assets undertaken by us; inflationary conditions, interest rate changes, and recessionary concerns; regulatory changes to international trade policies, economic sanctions, or export controls, such as new licensing requirements for exporting certain chip-related technology to China; terrorist acts or acts of war, including the ongoing conflict between Ukraine and Russia; epidemics and pandemics, such as developments and restrictions with respect to the COVID-19 pandemic; trading activity in our common stock, including stock repurchases, actions by institutional or other large stockholders, or our inclusion in market indices; or general economic, industry, and market conditions worldwide.

The volatility of our stock may cause the value of a stockholder's investment to change rapidly. Investors in our common stock may not realize any return on their investment in us and may lose some or all of their investment. Additionally, if our stock price declines, it may be more difficult for us to raise capital and may have other adverse effects on our business. Stock price fluctuations could impact the value of our equity compensation, which could affect our ability to recruit and retain employees. Volatility in the trading price of our common stock could also result in the filing of securities class action litigation matters, which could result in substantial costs and the diversion of management time and resources. For these reasons, investors should not rely on recent or historical trends to predict future trading prices of our common stock, financial condition, results of operations, or cash flows.

***Acquisitions, divestitures, strategic investments and strategic partnerships could disrupt our business and adversely affect our financial condition and operating results.***

We may pursue growth opportunities by acquiring complementary businesses, solutions or technologies through strategic transactions, investments or partnerships. The identification of suitable acquisition, strategic investment or strategic partnership candidates can be costly and time consuming and can distract our management team from our current operations. If such strategic transactions require us to seek additional debt or equity financing, we may not be able to obtain such financing on terms favorable to us or at all, and such transaction may adversely affect our liquidity and capital structure. We may also choose to divest certain non-core assets, which divestitures could lead to charges against earnings and may expose us to additional liabilities and risks. Any strategic transaction might not strengthen our competitive position, may increase some of our risks, and may be viewed negatively by our customers, partners or investors. Even if we successfully complete a strategic transaction, we may not be able to effectively integrate the acquired business, technology, systems, control environment, solutions, personnel or operations into our business or global tax structure. We may experience unexpected changes in how we are required to account for strategic transactions pursuant to U.S. GAAP and may not achieve the anticipated benefits of any strategic transaction. We may incur unexpected costs, claims or liabilities that we incur during the strategic transaction or that we assume from the acquired company, or we may discover adverse conditions post acquisition for which we have limited or no recourse.



## Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

We lease a 47,800 square foot space in Hillsboro, Oregon as our corporate headquarters and a research and development facility through October 2028.

In San Jose, California, we have 98,874 square feet under lease through September 2026, of which we use 49,579 square feet as a research and development facility. We vacated 49,295 square feet during the fourth quarter of 2018. During 2019, we vacated a 23,680 square foot office space in Portland, Oregon, which we have subleased through the end of the lease in March 2025.

In Muntinlupa City, Philippines, we lease a total of 50,503 square feet through May 2025 for research and development and operations facilities. In Shanghai, China, we lease 68,027 square feet through May 2024 for research and development operations. We also lease office facilities in multiple other 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.

## Item 3. Legal Proceedings

The information contained under the heading "Legal Matters" in [Note 15 - Contingencies](#) to our Consolidated Financial Statements in Part II, Item 8 of this report is incorporated by reference into this Part I, Item 3. Also, see "Litigation and unfavorable results of legal proceedings could adversely affect our financial condition and operating results" in "Risk Factors" in Item 1A of Part I of this Annual Report on Form 10-K.

## Item 4. Mine Safety Disclosures

Not applicable.

## PART II

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

#### Market Information

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

#### Holders

As of February 13, 2023, we had approximately 177 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 our business. We have never paid cash dividends.

#### Recent Sales of Unregistered Securities

None.

#### Issuer Purchases of Equity Securities

On August 8, 2022, we announced that our Board of Directors had approved a stock repurchase program pursuant to which up to \$150 million of outstanding common stock could be repurchased from time to time (the "2023 Repurchase Program"). The duration of the 2023 Repurchase Program is through the end of December 2023. Under the 2023 Repurchase Program during the fourth quarter of fiscal 2022, we repurchased 288,652 shares for \$20.0 million, or an average price paid per share of \$69.27. All repurchases were open market transactions funded from available working capital. All shares repurchased pursuant to the 2023 Repurchase Programs were retired by the end of the fourth quarter of fiscal 2022. We have repurchased a total of 1,951,934 shares for \$110.1 million, or an average price paid per share of \$56.42, during fiscal year 2022.

The following table contains information regarding our repurchases of our common stock that is registered pursuant to Section 12 of the Securities Exchange Act of 1934 during the fourth quarter of fiscal 2022:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (a)	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (\$M) (b)
October 2, 2022 through October 29, 2022	—	\$ —	—	\$ 149.7
October 30, 2022 through November 26, 2022	—	\$ —	—	\$ 149.7
November 27, 2022 through December 31, 2022	288,652	\$ 69.27	288,652	\$ 129.7
Total	288,652	\$ 69.27	288,652	\$ 129.7

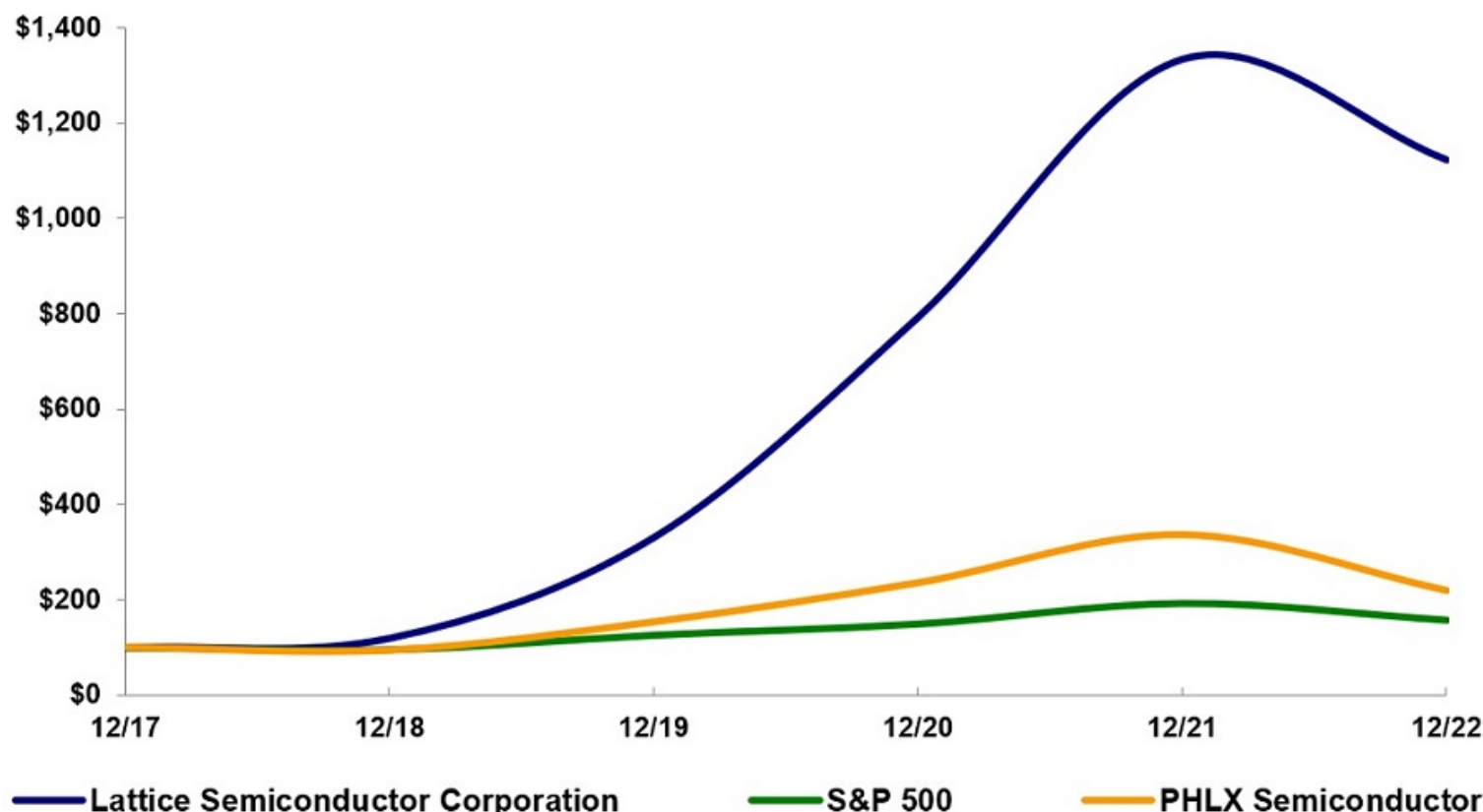
- (a) All repurchases during the quarter were open-market transactions funded from available working capital made under the authorization from our Board of Directors to purchase up to \$150.0 million of our common stock announced August 8, 2022.
- (b) As of December 31, 2022 this amount consisted of the remaining portion of the \$150.0 million program authorized through the end of December 2023 that was announced August 8, 2022.

**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 2017 through December 2022. 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 12/31/17 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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	12/17	12/18	12/19	12/20	12/21	12/22
<b>Lattice Semiconductor Corporation</b>	100.00	119.72	331.14	792.73	1333.22	1122.49
<b>S&amp;P 500</b>	100.00	95.62	125.72	148.85	191.58	156.89
<b>PHLX Semiconductor</b>	100.00	93.95	153.39	235.71	336.71	219.26

*The stock price performance included in this graph is not necessarily indicative of future stock price performance.*

**Item 6. Reserved**

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

### Overview

Lattice Semiconductor Corporation and its subsidiaries ("Lattice," the "Company," "we," "us," or "our") develop technologies that we monetize through differentiated programmable logic semiconductor products, silicon-enabling products, system solutions, design services, and licenses. Lattice is the low power programmable leader. We solve customer problems across the network, from the Edge to the Cloud, in the growing communications, computing, industrial, automotive, and consumer markets. Our technology, long-standing relationships, and commitment to world-class support lets our customers quickly and easily unleash their innovation to create a smart, secure, and connected world.

Lattice has focused its strategy on delivering programmable logic products and related solutions based on low power, small size, and ease of use. We also serve our customers with IP licensing and various other services. Our product development activities include new proprietary products, advanced packaging, existing product enhancements, software development tools, soft IP, and system solutions for high-growth applications such as Edge AI, 5G infrastructure, platform security, and factory automation.

This discussion and analysis of financial condition and results of operations should be read in conjunction with our consolidated financial statements and accompanying notes included in Part II, Item 8. "Financial Statements and Supplementary Data" of this report. Discussions of results for prior periods (fiscal 2021 compared to fiscal 2020) are incorporated by reference from our [Annual Report on Form 10-K for the year ended January 1, 2022](#).

### Impact of COVID-19 and Global Economic Environment on our Business

The COVID-19 pandemic, increased financial market volatility, inflationary pressure, rising interest rates, recessionary concerns, and geopolitical tension continue to impact business globally and may impact our operations by causing disruption to our labor markets and supply chains. The ongoing COVID-19 pandemic, including the periodic resurgence of cases relating to the spread of new variants, has and continues to impact worldwide economic activity and poses the risk that our employees, contractors, suppliers and other partners may be prevented from conducting business activities. The extent to which the COVID-19 pandemic, increased financial market volatility, inflationary pressures and related uncertainty will impact our business activities will depend on future developments that are highly uncertain and cannot be predicted at this time. See the section entitled "Risk Factors" in Item 1A of Part I of this report for further information about related risks and uncertainties.

### Critical Accounting Policies and Use of Estimates

Critical accounting policies are those that are both most important to the portrayal of a company's financial condition and results of operations, and that 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.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and judgments affecting the amounts reported in our consolidated financial statements and the accompanying notes. We base our estimates and judgments on historical experience, knowledge of current conditions, and our beliefs of what could occur in the future considering available information. While we believe that our estimates, assumptions, and judgments are reasonable, they are based on information available when made, and because of the uncertainty inherent in these matters, actual results may differ materially from these estimates under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis.

We believe the following accounting policies and the related estimates are critical in the portrayal of our financial condition and results of operations, and require management's most difficult, subjective, or complex judgments. See [Note 1 - Nature of Operations and Significant Accounting Policies](#) to our Consolidated Financial Statements in Part II, Item 8 of this report for further information on the significant accounting policies and methods used in the preparation of the consolidated financial statements.

### Revenue from Contracts with Customers

We recognize revenue upon satisfaction of performance obligations when control of promised goods or services has been transferred to our customers. We measure revenue based on the amount of consideration we expect to be entitled to in exchange for products or services. For revenue recognized on both sales to distributors and related to HDMI and other royalties, the amount of consideration we expect to be entitled to receive is based on estimates that require assumptions and judgments relating to trends in recent and historical activity. See [Note 1 - Basis of Presentation and Significant Accounting Policies](#) to our Consolidated Financial Statements in Part II, Item 8 of this report for further information on our recognition of revenue. Sales to most distributors are made under terms allowing certain price adjustments upon sale to their end customers and limited rights of return of our products held in their inventory. The revenue recognized based on estimated price adjustments and stock rotation reserves may be materially different from the actual consideration received if the actual distributor price adjustments and stock rotation returns differ significantly from the historical trends used in the estimates.

## **Inventories and Cost of Revenue**

Inventories are stated at the lower of actual cost (determined using the first-in, first-out method) or net realizable value. We review and set standard costs quarterly to approximate current actual manufacturing costs. Our manufacturing overhead standards for product costs are calculated assuming full absorption of actual spending over actual costs. The valuation of inventory requires us to estimate excess or obsolete inventory. Material assumptions we use to estimate necessary inventory carrying value adjustments can be unique to each product and are based on specific facts and circumstances. In determining provisions for excess or obsolete products, we consider assumptions such as changes in business and economic conditions, projected customer demand for our products, and changes in technology or customer requirements. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to Cost of revenue. If in any period we anticipate a change in assumptions such as future market or economic conditions to be less favorable than our previous estimates, additional inventory write-downs may be required and would be reflected in Cost of revenue, resulting in a negative impact to our gross margin in that period. If in any period we are able to sell inventories that had been written down to a level below the ultimate realized selling price in a previous period, related revenue would be recorded with a lower or no offsetting charge to Cost of revenue resulting in a net benefit to our gross margin in that period.

## **Business Combinations**

Business combinations are accounted for using the acquisition method of accounting, under which we allocate the purchase price paid for a company to identifiable assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. Goodwill is measured as the excess of purchase price over the fair value of identifiable assets acquired and liabilities assumed. Determining the fair value of assets acquired and liabilities assumed requires management to make assumptions, estimates, and judgments that are based on all available information, including comparable market data and information obtained from our management and the management of the acquired companies. These judgments affect the amount of consideration paid that is allocable to identified tangible and intangible assets acquired and liabilities assumed in the business combination. The estimation of the fair values of the intangible assets requires significant judgment and the use of valuation techniques including primarily the income approach. Consideration is given to all relevant factors that might affect the fair value such as estimates of future revenues and costs, present value factors, and the estimated useful lives of intangible assets.

## **Accounting for Income Taxes**

We are required to estimate our provision for income taxes and amounts ultimately payable or recoverable in numerous tax jurisdictions around the world. These estimates involve significant judgment and interpretations of regulations and are inherently complex. Resolution of income tax treatments in individual jurisdictions may not be known for many years after completion of the applicable year. 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. The determination of a valuation allowance and when it should be released requires complex judgment. In assessing the ability to realize deferred tax assets, we regularly 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.

As part of our regular financial review process, we also assess the likelihood that our tax reporting positions will ultimately be sustained on examination by the taxing authorities, based on the technical merits of the position. To the extent it is determined it is more likely than not (a likelihood of more than 50 percent) that some portion or all of a tax reporting position will ultimately not be recognized and sustained, a provision for unrecognized tax benefit is provided by either reducing the applicable deferred tax asset or accruing an income tax liability. Our judgment regarding the sustainability of our tax reporting positions may change in the future due to changes in U.S. or international tax laws and other factors. These changes, if any, may require material adjustments to the related deferred tax assets or accrued income tax liabilities and an accompanying reduction or increase in income tax expense which may result in a corresponding increase or decrease in net income in the period when such determinations are made. We recognize the tax impact of including certain foreign earnings in U.S. taxable income as a period cost.

## Results of Operations

Key elements of our Consolidated Statements of Operations, including as a percentage of revenue, are presented in the following table:

(In thousands)	Year Ended *					
	December 31, 2022		January 1, 2022		January 2, 2021	
Revenue	\$ 660,356	100.0%	\$ 515,327	100.0%	\$ 408,120	100.0%
Gross margin	452,050	68.5	321,675	62.4	245,306	60.1
Research and development	135,767	20.6	110,518	21.4	89,223	21.9
Selling, general and, administrative	122,076	18.5	105,617	20.5	95,331	23.4
Amortization of acquired intangible assets	3,778	0.6	2,613	0.5	4,449	1.1
Restructuring charges	2,551	0.4	940	0.2	3,937	1.0
Acquisition related charges	511	0.1	1,171	0.2	—	—
Income from operations	<u>\$ 187,367</u>	28.4%	<u>\$ 100,816</u>	19.6%	<u>\$ 52,366</u>	12.8%

\* The year ended January 2, 2021 was a 53-week year as compared to the other years presented, which were based on our standard 52-week year.

## Revenue

(In thousands)	Year Ended			% Change in	
	December 31, 2022	January 1, 2022	January 2, 2021	2022	2021
Revenue	<u>\$ 660,356</u>	<u>\$ 515,327</u>	<u>\$ 408,120</u>	<u>28.1%</u>	<u>26.3%</u>

Revenue increased \$145.0 million, or 28.1%, in fiscal 2022 compared to fiscal 2021, primarily from our products used in data center servers, client computing solutions, 5G wireless infrastructure, industrial automation, and robotics applications.

## Revenue by End Market

We sell our products globally to a broad base of customers in three primary end markets groups: Communications and Computing, Industrial and Automotive, and Consumer. We also provide IP licensing and services to these end markets.

Within these end markets, there are multiple segment drivers, including:

- Communications and Computing: datacenter servers and networking equipment, client computing platforms, and 5G communications infrastructure deployments,
- Industrial and Automotive: factory automation, robotics, automotive electronics, and industrial IoT,
- Consumer: smart home, prosumer, and other applications.

We also generate revenue from the licensing of our IP, the collection of certain royalties, patent sales, the revenue related to our participation in consortia and standard-setting activities, and services. While these activities may be associated with multiple markets, Licensing and services revenue is reported as a separate end market as it has characteristics that differ from other categories, most notably a higher gross margin.

The end market data below is derived from data provided to us by our customers. With a diverse base of customers who may manufacture end products spanning multiple end markets, the assignment of revenue to a specific end market requires the use of judgment. We also recognize certain revenue for which end customers and end markets are not yet known. We assign this revenue first to a specific end market using historical and anticipated usage of the specific products, if possible, and allocate the remainder to the end markets based on either historical usage for each product family or industry application data for certain product types.

The following are examples of end market applications for the fiscal years presented:

**Communications and Computing**

Wireless  
Wireline  
Data Backhaul  
Server Computing  
Client Computing  
Data Storage

**Industrial and Automotive**

Security and Surveillance  
Machine Vision  
Industrial Automation  
Robotics  
Automotive  
Drones

**Consumer**

Cameras  
Displays  
Wearables  
Televisions  
Home Theater

**Licensing and Services**

IP Royalties  
Adopter Fees  
IP Licenses  
Patent Sales

The composition of our revenue by end market is presented in the following table:

(In thousands)	Year Ended						% Change in	
	December 31, 2022		January 1, 2022		January 2, 2021		2022	2021
Communications and Computing	\$ 274,754	41.6%	\$ 217,960	42.3%	\$ 174,656	42.8%	26.1%	24.8%
Industrial and Automotive	319,399	48.4	226,240	43.9	168,323	41.2	41.2	34.4
Consumer	49,064	7.4	50,652	9.8	45,523	11.2	(3.1)	11.3
Licensing and Services	17,139	2.6	20,475	4.0	19,618	4.8	(16.3)	4.4
Total revenue	\$ 660,356	100.0%	\$ 515,327	100.0%	\$ 408,120	100.0%	28.1%	26.3%

Revenue from the Communications and Computing end market increased by 26% in fiscal 2022 compared to fiscal 2021 primarily due to content expansion in datacenter servers, new greenfield client computing opportunities, 5G infrastructure, and datacenter networking.

Revenue from the Industrial and Automotive end market increased by 41% in fiscal 2022 compared to fiscal 2021, primarily due to strong customer adoption in a broad range of applications, including industrial automation and robotics. Growth in Automotive was driven by the adoption of new designs in ADAS and infotainment applications.

Revenue from the Consumer end market decreased by 3% in fiscal 2022 compared to fiscal 2021 primarily due to macroeconomic weakness in Consumer in the current year.

Revenue from the Licensing and Services end market decreased by 16% in fiscal 2022 compared to fiscal 2021 primarily due to decreased licensing and IP royalties.

**Revenue by Geography**

We assign revenue to geographies based on ship-to location of the customer.

The composition of our revenue by geography is presented in the following table:

(In thousands)	Year Ended						% Change in	
	December 31, 2022		January 1, 2022		January 2, 2021		2022	2021
Asia	\$ 464,904	70.5%	\$ 384,568	74.6%	\$ 305,183	74.8%	20.9%	26.0%
Americas	100,260	15.2	80,870	15.7	62,137	15.2	24.0	30.1
Europe	95,192	14.3	49,889	9.7	40,800	10.0	90.8	22.3
Total revenue	\$ 660,356	100.0%	\$ 515,327	100.0%	\$ 408,120	100.0%	28.1%	26.3%



## Revenue from Customers

We sell our products to independent distributors and directly to customers. Distributors have historically accounted for a significant portion of our total revenue, and the two distributor groups noted below individually accounted for more than 10% of our total revenue in the periods covered by this report.

The composition of our revenue by customer is presented in the following table:

	% of Total Revenue Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
Weikeng Group	30.3%	37.2%	34.8%
Arrow Electronics Inc.	28.5	27.1	25.1
Other distributors	30.7	23.0	23.2
All distributors	89.5	87.3	83.1%
Direct customers	7.9	8.7	12.1
Licensing and services revenue	2.6	4.0	4.8
Total revenue	100.0%	100.0%	100.0%

## Gross margin

The composition of our gross margin, including as a percentage of revenue, is presented in the following table:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Gross margin	\$ 452,050	\$ 321,675	\$ 245,306
Gross margin percentage	68.5%	62.4%	60.1%
Product gross margin %	67.6%	60.9%	58.1%
Licensing and services gross margin %	100.0%	100.0%	100.0%

Gross margin percentage increased 610 basis points from fiscal 2021 to fiscal 2022. Improved margins were driven by benefits from our gross margin expansion strategy.

Because of its higher margin, the licensing and services portion of our overall revenue can have a disproportionate impact on Gross margin.

## Operating Expenses

### Research and Development Expense

The composition of our Research and development expense, including as a percentage of revenue, is presented in the following table:

	Year Ended			% Change in	
	December 31, 2022	January 1, 2022	January 2, 2021	2022	2021
<i>(In thousands)</i>					
Research and development	\$ 135,767	\$ 110,518	\$ 89,223	22.8%	23.9%
Percentage of revenue	20.6%	21.4%	21.9%		

Research and development expense includes costs for compensation and benefits, stock compensation, engineering wafers, depreciation, licenses, and outside engineering services. These expenditures are for the design of new products, IP cores, processes, packaging, and software solutions.

The increase in Research and development expense for fiscal 2022 compared to fiscal 2021 was due primarily to increased headcount-related costs as we continue to invest in our long-term product roadmap.

We believe that investing in research and development is important to delivering innovative products to our customers and, therefore, we expect to continue to increase our investment in research and development.

## Selling, General, and Administrative Expense

The composition of our Selling, general, and administrative expense, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Selling, general, and administrative	\$ 122,076	\$ 105,617	\$ 95,331	15.6%	10.8%
Percentage of revenue	18.5%	20.5%	23.4%		

Selling, general, and administrative expense includes costs for compensation and benefits related to selling, general, and administrative employees, commissions, depreciation, professional and outside services, trade show, and travel expenses.

The increase in Selling, general, and administrative expense for fiscal 2022 compared to fiscal 2021 was due primarily to increased headcount-related costs to support the growth of our business, and to increased legal expenses primarily related to the defense of claims outside the ordinary course of business.

## Amortization of Acquired Intangible Assets

The composition of our Amortization of acquired intangible assets, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Amortization of acquired intangible assets	\$ 3,778	\$ 2,613	\$ 4,449	44.6%	(41.3)%
Percentage of revenue	0.6%	0.5%	1.1%		

The increase in Amortization of acquired intangible assets for fiscal 2022 compared to fiscal 2021 was due to the amortization expense for new intangible assets added in the fourth quarter of fiscal 2021 through the acquisition of Mirametrix, Inc., partially offset by end of the amortization period during the first quarter of fiscal 2022 for acquired intangible assets from previous acquisitions.

## Restructuring Charges

The composition of our Restructuring charges, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Restructuring charges	\$ 2,551	\$ 940	\$ 3,937	171.4%	(76.1)%
Percentage of revenue	0.4%	0.2%	1.0%		

Restructuring charges are comprised of expenses resulting from reductions in our worldwide workforce, consolidation of our facilities, removal of fixed assets from service, and cancellation of software contracts and engineering tools. Details of our restructuring plans and expenses incurred under them are discussed in [Note 9 - Restructuring](#) to our Consolidated Financial Statements in Part II, Item 8 of this report.

Restructuring charges increased in fiscal 2022 compared to fiscal 2021 due to additional lease right-of-use asset impairment charges for our partially vacated facility in San Jose, California and contract termination fees in the current year under the internal restructuring plan that our management approved and executed in April 2019, as compared to minimal activity in the prior year.

## Acquisition Related Charges

The composition of our Acquisition related charges, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Acquisition related charges	\$ 511	\$ 1,171	\$ —	(56.4)%	100+%
Percentage of revenue	0.1%	0.2%	—%		

Acquisition related charges include legal and professional fees directly related to acquisitions. For fiscal 2022 and 2021, Acquisition related charges were entirely attributable to our acquisition of Mirametrix in November 2021 and were comprised primarily of professional services including legal and accounting fees, as well as closing costs.

## Interest Expense

The composition of our Interest expense, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Interest expense	\$ (4,146)	\$ (2,738)	\$ (3,702)	51.4%	(26.0)%
Percentage of revenue	(0.6)%	(0.5)%	(0.9)%		

Interest expense is primarily related to our long-term debt. This interest expense is comprised of contractual interest and amortization of original issue discount and debt issuance costs based on the effective interest method.

The increase in Interest expense for fiscal 2022 compared to fiscal 2021 was driven by the increase in the applicable base rate for our long-term debt, the adjusted Term Secured Overnight Financing Rate ("SOFR") from September 1, 2022, and the London Interbank Offered Rate ("LIBOR") prior to that date.

## Other (Expense) Income, net

The composition of our Other (expense) income, net, including as a percentage of revenue, is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Other (expense) income, net	\$ (1,109)	\$ (452)	\$ (208)	145.4%	117.3%
Percentage of revenue	(0.2)%	(0.1)%	(0.1)%		

For fiscal 2022 compared to fiscal 2021, the increase in Other (expense) income, net was primarily due to the \$0.7 million loss on refinancing of our long-term debt during the current year.

## Income Taxes

The composition of our Income tax expense is presented in the following table:

<i>(In thousands)</i>	Year Ended			% Change in	
	December 31,	January 1,	January 2,	2022	2021
	2022	2022	2021		
Income tax expense (benefit)	\$ 3,230	\$ 1,704	\$ 1,064	89.6%	60.2%

Our Income tax expense (benefit) is composed primarily of foreign income and withholding taxes, partially offset by benefits resulting from the release of uncertain tax positions ("UTP") due to statute of limitation expirations that occurred in the respective periods. The increase in expense in fiscal 2022 as compared to fiscal 2021 is primarily due to increased worldwide income and changes in uncertain tax positions.

We updated our evaluation of the valuation allowance position in the United States through December 31, 2022 and concluded that we should continue to maintain a full valuation allowance against the net federal and state deferred tax assets. In making this evaluation, we considered the uncertain stability of the current economic and operating environment and estimates about our ability to generate taxable income in future periods within the United States. We continue to evaluate future projected financial performance to determine whether such performance is sufficient evidence to support a reduction in or reversal of the valuation allowance. We will continue to evaluate both positive and negative evidence in future periods to determine if we will realize the deferred tax assets. The amount of the deferred tax asset considered realizable could be adjusted if sufficient positive evidence exists. Details of our deferred tax assets and valuation allowance are discussed in [Note 13 - Income Taxes](#) to our Consolidated Financial Statements in Part II, Item 8 of this report.

## Liquidity and Capital Resources

The following sections discuss material changes in our financial condition from the end of fiscal 2021, including the effects of changes in our Consolidated Balance Sheets, and the effects of our credit arrangements and contractual obligations on our liquidity and capital resources. There continues to be uncertainty around the extent and duration of the disruption to our business, including from the effects of the ongoing COVID-19 pandemic, market volatility, and inflationary pressures, which may impact our liquidity and working capital needs in future periods.

We have historically financed our operating and capital resource requirements through cash flows from operations, and from the issuance of long-term debt to fund acquisitions. Cash provided by or used in operating activities will fluctuate from period to period due to fluctuations in operating results, the timing and collection of accounts receivable, and required inventory levels, among other things. We believe that our financial resources, including current cash and cash equivalents, cash flow from operating activities, and our credit facilities, will be sufficient to meet our liquidity and working capital needs through at least the next 12 months. On September 1, 2022, we entered into our 2022 Credit Agreement, as described in [Note 8 - Long-Term Debt](#) to our Consolidated Financial Statements in Part II, Item 8 of this report. As of December 31, 2022, we did not have significant long-term commitments for capital expenditures. For further information on our cash commitments for operating lease liabilities, see [Note 10 - Leases](#) to our Consolidated Financial Statements in Part II, Item 8 of this report.

In the future, we may continue to consider acquisition opportunities to further extend our product or technology portfolios and further expand our product offerings. In connection with funding capital expenditures, acquisitions, securing additional wafer supply, increasing our working capital, or other operations, we may seek to obtain equity or additional debt financing. We may also seek to obtain equity or additional debt financing if we experience downturns or cyclical fluctuations in our business that are more severe or longer than we anticipated when determining our current working capital needs.

### Liquidity

#### Cash and cash equivalents

<i>(In thousands)</i>	<u>December 31, 2022</u>	<u>January 1, 2022</u>	<u>\$ Change</u>	<u>% Change</u>
Cash and cash equivalents	\$ 145,722	\$ 131,570	\$ 14,152	10.8%

As of December 31, 2022, we had Cash and cash equivalents of \$145.7 million, of which approximately \$30.9 million in Cash and cash equivalents was held by our foreign subsidiaries. We manage our global cash requirements considering, among other things, (i) available funds among our 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-US earnings may require us to withhold and pay foreign income tax on dividends. This should not result in our recording significant additional tax expense as we have accrued expense based on current withholding rates. As of December 31, 2022, we could access all cash held by our foreign subsidiaries without incurring significant additional expense.

The net increase in Cash and cash equivalents of \$14.2 million between January 1, 2022 and December 31, 2022 was primarily driven by cash flows from the following activities:

**Operating activities** — Cash provided by operating activities results from net income adjusted for certain non-cash items and changes in assets and liabilities. Cash provided by operating activities was \$238.8 million in fiscal 2022 compared to \$167.7 million in fiscal 2021. This increase of \$71.1 million was primarily driven by an increase of \$98.9 million provided by improved operating performance, partially offset by \$27.8 million of changes in working capital, primarily from cash used by inventories.

**Investing activities** — Investing cash flows consist primarily of transactions related to capital expenditures and payments for software and intellectual property licenses, and a business acquisition in fiscal 2021. Net cash used by investing activities in fiscal 2022 was \$34.9 million compared to \$89.8 million in fiscal 2021. This \$54.9 million decrease was primarily a result of the acquisition of Mirametrix in the prior year, which used cash, net of cash acquired, of \$68.1 million. Total cash used for capital expenditures and payments for software and intellectual property licenses increased \$13.2 million to \$34.9 million in fiscal 2022 from \$21.7 million in fiscal 2021.

**Financing activities** — Financing cash flows consist primarily of repurchases of common stock, tax payments related to the net share settlement of restricted stock units, proceeds from the exercise of options to acquire common stock, and activity on our long-term debt. Net cash used by financing activities in fiscal 2022 was \$188.1 million compared to \$128.6 million in fiscal 2021. This \$59.5 million increase was due to the following mix of activities. During fiscal 2022, we repurchased approximately 2.0 million shares of common stock for \$110.1 million compared to repurchases in fiscal 2021 of approximately 1.3 million shares of common stock for \$70.1 million. Payments for tax withholdings on vesting of RSUs partially offset by employee exercises of stock options used net cash flows of \$47.8 million in fiscal 2022, an increase of approximately \$2.4 million from the net \$45.4 million used in fiscal 2021. In September 2022, we entered into our 2022 Credit Agreement and drew down an initial \$150.0 million revolving loan at closing, which we used to pay off the \$150.0 million outstanding balance on our previous term and revolving loans. In connection with the 2022 Credit Agreement, we paid \$1.4 million in debt issuance costs. During fiscal 2022, we made a discretionary payment of \$20.0 million on our current revolving loans, and we paid required quarterly installments on our previous long-term debt totaling \$8.8 million. During fiscal 2021, we paid required quarterly installments on our long-term debt totaling \$13.1 million.

**Accounts receivable, net**

<i>(In thousands)</i>	<b>December 31, 2022</b>	<b>January 1, 2022</b>	<b>\$ Change</b>	<b>% Change</b>
Accounts receivable, net	\$ 94,018	\$ 79,859	\$ 14,159	17.7%
Days sales outstanding - Overall	49	51	(2)	

Accounts receivable, net as of December 31, 2022 increased by approximately \$14.2 million, or approximately 18%, compared to January 1, 2022. This resulted primarily from higher revenue shipments in the fourth quarter of fiscal 2022 compared to the fourth quarter of fiscal 2021. We calculate Days sales outstanding on the basis of a 365-day year as Accounts receivable, net at the end of the quarter divided by sales during the quarter annualized and then multiplied by 365.

**Inventories**

<i>(In thousands)</i>	<b>December 31, 2022</b>	<b>January 1, 2022</b>	<b>\$ Change</b>	<b>% Change</b>
Inventories	\$ 110,375	\$ 67,594	\$ 42,781	63.3%
Days of inventory on hand	187	122	65	

Inventories as of December 31, 2022 increased \$42.8 million, or approximately 63%, compared to January 1, 2022 primarily to meet the increased demands of our customers and for new product ramps.

The Days of inventory on hand ratio compares the inventory balance at the end of a quarter to the cost of sales in that quarter. We calculate Days of inventory on hand on the basis of a 365-day year as Inventories at the end of the quarter divided by Cost of sales during the quarter annualized and then multiplied by 365.

**Credit Arrangements**

On September 1, 2022, we entered into our 2022 Credit Agreement. The details of this arrangement are described in [Note 8 - Long-Term Debt](#) to our Consolidated Financial Statements in Part II, Item 8 of this report. As of December 31, 2022, we had no used or unused credit arrangements beyond the secured revolving loan facility described in the 2022 Credit Agreement.

**Share Repurchase Program**

See "Issuer Purchases of Equity Securities" under Part II, Item 5 of this Annual Report on Form 10-K for more information about the share repurchase program.

**New Accounting Pronouncements**

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

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

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. We assess these risks on a regular basis and have established policies that are designed to protect against the adverse effects of these and other potential exposures.

**Foreign Currency Exchange Rate Risk**

While our revenues and the majority of our expenses are denominated in U.S. dollars, our financial position and results of operations are subject to foreign currency exchange rate risk as a result of having various international subsidiary and branch operations. Historically, exposure to foreign currency exchange rate risk has not had a material impact on our results from operations. At times in the past, we have entered into foreign currency forward exchange contracts in relation to certain activities, which mitigated the foreign currency exchange rate exposure from an economic perspective, but these were not designated as "effective" hedges under U.S. GAAP.

**Interest Rate Risk**

We are exposed to interest rate risk related to our indebtedness. At December 31, 2022, we had \$130.0 million outstanding under our 2022 Credit Agreement. A hypothetical increase in the one-month SOFR by 1% (100 basis points) would increase our future interest expense by approximately \$0.3 million per quarter.

## Item 8. Financial Statements and Supplementary Data

### Index to Consolidated Financial Statements:

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(PCAOB ID: 42)

## LATTICE SEMICONDUCTOR CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands, except per share data)</i>			
Revenue	\$ 660,356	\$ 515,327	\$ 408,120
Cost of revenue	208,306	193,652	162,814
Gross margin	452,050	321,675	245,306
Operating expenses:			
Research and development	135,767	110,518	89,223
Selling, general, and administrative	122,076	105,617	95,331
Amortization of acquired intangible assets	3,778	2,613	4,449
Restructuring charges	2,551	940	3,937
Acquisition related charges	511	1,171	—
Total operating expenses	264,683	220,859	192,940
Income from operations	187,367	100,816	52,366
Interest expense	(4,146)	(2,738)	(3,702)
Other (expense) income, net	(1,109)	(452)	(208)
Income before income taxes	182,112	97,626	48,456
Income tax expense (benefit)	3,230	1,704	1,064
Net income	\$ 178,882	\$ 95,922	\$ 47,392
Net income per share:			
Basic	\$ 1.30	\$ 0.70	\$ 0.35
Diluted	\$ 1.27	\$ 0.67	\$ 0.34
Shares used in per share calculations:			
Basic	137,321	136,619	135,220
Diluted	140,667	142,143	141,276

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



**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Net income	\$ 178,882	\$ 95,922	\$ 47,392
Other comprehensive income (loss):			
Translation adjustment	(1,554)	(75)	1,533
Change in actuarial valuation of defined benefit pension, net of tax	591	372	(678)
Comprehensive income	<u>\$ 177,919</u>	<u>\$ 96,219</u>	<u>\$ 48,247</u>

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**

<i>(In thousands, except share and par value data)</i>	<b>December 31, 2022</b>	<b>January 1, 2022</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 145,722	\$ 131,570
Accounts receivable, net of allowance for credit losses	94,018	79,859
Inventories, net	110,375	67,594
Prepaid expenses and other current assets	29,052	22,328
Total current assets	379,167	301,351
Property and equipment, net	47,614	38,094
Operating lease right-of-use assets	17,590	23,818
Intangible assets, net	25,070	29,782
Goodwill	315,358	315,358
Other long-term assets	13,914	18,091
Total assets	<u>\$ 798,713</u>	<u>\$ 726,494</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 42,036	\$ 34,597
Accrued liabilities	48,467	26,444
Accrued payroll obligations	36,870	27,967
Current portion of long-term debt	—	17,173
Total current liabilities	127,373	106,181
Long-term debt, net of current portion	128,752	140,760
Long-term operating lease liabilities, net of current portion	13,618	19,248
Other long-term liabilities	41,807	48,672
Total liabilities	311,550	314,861
Contingencies (Note 15)		
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; 137,099,000 shares issued and outstanding as of December 31, 2022 and 137,239,000 shares issued and outstanding as of January 1, 2022	1,371	1,372
Additional paid-in capital	599,300	701,688
Accumulated deficit	(111,094)	(289,976)
Accumulated other comprehensive loss	(2,414)	(1,451)
Total stockholders' equity	487,163	411,633
Total liabilities and stockholders' equity	<u>\$ 798,713</u>	<u>\$ 726,494</u>

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
<b>Cash flows from operating activities:</b>			
Net income	\$ 178,882	\$ 95,922	\$ 47,392
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation and amortization	29,323	24,429	25,140
Stock-based compensation expense	55,530	46,475	40,372
Amortization of right-of-use assets	6,512	6,587	5,960
Impairment of operating lease right-of-use asset	1,149	—	—
Other non-cash adjustments	642	(239)	144
Changes in assets and liabilities:			
Accounts receivable, net	(14,159)	(12,013)	336
Inventories, net	(42,781)	(2,995)	(9,619)
Prepaid expenses and other assets	(6,276)	1,918	(6,441)
Accounts payable	7,439	7,046	(16,820)
Accrued liabilities	20,101	(2,855)	6,314
Accrued payroll obligations	8,903	9,692	4,624
Operating lease liabilities, current and long-term portions	(6,459)	(6,245)	(5,715)
Net cash provided by (used in) operating activities	<u>238,806</u>	<u>167,722</u>	<u>91,687</u>
<b>Cash flows from investing activities:</b>			
Cash paid for business acquisition, net of cash acquired	—	(68,099)	—
Capital expenditures	(23,338)	(9,835)	(12,121)
Cash paid for software and intellectual property licenses	(11,594)	(11,862)	(8,747)
Net cash provided by (used in) investing activities	<u>(34,932)</u>	<u>(89,796)</u>	<u>(20,868)</u>
<b>Cash flows from financing activities:</b>			
Restricted stock unit tax withholdings	(54,946)	(54,191)	(26,965)
Proceeds from issuance of common stock	7,159	8,827	10,103
Repurchase of common stock	(110,132)	(70,124)	(14,989)
Proceeds from long-term debt, net of issuance costs	148,597	—	50,000
Repayment of long-term debt	(178,750)	(13,125)	(26,250)
Net cash provided by (used in) financing activities	<u>(188,072)</u>	<u>(128,613)</u>	<u>(8,101)</u>
Effect of exchange rate change on cash	(1,650)	(75)	1,533
Net increase (decrease) in cash and cash equivalents	14,152	(50,762)	64,251
Beginning cash and cash equivalents	131,570	182,332	118,081
Ending cash and cash equivalents	<u>\$ 145,722</u>	<u>\$ 131,570</u>	<u>\$ 182,332</u>

**Supplemental disclosure of cash flow information and non-cash investing and financing activities:**

Interest paid	\$ 3,973	\$ 2,313	\$ 3,700
Operating lease payments	\$ 7,419	\$ 7,639	\$ 7,713
Income taxes paid, net of refunds	\$ 4,621	\$ 3,304	\$ 1,868
Accrued purchases of plant and equipment	\$ 1,357	\$ 1,360	\$ 975
Operating lease right-of-use assets obtained in exchange for lease obligations	\$ 2,134	\$ 8,134	\$ 2,645

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

**LATTICE SEMICONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Common Stock (\$0.01 par value)		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount				
<i>(In thousands, except par value data)</i>						
Balances, December 28, 2019	133,883	\$ 1,339	\$ 762,213	\$ (433,290)	\$ (2,603)	\$ 327,659
Components of comprehensive income, net of tax:						
Net income	—	—	—	47,392	—	47,392
Other comprehensive income (loss)	—	—	—	—	855	855
Total comprehensive income						48,247
Common stock issued in connection with employee equity incentive plans, net of shares withheld for employee taxes	2,738	27	(16,889)	—	—	(16,862)
Stock-based compensation expense	—	—	40,372	—	—	40,372
Repurchase of common stock	(385)	(4)	(14,985)	—	—	(14,989)
Balances, January 2, 2021	136,236	\$ 1,362	\$ 770,711	\$ (385,898)	\$ (1,748)	\$ 384,427
Components of comprehensive income, net of tax:						
Net income	—	—	—	95,922	—	95,922
Other comprehensive income (loss)	—	—	—	—	297	297
Total comprehensive income						96,219
Common stock issued in connection with employee equity incentive plans, net of shares withheld for employee taxes	2,270	23	(45,387)	—	—	(45,364)
Stock-based compensation expense	—	—	46,475	—	—	46,475
Repurchase of common stock	(1,267)	(13)	(70,111)	—	—	(70,124)
Balances, January 1, 2022	137,239	\$ 1,372	\$ 701,688	\$ (289,976)	\$ (1,451)	\$ 411,633
Components of comprehensive income, net of tax:						
Net income	—	—	—	178,882	—	178,882
Other comprehensive income (loss)	—	—	—	—	(963)	(963)
Total comprehensive income						177,919
Common stock issued in connection with employee equity incentive plans, net of shares withheld for employee taxes	1,812	18	(47,806)	—	—	(47,788)
Stock-based compensation expense	—	—	55,530	—	—	55,530
Repurchase of common stock	(1,952)	(19)	(110,112)	—	—	(110,131)
Balances, December 31, 2022	137,099	\$ 1,371	\$ 599,300	\$ (111,094)	\$ (2,414)	\$ 487,163

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

# LATTICE SEMICONDUCTOR CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### Note 1 - Basis of Presentation and Significant Accounting Policies

#### Basis of Presentation and Use of Estimates

The accompanying Consolidated Financial Statements have been prepared in accordance with U.S. Generally Accepted Accounting Principles ("U.S. GAAP") and pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). They include the accounts of Lattice and its subsidiaries after the elimination of all intercompany balances and transactions.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and judgments affecting the amounts reported in our consolidated financial statements and the accompanying notes. We base our estimates and judgments on historical experience, knowledge of current conditions, and our beliefs of what could occur in the future considering available information. While we believe that our estimates, assumptions, and judgments are reasonable, they are based on information available when made, and because of the uncertainty inherent in these matters, the actual results that we experience may differ materially from these estimates under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis.

Certain prior year balances have been reclassified to conform to the current year's presentation.

#### Fiscal Reporting Periods

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our fiscal 2022 was a 52-week year that ended on December 31, 2022. Our fiscal 2021 was a 52-week year that ended on January 1, 2022, and our fiscal 2020 was a 53-week year that ended on January 2, 2021. All references to quarterly or annual financial results are references to the results for the relevant fiscal period.

#### Concentrations of Risk

Potential exposure to concentrations of risk may impact revenue, accounts receivable, and supply of wafers for our new products.

Distributors have historically accounted for a significant portion of our total revenue. Our two largest distributor groups, the Weikeng Group ("Weikeng") and Arrow Electronics, Inc. ("Arrow"), each account for more than 10% of our total revenue and our net accounts receivable. Revenue attributable to distributors as a percentage of total revenue is presented in the following table:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
Weikeng Group	30%	37%	35%
Arrow Electronics Inc.	28	27	25
Other distributors	31	23	23
Revenue attributable to distributors	89%	87%	83%

At December 31, 2022 and January 1, 2022, Weikeng accounted for approximately 47% and 59%, respectively, and Arrow accounted for approximately 27% and 28%, respectively, of net accounts receivable.

Concentration of credit risk with respect to accounts receivable is mitigated by our credit and collection process including active management of collections, credit limits, routine credit evaluations for essentially all customers, and secure transactions with letters of credit or advance payments where appropriate. We regularly review our allowance for doubtful accounts and the aging of our accounts receivable.

We rely on a limited number of foundries for our wafer purchases. We seek to mitigate the concentration of supply risk by establishing, maintaining and managing multiple foundry relationships; however, certain of our products are sourced from a single foundry and changing from one foundry to another can have a significant cost, or create delays in production or shipments, among other factors.

#### Cash and Cash Equivalents

We consider all investments that are readily convertible into cash and that 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, which approximates fair value. Deposits with financial institutions at times exceed Federal Deposit Insurance Corporation insurance limits.

## Foreign Exchange and Translation of Foreign Currencies

While our revenues and the majority of our expenses are denominated in U.S. dollars, we also have international subsidiaries and branch operations that conduct some transactions in currencies that differ from the functional currency of that entity. Gains or losses from foreign exchange rate fluctuations on balances denominated in currencies that differ from the functional currencies are reflected in Other expense, net.

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 (See our Consolidated Statements of Stockholders' Equity).

## Revenue Recognition

Under the terms of ASC 606, "*Revenue from Contracts with Customers*", we recognize revenue when we satisfy performance obligations as evidenced by the transfer of control of our products or services to customers. For sales to distributors, we have concluded that our contracts are with the distributor, rather than with the distributor's end customer, as we hold a contract bearing enforceable rights and obligations only with the distributor. Our revenue is derived primarily from sales of silicon-based products, with additional revenue from sales of silicon-enabling products. We consider customer purchase orders, which in some cases are governed by master sales agreements, to be the contracts with a customer. For each contract, we consider our promise to transfer each distinct product to be the identified performance obligations. Revenue for product sales is recognized at the time of product shipment, as determined by the agreed upon contract shipping terms.

Our Licensing and services revenue is comprised of revenue from our IP core licensing activity, patent monetization activities, design services, and royalty and adopter fee revenue from our standards activities. These activities are complementary to our product sales and help us to monetize our IP associated with our technology and standards. We consider licensing arrangements with our customers and agreements with the standards consortia of which we are a member to be the contract. For each contract, we consider the promise to deliver a license that grants the customer the right to use the IP, as well as any professional services provided under the contract, as distinct performance obligations. We recognize license revenue at the point in time that control of the license transfers to the customer, which is generally upon delivery, or as usage occurs.

We measure revenue based on the amount of consideration we expect to be entitled to in exchange for products or services. Variable consideration is estimated and reflected as an adjustment to the transaction price. We determine variable consideration, which consists primarily of various sales price concessions, by estimating the most likely amount of consideration we expect to receive from the customer based on an analysis of historical rebate claims over a period of time considered adequate to account for current pricing and business trends. Sales rebates earned by customers are offset against their receivable balances. Rebates earned by customers when they do not have outstanding receivable balances are recorded within Accrued liabilities. Licensing and services revenue, which includes HDMI and MHL standards revenue, as well as certain IP licenses, includes variable consideration in the form of usage-based royalties.

We generally provide an assurance warranty that our products will substantially conform to the published specifications for twelve months from the date of shipment. In some cases, the warranty period may be longer than twelve months. We do not separately price or sell the assurance warranty. Our liability is limited to either a credit equal to the purchase price or replacement of the defective part. Under the practical expedient provided by ASC 340, we generally expense sales commissions when incurred because the amortization period would be less than one year. We record these costs within Selling, general, and administrative expenses. Substantially all of our performance obligations are satisfied within twelve months.

## Inventories and Cost of Revenue

Inventories are stated at the lower of actual cost (determined using the first-in, first-out method) or net realizable value. We review and set standard costs quarterly to approximate current actual manufacturing costs. Our manufacturing overhead standards for product costs are calculated assuming full absorption of actual spending over actual costs. The valuation of inventory requires us to estimate excess or obsolete inventory. Material assumptions we use to estimate necessary inventory carrying value adjustments can be unique to each product and are based on specific facts and circumstances. In determining provisions for excess or obsolete products, we consider assumptions such as changes in business and economic conditions, projected customer demand for our products, and changes in technology or customer requirements. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to Cost of revenue. Lower of cost or net realizable value is based on assumptions such as recent historical sales activity and selling prices, as well as estimates of future sales activity and selling prices. Shipping and handling costs are included in Cost of revenue in our Consolidated Statements of Operations.

## Property and Equipment

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, generally three to five years for equipment and software, and one to three years for tooling. Leasehold improvements are amortized over the shorter of the non-cancelable lease term or the estimated useful life of the assets. We capitalize costs for the fabrication of masks used by our foundry partners to manufacture our products. The capitalized mask costs begin depreciating to Cost of revenue once the products go into production, and depreciation is straight-lined over a three-year period, which is the expected useful life of the mask. Upon disposal of property and equipment, the accounts are relieved of the costs and related accumulated depreciation and amortization, and resulting gains or losses are reflected in the Consolidated Statements of Operations for recognized gains and losses. Repair and maintenance costs are expensed as incurred.

## Business Combinations

Business combinations are accounted for using the acquisition method of accounting, under which we allocate the purchase price paid for a company to identifiable assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. Goodwill is measured as the excess of purchase price over the fair value of identifiable assets acquired and liabilities assumed. Determining the fair value of identifiable tangible and intangible assets acquired and liabilities assumed requires management to make assumptions, estimates, and judgments that are based on all available information, including comparable market data and information obtained from our management and the management of the acquired companies. The estimation of the fair values of the intangible assets requires significant judgment and the use of valuation techniques including primarily the income approach. Consideration is given to all relevant factors that might affect the fair value such as estimates of future revenues and costs, present value factors, and the estimated useful lives of intangible assets. We expense acquisition-related costs in the period incurred.

## Impairment of Long-Lived Assets

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

## Valuation of Goodwill

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

## Leases

We account for leases under the terms of ASC 842, "Leases," which requires lessees to record assets and liabilities on the balance sheet for all leases with terms longer than 12 months. Upon adoption, we elected the "package of practical expedients" that would allow us to carryforward our historical lease classifications, not reassess historical contracts to determine if they contain leases, and not reassess the initial direct costs for any existing leases. We also elected the practical expedient to not separate lease and non-lease components, which we applied to all asset classes. Concurrent with our adoption of Topic 842, we early adopted ASU 2019-01, *Leases (Topic 842): Codification Improvements*, which granted disclosure relief for interim periods during the year in which a company adopted Topic 842.

Right-of-use ("ROU") assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized on the commencement date of the lease based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we determine the present value of lease payments using an incremental borrowing rate based on information from our commercial bank for an equivalent borrowing and term in the respective region as of the lease commencement date. At inception, we determine if an arrangement is a lease, if it includes options to extend or terminate the lease, and if it is reasonably certain that we will exercise the options. Lease cost, representing lease payments over the term of the lease and any capitalizable direct costs less any incentives received, is recognized on a straight-line basis over the lease term as lease expense. We have operating leases for corporate offices, sales offices, research and development facilities, storage facilities, and a data center.

The exercise of lease renewal options is at our sole discretion. When deemed reasonably certain of exercise, the renewal options are included in the determination of the lease term and lease payment obligation, respectively. For our leases that contain variable lease payments, residual value guarantees, or restrictive covenants, we have concluded that these inputs are not significant to the determination of the ROU asset and lease liability.

## **Research and Development**

Research and development expenses include costs for compensation and benefits, engineering wafers, depreciation, licenses, and outside engineering services. These expenditures are for the design of new products, intellectual property cores, processes, packaging, and software solutions. Research and development costs are generally expensed as incurred, with certain licensed technology agreements capitalized as intangible assets and amortized to Research and development expense over their estimated useful lives.

## **Restructuring Charges**

Expenses associated with exit or disposal activities are recognized when incurred under ASC 420, "*Exit or Disposal Cost Obligations*," for everything except severance expenses and vacated leased facilities. Because we have a history of paying severance benefits, the cost of severance benefits associated with a restructuring plan is recorded when such costs are probable and the amount can be reasonably estimated in accordance with ASC 712, "*Compensation - Nonretirement Postemployment Benefits*." When leased facilities are vacated, the amount of any ROU asset impairment is calculated in accordance with ASC 360, "*Property, Plant, and Equipment*" and recorded as a part of restructuring charges. Expenses from other exit or disposal activities, including the cancellation of software contracts and engineering tools or the abandonment of long-lived assets, is recorded as a part of Restructuring charges.

## **Accounting for Income Taxes**

We are required to estimate our provision for income taxes and amounts ultimately payable or recoverable in numerous tax jurisdictions around the world. These estimates involve significant judgment and interpretations of regulations and are inherently complex. Resolution of income tax treatments in individual jurisdictions may not be known for many years after completion of the applicable year. 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. The determination of a valuation allowance and when it should be released requires complex judgment.

In assessing the ability to realize 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 for the period that the adjustment is determined to be required.

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



## Stock-Based Compensation

We estimate the fair value of share-based awards consistent with the provisions of ASC 718, "*Compensation - Stock Compensation*." We value RSUs using the closing market price on the date of grant, and we value stock options using the Black-Scholes option pricing model. We have also granted RSUs with a market condition or a performance condition to certain executives. The terms of these grants, including achievement criteria and vesting schedules, are detailed under the heading "Market-Based and Performance-Based Awards — Grants" in "[Note 11 - Stock-Based Compensation Plans](#)." Our current practice is to issue new shares to satisfy option exercises. For RSUs, we issue new shares when awards vest and withhold a portion of these shares on behalf of employees to satisfy the minimum statutory tax withholding requirements.

## Segment Information

As of December 31, 2022, we had one operating segment: the core Lattice business, which includes silicon-based and silicon-enabling products, evaluation boards, development hardware, and related intellectual property licensing, services, and sales. Our chief operating decision maker is the Chief Executive Officer, who reviews operating results and financial information presented on a consolidated basis for purposes of making operating decisions, allocating resources, and evaluating financial performance.

## Note 2 - Net Income Per Share

Our calculation of the diluted share count includes the number of shares from our equity awards with market conditions or performance conditions that would be issuable under the terms of such awards at the end of the reporting period. For equity awards with a market condition, the number of shares included in the diluted share count as of the end of each period presented is determined by measuring the achievement of the market condition as of the end of the respective reporting periods. For equity awards with a performance condition, the number of shares that qualified for vesting as of the end of each period presented are included in the diluted share count when the condition for their issuance was satisfied by the end of the respective reporting periods. See "[Note 11 - Stock-Based Compensation Plans](#)" for further discussion of our equity awards with market or performance conditions.

A summary of basic and diluted Net income per share is presented in the following table:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands, except per share data)</i>			
Net income	\$ 178,882	\$ 95,922	\$ 47,392
Shares used in basic Net income per share	137,321	136,619	135,220
Dilutive effect of stock options, RSUs, ESPP shares, and equity awards with a market condition or performance condition	3,346	5,524	6,056
Shares used in diluted Net income per share	140,667	142,143	141,276
Basic Net income per share	\$ 1.30	\$ 0.70	\$ 0.35
Diluted Net income per share	\$ 1.27	\$ 0.67	\$ 0.34

The computation of diluted Net income per share excludes the effects of stock options, RSUs, ESPP shares, and equity awards with a market condition or performance condition that are antidilutive, aggregating to approximately the following number of shares:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Stock options, RSUs, ESPP shares, and equity awards with a market condition or performance condition excluded as they are antidilutive	472	638	646

### Note 3 - Revenue from Contracts with Customers

#### Disaggregation of Revenue

The following tables provide information about revenue from contracts with customers disaggregated by channel and by geographical market, based on ship-to location of the customer:

<b>Revenue by Channel</b> <i>(In thousands)</i>	<b>Year Ended</b>					
	<b>December 31, 2022</b>		<b>January 1, 2022</b>		<b>January 2, 2021</b>	
Product revenue - Distributors	\$ 591,229	89%	\$ 449,650	87%	\$ 339,100	83%
Product revenue - Direct	51,988	8%	45,202	9%	49,402	12%
Licensing and services	17,139	3%	20,475	4%	19,618	5%
Total revenue	<u>\$ 660,356</u>	<u>100%</u>	<u>\$ 515,327</u>	<u>100%</u>	<u>\$ 408,120</u>	<u>100%</u>
<b>Revenue by Geographical Market</b> <i>(In thousands)</i>						
United States	\$ 94,972	14%	\$ 60,176	12%	\$ 43,945	11%
Other Americas	5,288	1%	20,694	4%	18,192	4%
Americas	<u>100,260</u>	<u>15%</u>	<u>80,870</u>	<u>16%</u>	<u>62,137</u>	<u>15%</u>
China	296,917	45%	281,237	55%	213,714	52%
Japan	90,902	14%	47,915	9%	25,435	6%
Other Asia	77,085	12%	55,416	10%	66,034	17%
Asia	<u>464,904</u>	<u>71%</u>	<u>384,568</u>	<u>74%</u>	<u>305,183</u>	<u>75%</u>
Europe	95,192	14%	49,889	10%	40,800	10%
Total revenue	<u>\$ 660,356</u>	<u>100%</u>	<u>\$ 515,327</u>	<u>100%</u>	<u>\$ 408,120</u>	<u>100%</u>

#### Contract Balances

Our contract assets relate to our rights to consideration for licenses and royalties due to us as a member of the HDMI consortium, with collection dependent on events other than the passage of time, such as collection of licenses and royalties from customers by the HDMI licensing agent. The balance results primarily from the amount of estimated revenue related to HDMI that we have recognized to date, but which has not yet been collected by the agent. Contract assets are recorded in Prepaid expenses and other current assets in our Consolidated Balance Sheets.

The following table summarizes activity during the periods presented:

<i>(In thousands)</i>	
<b>Contract assets as of January 2, 2021</b>	\$ 5,611
Revenues recorded during the period	15,587
Transferred to Accounts receivable or collected	(15,526)
<b>Contract assets as of January 1, 2022</b>	\$ 5,672
Revenues recorded during the period	15,848
Transferred to Accounts receivable or collected	(14,173)
<b>Contract assets as of December 31, 2022</b>	<u>\$ 7,347</u>

Contract liabilities are included in Accrued liabilities on our Consolidated Balance Sheets. The following table summarizes activity during the periods presented:

<i>(In thousands)</i>	
<b>Contract liabilities as of January 2, 2021</b>	\$ 3,068
Accruals for estimated future stock rotation and scrap returns	4,613
Less: Release of accruals for recognized stock rotation and scrap returns	(2,913)
<b>Contract liabilities as of January 1, 2022</b>	\$ 4,768
Prepaid customer deposit	12,811
Accruals for estimated future stock rotation and scrap returns	6,142
Less: Release of accruals for recognized stock rotation and scrap returns	(6,055)
<b>Contract liabilities as of December 31, 2022</b>	<u>\$ 17,666</u>

## Note 4 - Balance Sheet Components

### Accounts Receivable

Accounts receivable do not bear interest and are shown net of an allowance for expected lifetime credit losses, which reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine this allowance through an assessment of known troubled accounts, analysis of our accounts receivable aging, historical experience, expectations for future economic conditions, management judgment, and other available evidence.

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
Accounts receivable	\$ 94,018	\$ 79,859
Less: Allowance for credit losses	—	—
Accounts receivable, net of allowance for credit losses	<u>\$ 94,018</u>	<u>\$ 79,859</u>

We had no material bad debt expense in fiscal 2022, 2021, or 2020.

### Inventories

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
Work in progress	\$ 58,269	\$ 43,546
Finished goods	52,106	24,048
Total inventories, net	<u>\$ 110,375</u>	<u>\$ 67,594</u>

### Accrued Liabilities

Included in Accrued liabilities in the Consolidated Balance Sheets are the following balances:

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
Contract liability under ASC 606	\$ 17,666	\$ 4,768
Liability for non-cancelable contracts	10,498	9,930
Current portion of operating lease liabilities	6,454	5,696
Liability for production materials	6,002	—
Other accrued liabilities	7,847	6,050
Total accrued liabilities	<u>\$ 48,467</u>	<u>\$ 26,444</u>

### Cloud Based Computing Implementation Costs

Under the guidance in ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40)*, we are capitalizing the implementation costs for cloud computing arrangements, mainly for our integrated distributor accounting management systems. These cloud-based computing implementation costs are recorded in Prepaid expenses and other current assets and Other long-term assets on our Consolidated Balance Sheets. The following table summarizes activity during the periods presented:

<i>(In thousands)</i>		
<b>Cloud based computing implementation costs as of January 2, 2021</b>	\$	2,831
Costs capitalized		324
Amortization		(775)
<b>Cloud based computing implementation costs as of January 1, 2022</b>	\$	2,380
Costs capitalized		63
Amortization		(841)
<b>Cloud based computing implementation costs as of December 31, 2022</b>	<u>\$</u>	<u>1,602</u>

## Note 5 - Property and Equipment

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
Production equipment and software	\$ 149,787	\$ 133,039
Leasehold improvements	12,416	12,960
Office furniture and equipment	1,760	2,000
	163,963	147,999
Accumulated depreciation and amortization	(116,349)	(109,905)
	<u>\$ 47,614</u>	<u>\$ 38,094</u>

For fiscal years 2022, 2021, and 2020 depreciation and amortization expense for property and equipment was \$13.8 million, \$12.0 million, and \$11.8 million, respectively.

### Property and Equipment – Geographic Information

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

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
United States	\$ 29,118	\$ 26,509
Taiwan	10,732	6,555
Philippines	3,596	2,498
China	2,229	1,643
Other	1,939	889
Total foreign property and equipment, net	18,496	11,585
Total property and equipment, net	<u>\$ 47,614</u>	<u>\$ 38,094</u>

## Note 6 - Business Combination and Goodwill

On November 12, 2021, we acquired 100% of the outstanding shares of Mirametrix, Inc. ("Mirametrix"), an innovator in advanced AI software and computer vision ("CV") applications. This acquisition combines Mirametrix technology and expertise with Lattice's innovative hardware and software solution stacks to create an end-to-end AI and computer vision solution that spans from the hardware to the application layer. Total consideration to acquire Mirametrix was \$68.5 million, paid 100% in cash to Mirametrix shareholders. There is no contingent consideration included in the determination of the purchase consideration.

Purchase consideration was allocated to the tangible and intangible assets and liabilities assumed on the basis of the respective estimated fair values on the acquisition date. The fair values of the assets acquired and liabilities assumed in the acquisition of Mirametrix, by major class, were recognized as follows:

<i>(In thousands)</i>	Estimated Fair Value
Assets acquired:	
Cash and cash equivalents	\$ 437
Accounts receivable	3,265
Other current assets	262
Property and equipment	156
Intangible assets	24,800
Goodwill	47,844
Total assets acquired	76,764
Liabilities assumed	
Accounts payable	21
Accrued liabilities	5
Accrued payroll obligations	247
Long-term liabilities	7,955
Total liabilities assumed	8,228
Fair value of net assets acquired	<u>\$ 68,536</u>

The following table presents details of the identified intangible assets acquired through the acquisition of Mirametrix, as of November 12, 2021:

	Useful Life <i>(In years)</i>	Fair Value <i>(In thousands)</i>
Existing technology	7	\$ 13,500
Customer relationships	7	9,800
Trade name / trademarks	10	1,500
Total identified intangible assets subject to amortization		<u>\$ 24,800</u>

We do not believe there is any significant residual value associated with these intangible assets. We are amortizing the intangible assets using the straight-line method over their estimated useful lives.

### Goodwill

Goodwill represents the excess of the purchase price over the fair value of the underlying net tangible and intangible assets. The goodwill recognized in the acquisition of Mirametrix was derived from expected benefits from cost synergies and the knowledgeable and experienced workforce who joined the Company after the acquisition. Goodwill resulting from the acquisition is not deductible for Canada income tax purposes.

The goodwill balance of approximately \$315.4 million at December 31, 2022 is comprised of approximately \$267.5 million from prior acquisitions combined with the approximately \$47.8 million from the acquisition of Mirametrix. No impairment charges relating to goodwill were recorded for fiscal 2022, 2021, or 2020.

### Note 7 - Intangible Assets

In connection with our acquisitions of Mirametrix, Inc. in November 2021, Silicon Image, Inc. in March 2015, and SiliconBlue Technologies, Inc. in December 2011, we recorded identifiable intangible assets related to developed technology, customer relationships, licensed technology, patents, and in-process research and development based on guidance for determining fair value under the provisions of ASC 820, "Fair Value Measurements." We are amortizing the intangible assets using the straight-line method over their estimated useful lives. Additionally, we have entered into license agreements for third-party technology and recorded them as intangible assets. These licenses are being amortized to Research and development expense over their estimated useful lives. No impairment charges relating to acquired intangible assets were recorded for fiscal 2022, 2021, or 2020.

The following tables summarize the details of our Intangible assets, net as of December 31, 2022 and January 1, 2022:

	December 31, 2022			
<i>(In thousands)</i>	Weighted Average Amortization Period (in years)	Gross	Accumulated Amortization	Intangible assets, net
Existing technology	5.1	\$ 124,487	\$ (113,157)	\$ 11,330
Customer relationships	6.1	32,734	(24,509)	8,225
Trade name / trademarks	10.0	1,500	(169)	1,331
Licensed technology	6.3	6,671	(2,487)	4,184
Total identified intangible assets		<u>\$ 165,392</u>	<u>\$ (140,322)</u>	<u>\$ 25,070</u>

	January 1, 2022			
<i>(In thousands)</i>	Weighted Average Amortization Period (in years)	Gross	Accumulated Amortization	Intangible assets, net
Existing technology	5.1	\$ 124,487	\$ (111,090)	\$ 13,397
Customer relationships	6.1	32,734	(22,947)	9,787
Trade name / trademarks	10.0	1,500	(19)	1,481
Licensed technology	6.3	6,551	(1,434)	5,117
Total identified intangible assets		<u>\$ 165,272</u>	<u>\$ (135,490)</u>	<u>\$ 29,782</u>

We recorded amortization expense related to intangible assets on the Consolidated Statements of Operations as presented in the following table:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Research and development	\$ 1,054	\$ 901	\$ 124
Amortization of acquired intangible assets	3,778	2,613	4,449
	<u>\$ 4,832</u>	<u>\$ 3,514</u>	<u>\$ 4,573</u>

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

Fiscal year	<i>(In thousands)</i>
2023	\$ 4,522
2024	4,310
2025	4,263
2026	4,261
2027	4,197
Thereafter	3,517
Total	<u>\$ 25,070</u>

## Note 8 - Long-Term Debt

On September 1, 2022, we entered into an Amended and Restated Credit Agreement (the "2022 Credit Agreement"), which provides for a five-year secured revolving loan facility with an aggregate principal amount of up to \$350 million, along with other components and options, such as a letter of credit, swingline loan, and expansion of revolving and/or term loan commitments, currently not in use.

We drew down an initial \$150 million revolving loan at closing, which we used along with \$1.9 million of cash to (i) repay the \$150.5 million term loan, revolving loan, and accrued interest obligations outstanding under our previous credit agreement (the "2019 Credit Agreement"), and (ii) pay fees and expenses totaling \$1.4 million incurred in connection with the 2022 Credit Agreement. We intend to use the revolving loan facility for working capital and general corporate purposes.

At our option, the revolving loans accrue interest at a per annum rate based on ranges determined by our consolidated total leverage ratio of either (i) the base rate (as defined in the 2022 Credit Agreement) plus a margin ranging from 0.25% to 1.00%, or (ii) the adjusted Term Secured Overnight Financing Rate ("SOFR") for interest periods of 1, 3 or 6 months plus a margin ranging from 1.25% to 2.00%. Interest is due and payable in arrears quarterly for loans bearing interest at the base rate and at the end of an interest period (or at each three-month interval in the case of loans with interest periods greater than three months) in the case of loans bearing interest at the adjusted Term SOFR. In addition, we pay a quarterly commitment fee of 0.20% on the unused portion of the revolving facility.

With the amendment of our 2019 Credit Agreement pursuant to the 2022 Credit Agreement, we capitalized \$0.9 million of the new debt costs, and expensed \$0.7 million of debt costs and existing original issue discount ("OID") as a loss on refinancing in Other (expense) income, net on our Consolidated Statements of Operations for fiscal 2022. We determine the Current portion of long-term debt, if any, as the sum of the required debt payments to be made over the next twelve months, reduced by the OID and the debt issuance costs to be amortized over the next twelve months.

The revolving loans under the 2022 Credit Agreement may be repaid and reborrowed at our discretion, with any remaining outstanding principal amount due and payable on the maturity date of the revolving loans on September 1, 2027. During fiscal 2022, we made principal payments totaling \$28.8 million, including a discretionary payment of \$20 million on the revolving loans outstanding under the 2022 Credit Agreement and required quarterly installments totaling \$8.8 million on the term loans outstanding under the 2019 Credit Agreement.

The fair value of our long-term debt approximates the carrying value, which is reflected in our Consolidated Balance Sheets as follows:

	December 31, 2022	January 1, 2022
<i>(In thousands)</i>		
Principal amount	\$ 130,000	\$ 158,750
Unamortized original issuance discount and debt costs	(1,248)	(817)
Less: Current portion of long-term debt	—	(17,173)
Long-term debt, net of current portion and unamortized debt issue costs	<u>\$ 128,752</u>	<u>\$ 140,760</u>

Interest expense related to our long-term debt is included in Interest expense on our Consolidated Statements of Operations as follows:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Contractual interest	\$ 4,500	\$ 2,304	\$ 3,319
Amortization of original issuance discount and debt costs	310	362	400
Total interest expense related to long-term debt	<u>\$ 4,810</u>	<u>\$ 2,666</u>	<u>\$ 3,719</u>

## Note 9 - Restructuring

In September 2022, our management approved and implemented additional contract cancellations and headcount reductions under the Q2 2019 Sales Plan, an internal restructuring plan that our management approved and executed in April 2019. The Q2 2019 Sales Plan focused on a restructuring of the global sales organization through cancellation of certain contracts and a workforce reduction. With these actions, we incurred approximately \$1.0 million of incremental restructuring costs in fiscal 2022. Under this plan, no restructuring expense was incurred during fiscal 2021, and we incurred restructuring expense of approximately \$0.1 million during fiscal 2020. Under this plan, approximately \$3.1 million of total expense has been incurred through December 31, 2022. All actions planned under the Q2 2019 Sales Plan have been implemented.

In March 2020, our management approved and executed an internal restructuring plan (the "Q1 2020 Plan"), which included a workforce reduction in order to reduce our operating cost structure by leveraging our low-cost regions as well as enhancing efficiency. Under this plan, we recorded a credit of approximately \$0.1 million during fiscal 2022, and we incurred restructuring expense of approximately \$0.2 million and \$2.0 million, respectively, during fiscal 2021 and 2020. Approximately \$2.1 million of total expense has been incurred through December 31, 2022 under the Q1 2020 Plan. All actions planned under the Q1 2020 Plan have been implemented.

In June 2017, our Board of Directors approved an internal restructuring plan (the "June 2017 Plan"), which included actions, among others, to reconfigure our use of certain leased properties. Under the June 2017 Plan, we incurred approximately \$1.1 million of incremental restructuring costs in fiscal 2022 related to an impairment of the operating lease right-of-use asset for our partially vacated facility in San Jose, California. Including these charges, we incurred restructuring expense of approximately \$1.6 million during fiscal 2022, and we incurred restructuring expense of approximately \$0.7 million and \$1.9 million, respectively, during fiscal 2021 and 2020. Under this plan, we have incurred approximately \$23.3 million of total expense through December 31, 2022. All actions planned under the June 2017 Plan have been implemented.

These expenses and credits were recorded to Restructuring charges on our Consolidated Statements of Operations. The restructuring accrual balance is presented in Accrued liabilities and Other long-term liabilities on our Consolidated Balance Sheets.

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

	Lease			Total
	Severance & Related (1)	Termination & Fixed Assets	Other (2)	
<i>(In thousands)</i>				
<b>Accrued Restructuring at December 28, 2019</b>	\$ 160	\$ 6,585	\$ 865	\$ 7,610
Restructuring charges	1,669	1,896	372	3,937
Costs paid or otherwise settled	(1,583)	(248)	(573)	(2,404)
<b>Accrued Restructuring at January 2, 2021</b>	\$ 246	\$ 8,233	\$ 664	\$ 9,143
Restructuring charges	250	690	—	940
Costs paid or otherwise settled	(245)	(1,793)	(664)	(2,702)
<b>Accrued Restructuring at January 1, 2022</b>	\$ 251	\$ 7,130	\$ —	\$ 7,381
Restructuring charges	303	1,608	640	2,551
Costs paid or otherwise settled	(154)	(2,846)	—	(3,000)
<b>Accrued Restructuring at December 31, 2022</b>	<u>\$ 400</u>	<u>\$ 5,892</u>	<u>\$ 640</u>	<u>\$ 6,932</u>

(1) Includes employee relocation costs and outplacement costs

(2) Includes termination fees on the cancellation of certain contracts

## Note 10 - Leases

We have operating leases for corporate offices, sales offices, research and development facilities, storage facilities, and a data center, all of which are leased under operating leases that expire at various times through 2028. Our leases have remaining lease terms of 1 to 6 years, some of which include options to extend for up to 5 years, and some of which include options to terminate within 1 year. The weighted-average remaining lease term was 3.5 years and the weighted-average discount rate was 5.4% as of December 31, 2022. We recorded fixed operating lease expense of \$7.6 million, \$7.9 million, and \$7.6 million, respectively, for fiscal 2022, 2021, and 2020.

The following table presents the lease balance classifications within the Consolidated Balance Sheets and summarizes their activity during fiscal 2022:

<b>Operating lease right-of-use assets</b>		<i>(In thousands)</i>
Balance as of January 1, 2022	\$	23,818
Right-of-use assets obtained for new lease contracts during the period		2,134
Amortization of right-of-use assets during the period		(6,512)
Impairment of right-of use asset during the period (recorded in Restructuring charges)		(1,149)
Adjustments for present value and foreign currency effects		(701)
Balance as of December 31, 2022	\$	17,590
<b>Operating lease liabilities</b>		<i>(In thousands)</i>
Balance as of January 1, 2022	\$	24,944
Lease liabilities incurred for new lease contracts during the period		2,134
Accretion of lease liabilities		1,087
Operating cash used by payments on lease liabilities		(7,419)
Adjustments for present value and foreign currency effects		(674)
Balance as of December 31, 2022		20,072
Less: Current portion of operating lease liabilities (included in Accrued liabilities)		(6,454)
Long-term operating lease liabilities, net of current portion	\$	13,618

Lease obligations for facilities restructured prior to the adoption of Topic 842 totaled approximately \$5.9 million at December 31, 2022 and continued to be recorded in Other long-term liabilities on our Consolidated Balance Sheets.

Maturities of operating lease liabilities as of December 31, 2022 are as follows:

<b>Fiscal year</b>	<i>(In thousands)</i>
2023	7,536
2024	6,042
2025	4,140
2026	2,522
2027	1,110
Thereafter	934
Total lease payments	22,284
Less: amount representing interest	(2,212)
Total lease liabilities	\$ 20,072

## Note 11 - Stock-Based Compensation Plans

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

We have two active equity incentive plans, the "2013 Incentive Plan" and the "2011 Non-Employee Director Equity Incentive Plan", under which shares remain available for grants to employees and non-employee directors, respectively. In addition, we have made grants of inducement awards to certain executives and employees that are granted outside of, but governed by, the 2013 Incentive Plan. "Incentive stock options" under Section 422 of the U.S. Internal Revenue Code and restricted stock unit ("RSU") grants are part of our equity compensation practices for employees who receive equity grants. Options and RSUs generally vest quarterly over a four-year period beginning on the grant date. The contractual terms of options granted do not exceed ten years.



In May 2012, the Company's stockholders approved the 2012 Employee Stock Purchase Plan ("2012 ESPP"), which authorizes the issuance of 3.0 million shares of common stock to eligible employees to purchase shares of common stock through payroll deductions, which cannot exceed 10% of an employee's compensation. The purchase price of the shares is the lower of 85% of the fair market value of the stock at the beginning of each six-month offering period or 85% of the fair market value at the end of such period. We have treated the 2012 ESPP as a compensatory plan. At December 31, 2022, a total of 1.0 million shares of our common stock were available for future purchases under the 2012 ESPP.

At December 31, 2022, a total of 5.0 million shares of our common stock were available for future grants under the 2013 Incentive Plan and the 2011 Non-Employee Director Equity Incentive Plan. Following our 2018 Shareholder meeting, a share ratio of 2.2:1 was applied to the 2013 Incentive Plan. This ratio takes two and two-tenths shares out of the 2013 Plan for every one full value share granted. During fiscal 2022, a total of 2.5 million shares were adjusted out of the 2013 Plan. Shares subject to stock option grants that expire or are canceled, without delivery of such shares, generally become available for re-issuance under equity incentive plans.

### Stock-Based Compensation Expense

Total stock-based compensation expense included in our Consolidated Statements of Operations is presented in the following table:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Cost of revenue	\$ 3,674	\$ 3,049	\$ 3,179
Research and development	19,645	14,563	10,124
Selling, general, and administrative	32,211	28,863	27,069
Total stock-based compensation	\$ 55,530	\$ 46,475	\$ 40,372

### ESPP and Stock Options

The fair values of the shares expected to be issued under the employee stock purchase plan and of each option award on the date of grant were estimated using the Black-Scholes valuation model and the assumptions noted in the following table. No new stock options were granted during fiscal 2022, 2021, or 2020. The expected volatility of both ESPP shares and stock options is based on the daily historical volatility of our stock price, measured over the ESPP purchase period or the expected term of the option. 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 expected term is based on historical vested option exercises and includes an estimate of the expected term for options that are fully vested and outstanding. Dividend yield has no valuation impact, as we have not paid any cash dividends since inception and do not intend to pay any cash dividends in the foreseeable future.

The following table summarizes the assumptions used in the valuation of ESPP compensation for the periods presented:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<b>Employee Stock Purchase Plan</b>			
Weighted average expected volatility	60.3%	39.9%	48.2%
Weighted average risk-free interest rate	3.74%	0.07%	0.89%
Expected term (in months)	6	6	6

The weighted average fair values for the ESPP, calculated using the Black-Scholes option pricing model with the noted assumptions for the ESPP, were \$15.25, \$13.04, and \$6.62 for fiscal years 2022, 2021, and 2020, respectively.

At December 31, 2022, there was no unrecognized compensation cost related to unvested employee and director stock options. Compensation expense for all stock-based compensation awards is recognized using the straight-line method. We recorded stock compensation expense related to the ESPP of approximately \$1.5 million, \$1.2 million, and \$1.0 million in fiscal 2022, 2021, and 2020, respectively. Related to stock options, we recorded no expense in fiscal 2022, and approximately \$1.0 million and \$2.0 million, in fiscal 2021 and 2020, respectively.

The following table summarizes our stock option activity and related information for the year ended December 31, 2022:

<i>(Shares and aggregate intrinsic value in thousands)</i>	Shares	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate Intrinsic Value
Balance, January 1, 2022	1,367	\$ 6.62		
Granted	—	—		
Exercised	(448)	6.48		
Forfeited or expired	(1)	5.01		
Balance, December 31, 2022	918	\$ 6.70		
Vested and expected to vest at December 31, 2022	918	\$ 6.70	1.93	\$ 53,433
Exercisable, December 31, 2022	918	\$ 6.70	1.93	\$ 53,433

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 2022, 2021, and 2020 was \$24.3 million, \$44.7 million, and \$21.5 million, respectively.

### Time-Based Restricted Stock Unit Awards

The following table summarizes the activity for our time-based RSUs for the year ended December 31, 2022:

<i>(Shares in thousands)</i>	Shares	Weighted average grant date fair value
Balance, January 1, 2022	2,188	\$ 31.85
Granted	843	62.23
Vested	(1,132)	24.34
Forfeited or expired	(78)	41.21
Balance, December 31, 2022	1,821	\$ 50.18

At December 31, 2022, there was \$81.6 million of unrecognized compensation expense related to unvested time-based RSUs. Compensation expense for RSUs is recognized using the straight-line method over the related vesting period. In fiscal 2022, 2021, and 2020, we recorded stock compensation expense related to time-based RSUs of approximately \$30.1 million, \$21.7 million, and \$16.6 million, respectively.

### Market-Based and Performance-Based Awards

In 2020 through 2022, we granted awards of RSUs with either a market condition or a performance condition to certain executives.

#### Market-Based and Performance-Based Awards — Grants

In the first quarters of fiscal 2022, 2021 and 2020, we granted awards of RSUs with a market condition to certain executives. Under the terms of these grants, the RSUs with a market condition vest over a three-year period based on the Company's total shareholder return ("TSR") relative to the Russell 2000 index, which condition is measured for the 2022 and 2021 grants on the third anniversary of the grant date, and measured for one-half of the 2020 grants on the second and third anniversary of the grant date. The awards may vest at 250% or 200%, depending upon the executive, if the 75th percentile of the market condition is achieved, with 100% of the units vesting at the 55th percentile, zero vesting if relative TSR is below the 25th percentile, and vesting scaling for achievement between the 25th and 75th percentile.

In the first quarter of fiscal 2021, we also granted awards of RSUs with a performance condition to certain executives, to specifically drive additional executive attention and focus on the Company's revenue growth priorities. Under the terms of these grants, the RSUs with a performance condition will vest based on the Company generating specified levels of year-over-year revenue growth, which will be measured annually for one-fourth of the grants after each fiscal year-end through the end of fiscal 2024. Vesting of these awards scales for achievement of year-over-year revenue growth compared to certain targets, with maximum vesting up to 200%. Vesting of each tranche of these awards occurs 13 months after the performance conditions is met, and the entire award cannot be fully earned until five years from grant. For the first and second tranches of these awards, the Company had met the year-over-year revenue growth performance criteria at the 200% level of achievement as of January 1, 2022 and December 31, 2022, respectively.

### Market-Based and Performance-Based Awards — Vesting

During fiscal 2022, the market condition for awards granted to certain executives in previous years exceeded the 75th percentile of their TSR condition, and applicable tranches of these awards vested at 250% or 200% for the respective executives. Also during fiscal 2022, the fifth and sixth tranches of 40% and 70%, respectively, of the base number of the awards with an EBITDA performance condition vested, as the Company had met the adjusted EBITDA performance criteria on a trailing four-quarter basis for two consecutive trailing four-quarter periods as of the end of the respective measurement periods.

During fiscal 2021, the market condition for awards granted to certain executives in previous years exceeded the 75th percentile of their TSR condition, and applicable tranches of these awards vested at 250% or 200% for the respective executives. Also during fiscal 2021, the second and third tranches, each 33.3% of the base number of the awards with an EBITDA performance condition vested and released, as the Company had met the adjusted EBITDA performance criteria on a trailing four-quarter basis for two consecutive trailing four-quarter periods as of the end of the respective measurement periods. Additionally, as of January 1, 2022, the Company had met the next adjusted EBITDA performance criteria on a trailing four-quarter basis for two consecutive trailing four-quarter periods, and the fourth tranche of the awards with an EBITDA performance condition qualified for vesting at 40% of the base number.

During fiscal 2020, the market condition for awards granted to certain executives in previous years exceeded the 75th percentile of their TSR condition, and annual tranches of these awards vested at 250% or 200%, and applicable tranches of these awards vested at 250% or 200% for the respective executives. Also during fiscal 2020, the first tranche of 33.3% of the base number of the awards with an EBITDA performance condition vested, as the Company had met the adjusted EBITDA performance criteria on a trailing four-quarter basis for two consecutive trailing four-quarter periods as of the end of the measurement period.

### Market-Based and Performance-Based Awards — Compensation Expense

During the first quarter of fiscal 2020, the Board of Directors approved a modification to the market condition measurement periods associated with the unvested portions of certain of the Company's awards with a market condition that were granted prior to fiscal 2020. The modification extended the duration of the measurement period by adjusting the beginning date of each measurement period to the original grant date, resulting in approximately \$1.8 million additional stock compensation expense during the first quarter of fiscal 2020.

For our awards with a market condition or a performance condition, we incurred stock compensation expense, including the effect of the modification in the first quarter of fiscal 2020, of approximately \$24.0 million, \$22.1 million, and \$20.8 million in fiscal years 2022, 2021, and 2020, respectively, which is recorded as a component of total stock-based compensation. At December 31, 2022, there was \$21.6 million of unrecognized compensation expense related to unvested RSUs with a market condition or a performance condition. Awards with a TSR market condition were valued using a Monte Carlo simulation model.

The following table summarizes the assumptions used at the grant date in the valuation of RSUs with a market or performance condition:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<b>Executive RSUs with a market condition or performance condition</b>			
Weighted average expected volatility	51.44%	50.37% to 52.11%	42.38%
Weighted average risk-free interest rate	1.67%	0.22% to 0.77%	1.40%
Expected term (years)	3.00	3.00 to 5.00	3.00

The following table summarizes the activity for our awards with a market condition or performance condition:

	Shares	Weighted average grant date fair value
<i>(Shares in thousands)</i>		
<b>Balance, January 1, 2022</b>		
Granted	1,246	\$ 41.23
Effect of vesting multiplier	183	96.63
Vested	642	
	(1,086)	20.38
<b>Balance, December 31, 2022</b>	<b>985</b>	<b>\$ 60.15</b>

## Note 12 - Common Stock Repurchase Program

On August 8, 2022, we announced that our Board of Directors had approved a stock repurchase program pursuant to which up to \$150 million of outstanding common stock could be repurchased from time to time (the "2023 Repurchase Program"). The duration of the 2023 Repurchase Program is through the end of December 2023. Under the 2023 Repurchase Program during the fourth quarter of fiscal 2022, we repurchased 288,652 shares for \$20.0 million, or an average price paid per share of \$69.27. All repurchases were open market transactions funded from available working capital. All shares repurchased pursuant to the 2023 Repurchase Program were retired by the end of the fourth quarter of fiscal 2022. As of December 31, 2022, the remaining portion of the amount authorized for the 2023 Repurchase Program is approximately \$129.7 million. We repurchased a total of 1,951,934 shares for \$110.1 million, or an average price paid per share of \$56.42, during fiscal year 2022.

## Note 13 - Income Taxes

We are subject to federal and state income tax as well as income tax in the various foreign jurisdictions in which we operate.

The domestic and foreign components of Income before income taxes were as follows:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Domestic	\$ 30,362	\$ 24,003	\$ 11,772
Foreign	151,750	73,623	36,684
Income before taxes	\$ 182,112	\$ 97,626	\$ 48,456

The components of Income tax expense are as follows:

	Year Ended		
	December 31, 2022	January 1, 2022	January 2, 2021
<i>(In thousands)</i>			
Current:			
Federal	\$ 748	\$ 445	\$ 54
State	265	45	68
Foreign	3,637	1,538	1,025
	4,650	2,028	1,147
Deferred:			
Federal	—	—	—
State	—	—	—
Foreign	(1,420)	(324)	(83)
	(1,420)	(324)	(83)
Income tax expense	\$ 3,230	\$ 1,704	\$ 1,064

Income tax expense 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 31, 2022	January 1, 2022	January 2, 2021
	%	%	%
Statutory federal rate	21	21	21
Adjustments for tax effects of:			
State taxes, net	(2)	(4)	(4)
Federal tax credits	(1)	(3)	(3)
Excess tax benefit from stock compensation	—	(8)	(10)
Foreign rate differential	(16)	(14)	(12)
U.S. tax on foreign operations	33	3	15
Foreign withholding taxes	1	1	3
Capital loss expiration	1	3	—
Other deferred tax asset adjustment	—	—	3
Valuation allowance	(33)	8	(13)
Change in uncertain tax benefit accrual	(2)	(5)	2
Effective income tax rate	<u>2</u>	<u>2</u>	<u>2</u>

We updated our evaluation of the valuation allowance position in the United States through December 31, 2022 and concluded that we should continue to maintain a full valuation allowance against the net federal and state deferred tax assets. In making this evaluation, we considered the uncertain stability of the current economic and operating environment and estimates about our ability to generate taxable income in future periods within the United States. We will continue to evaluate both positive and negative evidence in future periods to determine if we will realize the net deferred tax assets. We don't have a valuation allowance in any foreign jurisdictions as we have concluded it is more likely than not that we will realize the net deferred tax assets in future periods.

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

<i>(In thousands)</i>	December 31, 2022	January 1, 2022
Deferred tax assets:		
Intangible assets	\$ 6,264	\$ 8,236
Net operating loss carry forwards	15,362	88,254
Tax credit carry forwards	103,092	93,095
Accrued liabilities and reserves	12,932	6,590
Stock-based and deferred compensation	3,769	4,477
Other	5,031	6,615
Total deferred tax assets	146,450	207,267
Less: valuation allowance	(140,533)	(200,438)
Net deferred tax assets	<u>5,917</u>	<u>6,829</u>
Deferred tax liabilities:		
Fixed assets	2,058	2,379
Unremitted earnings	2,498	2,128
Other	8,134	9,969
Total deferred tax liabilities	12,690	14,476
Net deferred taxes	<u>\$ (6,773)</u>	<u>\$ (7,647)</u>
Reported as:		
Deferred tax assets (included in Other long-term assets)	\$ 1,022	\$ 953
Deferred tax liabilities (included in Other long-term liabilities)	(7,795)	(8,600)
Net deferred taxes	<u>\$ (6,773)</u>	<u>\$ (7,647)</u>

The following table displays the activity related to changes in our valuation allowance for deferred tax assets:

Fiscal Years Ended <i>(In thousands)</i>	Balance at beginning of period	Charged (Credit) to costs and expenses	Charged (credit) to other accounts	Balance at end of period
December 31, 2022	\$ 200,438	\$ (59,905)	\$ —	\$ 140,533
January 1, 2022	\$ 192,478	\$ 7,960	\$ —	\$ 200,438
January 2, 2021	\$ 198,499	\$ (6,021)	\$ —	\$ 192,478

At December 31, 2022, we had U.S. federal net operating loss ("NOL") carryforwards (pretax) of approximately \$16.3 million which do not expire. We had state NOL carryforwards (pretax) of approximately \$142.0 million that substantially all expire at various dates from 2023 through 2041. We also had federal credit carryforwards of \$59.1 million that expire at various dates from 2023 through 2042, and \$75.0 million state credit carryforwards, of which substantially all do not expire.

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, future tax attribute utilization may be limited and NOL carryforwards and/or R&D credits will be reduced to reflect the limitation.

Foreign earnings may be subject to withholding taxes in local jurisdictions if they are distributed. At December 31, 2022, U.S. income taxes and foreign withholding taxes were not provided for on a cumulative total of approximately \$3.0 million of the undistributed earnings of our foreign subsidiaries. We intend to reinvest these earnings indefinitely.

At December 31, 2022 and January 1, 2022, our unrecognized tax benefits associated with uncertain tax positions were \$58.9 million and \$56.2 million, respectively, of which \$56.3 million and \$54.0 million, respectively, if recognized, would affect the effective tax rate, subject to valuation allowance. As of December 31, 2022 and January 1, 2022, interest and penalties associated with unrecognized tax benefits were \$10.6 million and \$9.6 million, respectively, which are not reflected in the table below. We accrue interest and penalties related to uncertain tax positions in Income tax expense.

The following table summarizes the changes to unrecognized tax benefits for the fiscal years presented:

	<i>(In thousands)</i>
Balance at December 28, 2019	\$ 56,962
Additions based on tax positions related to the current year	548
Additions based on tax positions of prior years	628
Reduction for tax positions of prior years	—
Reduction as a result of lapse of applicable statute of limitations	(2,401)
Balance at January 2, 2021	55,737
Additions based on tax positions related to the current year	1,156
Additions based on tax positions of prior years	1,130
Additions due to acquisition	977
Settlements	(51)
Reduction as a result of lapse of applicable statute of limitations	(2,718)
Balance at January 1, 2022	56,231
Additions based on tax positions related to the current year	1,594
Additions based on tax positions of prior years	2,798
Settlements	(148)
Reduction as a result of lapse of applicable statute of limitations	(1,586)
Balance at December 31, 2022	\$ 58,889

Our liability for uncertain tax positions (including penalties and interest) was \$21.6 million at both December 31, 2022 and January 1, 2022 and is recorded as a component of Other long-term liabilities on our Consolidated Balance Sheets. The remainder of our uncertain tax position exposure of \$47.9 million and \$44.2 million at December 31, 2022 and January 1, 2022, respectively, is netted against deferred tax assets.

At December 31, 2022, it is reasonably possible that \$1.0 million of unrecognized tax benefits and \$0.2 million of associated interest and penalties could be recognized during the next twelve months.

The years that remain subject to examination are 2017 for federal and state income taxes, and 2016 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. Our Singapore 2020 income tax return is currently under examination.

## **Note 14 - Employee Benefit Plans**

### **Qualified Investment Plan**

In 1990, we adopted a 401(k) tax-deferred savings plan, which provides all employees in the United States who meet certain eligibility requirements with an opportunity to accumulate funds for retirement. Participants may contribute up to the amount allowable as a deduction for federal income tax purposes. The plan does not allow investments in the Company's common stock. The plan allows for the Company to make discretionary matching contributions in cash. We recorded matching contributions of approximately \$2.8 million, \$2.6 million, and \$2.4 million in fiscal years 2022, 2021, and 2020, respectively.

### **Cash Incentive Plans**

For 2022, 2021, and 2020, the Board of Directors of the Company, upon the recommendation of the Compensation Committee, approved the Cash Incentive Plan (the "Cash Plans") for the respective fiscal year. The chief executive officer, other executive officers, and other members of senior management, including vice presidents and director-level employees, together with all other employees of the Company not on the Company's sales incentive plan are eligible to participate in the Cash Plans. Under the Cash Plans, individual cash incentive payments for the eligible employees will be based both on Company financial performance, as measured by achievement of operating income (before incentive plan accruals) and revenue goals within specified ranges established by the Compensation Committee, and Company performance, as measured by the achievement of personal management objectives. The Compensation Committee determines the performance of the chief executive officer, the chief financial officer and other participants based on the achievement of the management objectives established by the Compensation Committee during the first quarter of the respective fiscal year. We recorded approximately \$25.2 million, \$18.0 million, and \$7.9 million of expense under the Cash Plans in fiscal 2022, 2021, and 2020, respectively.

## **Note 15 - Contingencies**

### **Legal Matters**

On or about December 19, 2018, Steven A.W. De Jaray, Perienne De Jaray and Darrell R. Oswald (collectively, the "Plaintiffs") commenced an action against the Company and several unnamed defendants in the Multnomah County Circuit Court of the State of Oregon, in connection with the sale of certain products by the Company to the Plaintiffs in or around 2008. The Plaintiffs allege that we violated The Lanham Act, engaged in negligence and fraud by failing to disclose to the Plaintiffs the export-controlled status of the subject parts. The Plaintiffs seek damages of \$155 million to \$268 million, treble damages, and other remedies. In January 2019, we removed the action to the United States District Court for the District of Oregon. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any potential exposure to the Company; however, we believe that these claims are without merit and intend to vigorously defend the action.

From time to time, we are exposed to certain additional asserted and unasserted potential claims. 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. 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.

## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Lattice Semiconductor Corporation

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Lattice Semiconductor Corporation (the Company) as of December 31, 2022 and January 1, 2022, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and January 1, 2022, and the results of its operations and its cash flows for each of the three years in the periods ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 17, 2023 expressed an unqualified opinion thereon.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matter

The critical audit matter communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which they relate.

#### Inventory Valuation

*Description of the Matter* The Company's net inventory totaled \$110.4 million as of December 31, 2022. As explained in "Note 1 - Basis of Presentation and Significant Accounting Policies" within the consolidated financial statements, the Company records inventory at the lower of cost or net realizable value, and writes down inventories to net realizable value if it is obsolete or if quantities are in excess of projected customer demand.

Auditing management's estimates of excess and obsolete inventory was challenging because the estimate is judgmental and considers a number of factors that are affected by market and economic conditions that are outside of the Company's control. In particular, excess and obsolete inventory calculations are sensitive to significant assumptions that relate to projected customer demand for the Company's products.

*How We Addressed the Matter in Our Audit* We evaluated and tested the design and operating effectiveness of the Company's internal controls over the calculation of excess and obsolete inventory, including the determination of projected customer demand and related application against on-hand inventory.

Our audit procedures included, among others, evaluating the significant assumptions stated above and the underlying data used in management's excess and obsolete inventory assessment. We evaluated inventory levels compared to projected customer demand, historical sales, and specific product considerations. We also assessed the historical accuracy of management's estimates and performed sensitivity analyses to evaluate the changes in inventory valuation that would result from changes in significant assumptions.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.  
San Jose, California  
February 17, 2023



## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Lattice Semiconductor Corporation

### Opinion on Internal Control Over Financial Reporting

We have audited Lattice Semiconductor Corporation's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Lattice Semiconductor Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2022 and January 1, 2022, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and our report dated February 17, 2023 expressed an unqualified opinion thereon.

### Basis for Opinion

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

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

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

### Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

San Jose, California  
February 17, 2023

## 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

In connection with the filing of this Annual Report on Form 10-K, our management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2022. These disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. Our disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that we accumulate and communicate correct information to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls are effective as of December 31, 2022.

### 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.

Our internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

We do not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met, and may not prevent or detect misstatements. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company's internal control over financial reporting as of December 31, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework (2013)*. Based on this assessment, management concluded that, as of December 31, 2022, the Company's internal control over financial reporting was effective.

Ernst & Young LLP, our independent registered public accounting firm, has audited the Company's internal control over financial reporting and has issued its opinion on the effectiveness of the Company's internal control over financial reporting, which appears on page [60](#) in this Annual Report on Form 10-K.

### **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) under the Exchange Act) that occurred during the fourth quarter of fiscal 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We do not believe there has been any material impact to our internal controls over financial reporting notwithstanding that most of our employees are working remotely due to the COVID-19 pandemic. We continue to monitor and assess the COVID-19 situation on our internal controls to address any potential impact on their design and operating effectiveness.

### **Item 9B. Other Information**

None.

### **Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections**

Not applicable.

## **PART III**

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Certain information required by Part III is incorporated by reference from our definitive proxy statement (the "Proxy Statement") for the 2023 Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, which we will file not later than 120 days after the end of the fiscal year covered by this report. With the exception of the information expressly incorporated by reference from the Proxy Statement, the Proxy Statement is not to be deemed filed as a part of this report.

### **Item 10. Directors, Executive Officers and Corporate Governance**

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

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

We have adopted a Code of Conduct that applies to all of our directors, employees, including our principal executive officer, principal financial officer, principal accounting officer, and persons performing similar functions, consultants, contractors, and agents. The Code of Conduct is posted on our website at [www.latticesemi.com](http://www.latticesemi.com). In fiscal 2022, we rescinded our Director Code of Ethics and expanded our Code of Conduct to cover directors, consultants, and agents. In addition, we revised our Code of Conduct to provide general guidance on how to handle ethical business decisions, and to expand and/or clarify provisions in the Code of Conduct related to antitrust, conflicts of interest, improper conduct and activities, and public disclosures. We also revised our Corporate Governance Policies to incorporate any items previously addressed in the Director Code of Conduct that the revised Code of Conduct did not address. Amendments to the Code of Conduct or any grant of a waiver from a provision of the Code of Conduct 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 Corporate Governance Policies 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.

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

### **Item 11. Executive Compensation**

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

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

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

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

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 "Proposal 5: Ratification of Appointment of Independent Registered Public Accounting Firm--Audit and Related Fees" in the Proxy Statement is incorporated herein by reference.

## PART IV

### Item 15. Exhibits

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

##### (1) All financial statements

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

<b>Consolidated Financial Statements:</b>	<b>Page</b>
<a href="#">Consolidated Statements of Operations</a>	<a href="#">35</a>
<a href="#">Consolidated Statements of Comprehensive Income</a>	<a href="#">36</a>
<a href="#">Consolidated Balance Sheets</a>	<a href="#">37</a>
<a href="#">Consolidated Statements of Cash Flows</a>	<a href="#">38</a>
<a href="#">Consolidated Statements of Stockholders' Equity</a>	<a href="#">39</a>
<a href="#">Notes to Consolidated Financial Statements</a>	<a href="#">40</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.

##### (2) Exhibits

<b>Exhibit Number</b>	<b>Description</b>
3.1	<a href="#">The Company's Restated Certificate of Incorporation, 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).</a>
3.2	<a href="#">The Company's Bylaws, as amended as of April 29, 2022 (Incorporated by reference to Exhibit 3.1 filed with the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended April 2, 2022).</a>
4.1	<a href="#">Description of Securities.</a>
10.1*	<a href="#">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).</a>
10.2*	<a href="#">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).</a>
10.3*	<a href="#">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).</a>
10.4*	<a href="#">Lattice Semiconductor Corporation 2011 Non-Employee Director Equity Incentive Plan. (Incorporated by reference to Exhibit 99.2 filed with the Company's Registration Statement on Form S-8 filed June 25, 2019).</a>
10.5*	<a href="#">Form of 2011 Non-Employee Director Equity Incentive Plan Outside Director Option Agreement.</a>
10.6*	<a href="#">Form of 2011 Non-Employee Director Equity Incentive Plan Restricted Stock Unit Agreement.</a>
10.7*	<a href="#">Lattice Semiconductor Corporation 2013 Incentive Plan, as amended and restated (incorporated by reference to Annex A of the Company's Definitive Proxy Statement filed with the Securities and Exchange Commission on March 23, 2020).</a>
10.8*	<a href="#">Form of 2013 Incentive Plan Stock Option Agreement.</a>

\* Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Annual Report on Form 10-K pursuant to Item 15(b) thereof.

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<b>Exhibit Number</b>	<b>Description</b>
10.9*	<a href="#">Form of 2013 Incentive Plan Restricted Stock Unit Agreement.</a>
10.10*	<a href="#">Form of 2013 Incentive Plan Stock Option Agreement (Performance-Based Option).</a>
10.11*	<a href="#">Form of 2013 Incentive Plan Notice of Performance-Based Restricted Stock Unit Award and Global Performance-Based Restricted Stock Unit Agreement (TSR Performance Basis).</a>
10.12*	<a href="#">Form of 2013 Incentive Plan Notice of Performance-Based Restricted Stock Unit Award and Global Performance-Based Restricted Stock Unit Agreement (Revenue Growth Performance Basis).</a>
10.13	<a href="#">Amended and Restated Credit Agreement, dated as of September 1, 2022, by and among Lattice Semiconductor Corporation, as borrower, the lenders from time to time party thereto and Wells Fargo Bank, National Association, as administrative agent. (Incorporated by reference to Exhibit 10.1 filed with the Company's Current Report on Form 8-K filed September 2, 2022).</a>
10.14*	<a href="#">Lattice Semiconductor Corporation 2020 Cash Incentive Plan (incorporated by reference to Exhibit 10.9 filed with the Company's Annual Report on Form 10-K filed on February 26, 2021).</a>
10.15*	<a href="#">Lattice Semiconductor Corporation 2021 Cash Incentive Plan (incorporated by reference to Exhibit 10.9 filed with the Company's Annual Report on Form 10-K filed on February 23, 2022).</a>
10.16*	<a href="#">Lattice Semiconductor Corporation 2022 Cash Incentive Plan.</a>
10.17*	<a href="#">Amended Employment Agreement, by and between Lattice Semiconductor Corporation and James R. Anderson, effective February 21, 2020. (Incorporated by reference to Exhibit 10.23 of the Company's Annual Report on Form 10-K filed on February 24, 2020).</a>
10.18*	<a href="#">Form of Amended Employment Agreement (Incorporated by reference to Exhibit 10.24 of the Company's Annual Report on Form 10-K filed on February 24, 2020).</a>
10.19*	<a href="#">Employment Agreement, by and between Lattice Semiconductor Corporation and Stephen Douglass, effective September 4, 2018 (Incorporated by reference to Exhibit 10.2 filed with the Company's Quarterly Report on Form 10-Q filed on October 29, 2018).</a>
10.20*	<a href="#">Employment Agreement, by and between Lattice Semiconductor Corporation and Sherri Luther, effective January 2, 2019 (Incorporated by reference to Exhibit 10.1 filed with the Company's Current Report on Form 8-K filed on January 2, 2019).</a>
10.21*	<a href="#">Employment Agreement, by and between Lattice Semiconductor Corporation and Esam Elashmawi, dated September 24, 2018 (Incorporated by reference to Exhibit 10.20 filed with the Company's Annual Report on Form 10-K filed on February 26, 2019).</a>
10.22	<a href="#">Credit Agreement, dated as of May 17, 2019, by and among Lattice Semiconductor Corporation, as borrower, the lenders from time to time party thereto and Wells Fargo Bank, National Association, as administrative agent. (Incorporated by reference to Exhibit 10.1 filed with the Company's Current Report on Form 8-K filed May 20, 2019).</a>
10.23	<a href="#">Office Lease, effective as of October 21, 2014, between 555 SW Oak, LLC and Lattice Semiconductor Corporation (Incorporated by reference to Exhibit 10.1 filed with the Company's Current Report on Form 8-K filed October 27, 2014).</a>
21.1	<a href="#">Subsidiaries of the Registrant.</a>
23.1	<a href="#">Consent of Independent Registered Public Accounting Firm (Ernst &amp; Young LLP).</a>
24.1	<a href="#">Power of Attorney (reference is made to the signature page hereto).</a>

\* Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Annual Report on Form 10-K pursuant to Item 15(b) thereof.

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<b>Exhibit Number</b>	<b>Description</b>
<b>31.1</b>	<a href="#">Certification of Chief Executive Officer pursuant to the Securities Exchange Act of 1934 Rule 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
<b>31.2</b>	<a href="#">Certification of Chief Financial Officer pursuant to the Securities Exchange Act of 1934 Rule 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>
<b>32.1</b>	<a href="#">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.</a>
<b>32.2</b>	<a href="#">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.</a>
<b>101.INS</b>	Inline XBRL Instance Document (the Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
<b>101.SCH</b>	Inline XBRL Taxonomy Extension Schema Document
<b>101.CAL</b>	Inline XBRL Taxonomy Extension Calculation Linkbase Document
<b>101.DEF</b>	Inline XBRL Taxonomy Extension Definition Linkbase Document
<b>101.LAB</b>	Inline XBRL Taxonomy Extension Labels Linkbase Document
<b>101.PRE</b>	Inline XBRL Taxonomy Extension Presentation Linkbase Document
<b>104</b>	Cover Page Interactive Data File - formatted in Inline XBRL and included in Exhibit 101

## SIGNATURES

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

LATTICE SEMICONDUCTOR CORPORATION  
(Registrant)

By: /s/ Sherri Luther  
Sherri Luther  
Chief Financial Officer  
(Duly Authorized Officer and Principal Financial and Accounting Officer)

Date: February 17, 2023

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

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<b>Principal Executive Officer</b>		
<u>/s/ James Anderson</u> James Anderson	President, Chief Executive Officer, and Director	February 17, 2023
<b>Principal Financial and Accounting Officer</b>		
<u>/s/ Sherri Luther</u> Sherri Luther	Chief Financial Officer	February 17, 2023
<b>Directors</b>		
<u>/s/ Robin Abrams</u> Robin Abrams	Director	February 17, 2023
<u>/s/ Doug Bettinger</u> Doug Bettinger	Director	February 17, 2023
<u>/s/ Mark Jensen</u> Mark Jensen	Director	February 17, 2023
<u>/s/ Anjali Joshi</u> Anjali Joshi	Director	February 17, 2023
<u>/s/ James Lederer</u> James Lederer	Director	February 17, 2023
<u>/s/ Jeff Richardson</u> Jeff Richardson	Director	February 17, 2023
<u>/s/ Raejeanne Skillern</u> Raejeanne Skillern	Director	February 17, 2023



## **DESCRIPTION OF SECURITIES**

References to “Lattice” and the “Company” herein are, unless the context otherwise indicates, only to Lattice Semiconductor Corporation and not to any of its subsidiaries.

### **Description of Capital Stock**

The following is a summary of the Company’s capital stock and certain provisions of its Restated Certificate of Incorporation (the “**Certificate**”) and Bylaws (the “**Bylaws**”). This summary does not purport to be complete and is qualified in its entirety by the provisions of the Certificate and the Bylaws.

#### **Common Stock**

Shares Outstanding. The Company is authorized to issue up to 300 million shares of common stock, par value \$0.01 per share (the “**Common Stock**”).

Dividends. Subject to prior dividend rights of the holders of any shares of preferred stock of the Company (“**Preferred Stock**”), holders of shares of Common Stock are entitled to receive ratably dividends when, as and if declared by the Company’s Board of Directors (the “**Board**”) out of funds legally available for that purpose. Delaware law allows a corporation to pay dividends only out of surplus, as determined under Delaware law.

Voting Rights. Each share of Common Stock is entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of Common Stock do not have cumulative voting rights. This means a holder of a single share of Common Stock cannot cast more than one vote for each position to be filled on the Board. The directors of the Company are elected by a plurality of the voting power of the shares present in person or represented by proxy and entitled to vote on the election of directors. On all other matters submitted to the stockholders, the affirmative vote of the majority of the voting power of the shares present in person or represented by proxy shall be the act of the shareholders.

Other Rights. In the event of a liquidation, dissolution or winding up of our company, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior liquidation preferences of holders of convertible preferred stock, if any, then outstanding. The shares of Common Stock are not subject to redemption by operation of a sinking fund or otherwise. Holders of shares of Common Stock are not currently entitled to pre-emptive rights or conversion rights or other subscription rights.

Fully Paid. The issued and outstanding shares of Common Stock are fully paid and non-assessable. This means the full purchase price for the outstanding shares of Common Stock has been paid and the holders of such shares will not be assessed any additional amounts for such shares. Any additional shares of Common Stock that the Company may issue in the future will also be fully paid and non-assessable.

Transfer Agent and Registrar. The transfer agent and registrar for the Common Stock is Computershare Trust Company N.A.

Listing. Our Common Stock is listed on the Nasdaq Global Select Market under the trading symbol “LSCC”.

#### **Preferred Stock**

The Board is authorized to issue up to 10 million shares of Preferred Stock from time to time in one or more series, to establish the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of such shares and any qualifications, limitations or restrictions thereof. The issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of Common Stock. The issuance of Preferred Stock with voting and conversion rights may adversely affect the voting power of the holders of Common Stock, including the loss of voting control to others.

## Anti-takeover Effects of Our Certificate of Incorporation and Bylaws and Delaware Law

Some provisions of Delaware law, the Certificate and Bylaws could make the following more difficult:

- acquisition of the Company by means of a tender offer,
- acquisition of the Company by means of a proxy contest or otherwise, or
- removal of the Company's incumbent officers and directors.

These provisions, summarized below, are expected to discourage and prevent coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of the Company to first negotiate with the Board. They are also intended to provide our management with the flexibility to enhance the likelihood of continuity and stability if our Board determines that a takeover is not in our best interests or the best interests of the stockholders. These provisions, however could have the effect of discouraging attempts to acquire us, which could deprive our stockholders of opportunities to sell their shares of Common Stock at prices higher than prevailing market prices. The Company believes that the benefits of these provisions, including increased protection, give it the potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure the Company and outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Size of Board and Vacancies. The Bylaws provide that the Board will have one or more members, which number will be determined from time to time by resolution of the Board. We do not have a classified board. The Certificate and Bylaws contain provisions that establish specific procedures for appointing and removing members of the Board. Under the Certificate and the Bylaws, and subject to the rights of holders of preferred stock, if any, vacancies and newly created directorships on the Board may be filled only by a majority of directors then serving on the Board. Under the Certificate and Bylaws, directors may be removed, with or without cause by a majority of the shares then entitled to vote at an election of directors.

Stockholder Action by Written Consent. The Bylaws provide that stockholder action may be taken by written consent, if such written consent is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

Stockholder Meetings. Under the Bylaws, only the chairman of the Board, chief executive officer or a majority of the authorized number of directors on the Board may call special meetings of the Company's stockholders.

Requirements for Advance Notification of Stockholder Nominations and Proposals. The Bylaws establish advance notice procedures with respect to stockholder proposals and nomination of candidates for election as directors.

Exclusive Jurisdiction. Under the Bylaws, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty, (iii) any action asserting a claim arising pursuant to the Delaware General Corporation Law, the Certificate or Bylaws, or (iv) any action asserting a claim against us that is governed by the internal affairs doctrine. The Bylaws also provide that the federal district courts of the United States of America are the exclusive forum for resolving any complaint asserting a course of action under the Securities Act. This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. Any person or entity purchasing or otherwise acquiring any interest in our securities is deemed to have notice of and consented to this provision. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings.

Delaware Anti-takeover Law. The Company is subject to Section 203 of the Delaware General Corporation Law ("**Section 203**"), an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date such person became an interested stockholder, unless the business combination or the *transaction* in which such person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an "interested stockholder" is a person that, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the Board, including discouraging attempts that might result in a premium over the market price for the shares of Common Stock held by stockholders.

No Cumulative Voting. Neither the Certificate nor Bylaws provide for cumulative voting in the election of directors.

Undesignated Preferred Stock. The authorization of the Company's undesignated Preferred Stock makes it possible for the Board to issue Preferred Stock with voting or other rights or preferences that could impede the success of any attempt to change control of the Company.

## LATTICE SEMICONDUCTOR CORPORATION

## OUTSIDE DIRECTOR OPTION AGREEMENT

Lattice Semiconductor Corporation, (the "Company"), has granted to %%FIRST\_NAME%%-%% %%LAST\_NAME%%-%% (the "Optionee"), an option to purchase a total of ninety thousand (90,000) shares of the Company's Common Stock (the "Optioned Stock"), at the price determined as provided herein, and in all respects subject to the terms, definitions and provisions of the Company's 2011 Non-Employee Director Equity Incentive Plan (the "Plan") adopted by the Company which is incorporated herein by reference. The terms defined in the Plan shall have the same defined meanings herein.

1. Nature of the Option. This Option is a nonstatutory option and is not intended to qualify for any special tax benefits to the Optionee.

2. Exercise Price. The exercise price is %%OPTION\_PRICE, '\$999,999,999.9999'%%-%% for each share of Common Stock.

3. Exercise of Option. This Option shall be exercisable during its term in accordance with the provisions of Sections 4 and 8 of the Plan as follows:

(i) Right to Exercise.

(a) This Option shall become exercisable in installments cumulatively with respect to one-third (1/3) of the Optioned Stock twelve (12) months after the date of grant, and as to an additional one-third (1/3) of the Optioned Stock each twelve (12) months thereafter, so that one hundred percent (100%) of the Optioned Stock shall be exercisable three years after the date of grant; provided, however, that in no event shall any Option be exercisable prior to the date the stockholders of the Company approve the Plan and provided, further, that Optionee remains a director on such dates.

(b) This Option may not be exercised for a fraction of a share.

(c) In the event of Optionee's death, disability or other termination of service as a Director, the exercisability of the Option is governed by Section 8 of the Plan.

(ii) Method of Exercise. This Option shall be exercisable by written notice which shall state the election to exercise the Option and the number of Shares in respect of which the Option is being exercised. Such written notice shall be signed by the Optionee and shall be delivered to the Secretary of the Company. The written notice shall be accompanied by payment of the exercise price.

4. Method of Payment. Payment of the exercise price shall be by any of the following, or a combination thereof, at the election of the Optionee:

(i) cash;

(ii) check;

(iii) surrender of 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; or

(iv) delivery of a properly executed exercise notice together with such other documentation as the Company and the broker, 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.

5. Restrictions on Exercise. This Option may not be exercised if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any applicable federal or state securities or other law or regulations, or if such issuance would not comply with the requirements of any stock exchange upon which the Shares may then be listed. As a condition to the exercise of this Option, the Company may require Optionee to make any representation and warranty to the Company as may be required by any applicable law or regulation.

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6. Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by the Optionee. The terms of this Option shall be binding upon the executors, administrators, heirs, successors and assigns of the Optionee.

7. Term of Option. This Option may not be exercised more than ten (10) years from the date of grant of this Option, and may be exercised during such period only in accordance with the Plan and the terms of this Option.

8. Taxation Upon Exercise of Option. Optionee understands that, upon exercise of this Option, he or she will recognize income for tax purposes in an amount equal to the excess of the then Fair Market Value of the Shares purchased over the exercise price paid for such Shares. The Optionee should consult with any tax consultant(s) Optionee deems advisable in connection with the purchase or disposition of the Shares.

DATE OF GRANT: %%OPTION\_DATE, 'Month DD, YYYY' %-%

LATTICE SEMICONDUCTOR CORPORATION  
A Delaware corporation



By: \_\_\_\_\_  
Byron W. Milstead  
Corporate Vice President and General Counsel

By your acceptance of this Stock Option Grant, you acknowledge and agree that this Option is granted under and governed by the terms and conditions of the Plan and this Option Agreement. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan and the Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Plan Administrator upon any questions relating to the Plan and Option Agreement.

**EXHIBIT A**

**LATTICE SEMICONDUCTOR CORPORATION**  
**2011 NON-EMPLOYEE DIRECTOR EQUITY INCENTIVE PLAN**  
**RESTRICTED STOCK UNIT AGREEMENT**

1. **Grant.** The Company hereby grants to the Non-Employee Director an award of Restricted Stock Units (“RSUs”), as set forth in the Notice of Grant of Restricted Stock Units and subject to the terms and conditions in this Agreement and the Company’s 2011 Non-Employee Director Equity Incentive Plan (the “Plan”). Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Restricted Stock Unit Agreement.

2. **Company’s Obligation.** Each RSU represents the right to receive a share of Stock on the vesting date. Unless and until the RSUs vest, the Non-Employee Director will have no right to receive Stock under such RSUs. Prior to actual distribution of Stock pursuant to any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

3. **Vesting Schedule.** Subject to paragraph 4, and to relevant Plan provisions, the RSUs awarded by this Agreement will vest in the Non-Employee Director according to the vesting schedule specified in the Notice of Grant.

4. **Forfeiture upon Termination of Service.** Notwithstanding any contrary provision of this Agreement or the Notice of Grant, if the Non-Employee Director terminates service as a Non-Employee Director, for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited at no cost to the Company.

5. **Payment after Vesting.** Any RSUs that vest in accordance with this Agreement will be paid to the Non-Employee Director (or in the event of the Non-Employee Director’s death, to his or her estate) in shares of Stock, subject to the Non-Employee Director satisfying the applicable tax withholding obligations set forth in paragraph 11.

6. **Payments after Death.** Any distribution or delivery to be made to the Non-Employee Director under this Agreement will, if the Non-Employee Director is then deceased, be made to the administrator or executor of the Non-Employee Director’s estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. **Rights as Stockholder.** Neither the Non-Employee Director nor any person claiming under or through the Non-Employee Director will have any of the rights or privileges of a stockholder of the Company in respect of any shares of Stock deliverable hereunder unless and until certificates representing such shares of Stock will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Non-Employee Director or Non-Employee Director’s broker.

8. **No Effect on Service.** The Non-Employee Director’s service with the Company is on an at-will basis only. Accordingly, the terms of the Non-Employee Director’s service with the Company and its subsidiaries will be determined from time to time by the Company, and the Company will have the right, which is hereby expressly reserved, to terminate or change the terms of the service of the Non-Employee Director at any time for any reason whatsoever, with or without good cause or notice.

9. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at 5555 N.E. Moore Court, Hillsboro, OR 97124 **Attn:** Stock Administration, or at such other address as the Company may hereafter designate in writing or electronically.

10. **Change in Control.** In the event of a change in the capital structure of the Company, which is a corporation merger, consolidation, plan of exchange, combination, or other purchase of the Company’s stock or assets (a “Change in Control”), the acquiring corporation may, without the consent of the Non-Employee Director, assume the Company’s rights and obligations under outstanding RSUs and adjust such awards to reflect the acquiring corporation’s stock. In the event that the acquiring corporation elects not to assume outstanding RSUs in connection with a Change in Control, or if the acquiring corporation is not a “publicly held corporation” within the meaning of Section 162(m) of the Code, the RSUs will vest and be settled by the Company through the issuance of shares of Stock immediately prior to the effective date of the Change in Control.

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11. Code Section 409A. Notwithstanding anything to the contrary in this Agreement, if the Company reasonably determines that Section 409A of the Code will result in the imposition of additional tax with respect to the payment of RSUs on account of the Non-Employee Director's termination of service, the RSUs (and/or at the election of the Non-Employee Director the cash received from the sale of the shares of Stock underlying the vested RSUs) will not be paid to the Non-Employee Director until the date six (6) months and one (1) day following the date of the Non-Employee Director's termination.

12. Withholding of Taxes. Notwithstanding any contrary provision of this Agreement, no certificate representing the shares of Stock will be issued to Non-Employee Director, unless and until satisfactory arrangements (as determined by the Company) will have been made by Non-Employee Director with respect to the payment of income, employment, and other taxes which the Company determines must be withheld with respect to such shares of Stock. To the extent determined appropriate by the Company in its discretion, it shall have the right (but not the obligation) to satisfy any tax withholding obligations by reducing the number of shares of Stock otherwise deliverable to Non-Employee Director. If the Non-Employee Director fails to make satisfactory arrangements for the payment of any required tax withholding obligations hereunder at the time any applicable RSUs otherwise are scheduled to vest pursuant to paragraphs 3 or 10, Non-Employee Director will permanently forfeit such RSUs and any right to receive shares of Stock thereunder and the RSUs will be returned to the Company at no cost to the Company.

13. Grant is Not Transferable. Except to the limited extent provided in paragraph 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged, or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment, or similar process. Upon any attempt to transfer, assign, pledge, hypothecate, or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment, or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors, and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration, or qualification of the shares of Stock upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to the Non-Employee Director (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent, or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

16. Plan Governs. This Agreement and the Notice of Grant are subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement or the Notice of Grant and one or more provisions of the Plan, the provisions of the Plan will govern.

17. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation, and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Non-Employee Director, the Company, and all other interested persons. No member of the Administrator will be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan or this Agreement.

**LATTICE SEMICONDUCTOR CORPORATION  
2013 INCENTIVE PLAN  
STOCK OPTION AGREEMENT**

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Option Agreement.

**I. NOTICE OF STOCK OPTION GRANT**

Dear %%FIRST\_NAME%%-%% %%LAST\_NAME%%-%%

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

GRANT NUMBER: %%OPTION\_NUMBER%%-

DATE OF GRANT: %%OPTION\_DATE, 'Month DD, YYYY'%%-

VESTING COMMENCEMENT DATE: %%VEST\_BASE\_DATE, 'Month DD, YYYY'%%-

EXERCISE PRICE PER SHARE: %%OPTION\_PRICE, '\$999,999,999.9999'%%-

TOTAL SHARES GRANTED: %%TOTAL\_SHARES\_GRANTED, '999,999,999'%%-

TYPE OF OPTION: **Nonstatutory Stock Option**

TERM/EXPIRATION DATE: %%EXPIRE\_DATE\_PERIOD1, 'Month DD, YYYY'%%-

Vesting Schedule:

This option shall vest in accordance with the following schedule:

Six and one quarter percent (6.25%) of the shares subject to the Option shall vest three months after the Vesting Commencement Date, and an additional six and one quarter percent (6.25%) of the shares subject to the Option shall vest on the last day of each three month period thereafter, provided that vesting is suspended for the number of days by which a leave exceeds a full pay period.

Exercise Schedule:

Except as provided in the Plan and in Section 4 of Part II of this Agreement, vested shares of the Option may be exercised, in whole or in part, at any time during the term of the Option.

Termination Period:

Vested shares of this Option may be exercised for three months after termination of Optionee's employment relationship, or for such longer period and to such extent as may be applicable upon death or disability of Optionee as provided in the Plan and in Section 4 of Part II of this agreement, but in no event later than the Term/Expiration Date as provided above.

**II. ADDITIONAL PROVISIONS OF OPTION**

1. Grant of Option. The Plan Administrator of the Company hereby grants to the optionee named in the Notice of Grant attached as Part I of this Agreement (the "Optionee"), an option (the "Option") to purchase a number of Shares, as set forth in the Notice of Grant, at the exercise price per share set forth in the Notice of Grant (the "Exercise Price"), subject to the terms and conditions of the Plan, which is incorporated herein by reference. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option, this Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code.

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## 2. Exercise of Option.

(a) Right to Exercise. This Option is exercisable during its term in accordance with the Exercise Schedule set out in the Notice of Grant (I, preceding) and the applicable provisions of the Plan and this Option Agreement. In the event of Optionee's death, disability or other termination of Optionee's employment relationship, the exercisability of the Option is governed by the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option is exercisable by delivery of an exercise notice, in the form attached as Exhibit A (the "Exercise Notice"), which shall state the election to exercise the Option, the number of Shares being exercised (the "Exercised Shares"), and such other representations and agreements (such as a stock restriction agreement) as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice and any other required agreements shall be signed by the Optionee and shall be delivered in person or by certified mail to the Stock Administrator of the Company. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice and any other required agreements accompanied by such aggregate Exercise Price (see 3. Method of Payment, below).

No Shares shall be issued pursuant to the exercise of this Option unless such issuance and exercise complies with all relevant provisions of law and the requirements of any stock exchange or quotation service upon which the Shares are then listed. Assuming such compliance, for U.S. Federal income tax purposes the Exercised Shares shall be considered transferred to the Optionee on the date the Option is exercised with respect to such Exercised Shares.

3. Method of Payment. Payment of the aggregate Exercise Price and applicable taxes shall be by any of the following, or a combination thereof, at the election of the Optionee:

(a) cash; or

(b) check; or

(c) delivery of a properly executed exercise notice together with such other documentation as the Stock Administrator and the broker, if applicable, shall require to effect an exercise of the Option and delivery to the Company of the sale proceeds or broker loan proceeds required to pay the exercise price and taxes (commonly called same day sale); or

(d) at the discretion of the Plan Administrator, either at the time of exercise in the case of Non-Statutory Stock Options or at the time of grant for Incentive Stock Options, by surrender of other Stock which (i) in the case of Stock acquired upon exercise of an option, has been owned by the Optionee for more than six (6) months on the date of surrender (unless the Plan Administrator consents to accepting Stock held for a lesser period of time), **and** (ii) has a fair market value on the date of surrender at least equal to the aggregate Exercise Price of the Exercised Shares.

## 4. Termination of Employment.

(a) In the event the employment of the Optionee 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 subsection (b) below, the Option held by the Optionee may be exercised at any time prior to its expiration date or the expiration of three months after the date of such termination of employment, 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 (i.e. no vesting occurs after termination).

(b) In the event the 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 IRC), the Option may be fully exercised with respect to all remaining unexercised shares, including those shares that would otherwise have been vested on the date of death or disability, at any time prior to its expiration date or the expiration of one year after the date of such termination, whichever is the shorter period. If the Optionee's employment is terminated by death, the Option shall be exercisable only by the person or persons to whom the Optionee's rights under the 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.

(c) In the event of the death or termination of employment of the Optionee, to the extent the Option shall not have been exercised within the limited periods provided above, all further rights to purchase shares pursuant to the Option shall cease and terminate at the expiration of such periods.

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5. Transferability of Option.

(a) Option Generally Non-Transferable. 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. The terms of the Plan and this Option Agreement shall be binding upon the transferees, purchasers, executors, administrators, heirs, successors and assigns of the Optionee.

(b) Limited Transferability of Option. At the sole discretion of the Plan Administrator or its appointee, and subject to such terms and conditions as the Plan Administrator or its appointee deems advisable, the Plan Administrator or its appointee may allow, by means of a writing to the Optionee, for all or part of this Option, to the extent such shares of this Option are fully vested, to be assigned or transferred, including by means of sale, during the 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 the 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 provision of this Option Agreement and the Plan, and there shall be no further assignment or transfer of the Option.

6. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

7. Employment At-Will. Nothing in the Plan or this Agreement shall confer upon the Optionee any right to continue in an employment relationship with 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 by whom the Optionee is employed to terminate the Optionee's employment at any time, for any reason, with or without cause.

8. Tax Consequences. Some of the U.S. Federal tax consequences relating to this Option, as of the date of this Option, are set forth below. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. THE OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(a) Exercising the Option.

(i) Nonqualified Stock Option ("NSO"). If this Option does not qualify as an ISO, the Optionee may incur regular U.S. Federal income tax liability upon exercise. The Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the fair market value of the Exercised Shares on the date of exercise over their aggregate Exercise Price. If the Optionee is an employee, the Company will be required to withhold from Optionee and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income at the time of exercise.

(ii) Incentive Stock Option ("ISO"). If this Option qualifies as an ISO, the Optionee will have no regular U.S. Federal income tax liability upon its exercise, although the excess, if any, of the fair market value of the Exercised Shares on the date of exercise over their aggregate Exercise Price will be treated as an adjustment to the alternative minimum tax for U.S. Federal tax purposes and may subject the Optionee to alternative minimum tax in the year of exercise.

(b) Disposition of Shares.

(i) NSO. Upon disposition of the Shares, any gain or loss will be treated as capital gain or loss for U.S. Federal income tax purposes.

(ii) ISO. If the Optionee holds ISO Shares for at least one year after exercise **and** two years after the grant date, any gain realized on disposition of the Shares will be treated as long-term capital gain for U.S. Federal income tax purposes. If the Optionee disposes of ISO Shares within one year after exercise or two years after the grant date, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the excess, if any, of the **lesser of (A) the difference between the fair market value of the Shares acquired on the date of exercise and the aggregate Exercise Price, or (B) the difference between the sale price of such Shares and the aggregate Exercise Price.**

(c) Notice of Disqualifying Disposition of ISO Shares. If the Optionee sells or otherwise disposes of any of the Shares acquired pursuant to an ISO on or before the later of (i) two years after the grant date, or (ii) one year after the exercise date, the Optionee shall immediately notify the Company in writing of such disposition. The Optionee agrees that he or she may be subject to income tax withholding by the Company on the compensation income recognized from such early disposition of ISO shares.

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9. Inside Information. By signing this Agreement, Optionee acknowledges that he or she has received, read and understood the Company's policy with respect to trading Company securities while possessing Inside Information.

### III. ACKNOWLEDGEMENTS

By your acceptance of this Stock Option Grant, you acknowledge and agree that this Option is granted under and governed by the terms and conditions of the Plan and this Option Agreement. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan and the Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Plan Administrator upon any questions relating to the Plan and Option Agreement.

Lattice Semiconductor Corporation

A handwritten signature in black ink, consisting of a stylized 'B' followed by a large, loopy 'M'.

Byron W. Milstead  
Corporate Vice President and General Counsel

**EXHIBIT A****LATTICE SEMICONDUCTOR CORPORATION****2013 INCENTIVE PLAN****RESTRICTED STOCK UNIT AGREEMENT**

1. **Grant.** The Company hereby grants to the Employee an award of Restricted Stock Units ("RSUs"), as set forth in the Notice of Grant of Restricted Stock Units and subject to the terms and conditions in this Agreement and the Company's 2013 Incentive Plan (the "Plan"). Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Restricted Stock Unit Agreement.

2. **Company's Obligation.** Each RSU represents the right to receive a share of Stock on the vesting date. Unless and until the RSUs vest, the Employee will have no right to receive Stock under such RSUs. Prior to actual distribution of Stock pursuant to any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

3. **Vesting Schedule.** Subject to paragraph 4, and to relevant Plan provisions, the RSUs awarded by this Agreement will vest in the Employee according to the vesting schedule specified in the Notice of Grant.

4. **Forfeiture upon Termination of Service.** Notwithstanding any contrary provision of this Agreement or the Notice of Grant, if the Employee terminates service as an employee, for any or no reason prior to vesting, the unvested RSUs awarded by this Agreement will thereupon be forfeited at no cost to the Company.

5. **Payment after Vesting.** Any RSUs that vest in accordance with this Agreement will be paid to the Employee (or in the event of the Employee's death, to his or her estate) in shares of Stock, subject to the Employee satisfying the applicable tax withholding obligations set forth in paragraph 11.

6. **Payments after Death.** Any distribution or delivery to be made to the Employee under this Agreement will, if the Employee is then deceased, be made to the administrator or executor of the Employee's estate. Any such administrator or executor must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

7. **Rights as Stockholder.** Neither the Employee nor any person claiming under or through the Employee will have any of the rights or privileges of a stockholder of the Company in respect of any shares of Stock deliverable hereunder unless and until certificates representing such shares of Stock will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Employee or Employee's broker.

8. **No Effect on Employment.** The Employee's employment with the Company and its subsidiaries is on an at-will basis only. Accordingly, the terms of the Employee's employment with the Company and its subsidiaries will be determined from time to time by the Company or the subsidiary employing the Employee (as the case may be), and the Company or the subsidiary will have the right, which is hereby expressly reserved, to terminate or change the terms of the employment of the Employee at any time for any reason whatsoever, with or without good cause or notice.

9. **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at 5555 N.E. Moore Court, Hillsboro, OR 97124 **Attn:** Stock Administration, or at such other address as the Company may hereafter designate in writing or electronically.

10. **Change in Control.** In the event of a change in the capital structure of the Company, which is a corporation merger, consolidation, plan of exchange, combination, or other purchase of the Company's stock or assets (a "Change in Control"), the acquiring corporation may, without the consent of the Employee, assume the Company's rights and obligations under outstanding RSUs and adjust such awards to reflect the acquiring corporation's stock. In the event that the acquiring corporation elects not to assume outstanding RSUs in connection with a Change in Control, or if the acquiring corporation is not a "publicly held corporation" within the meaning of Section 162(m) of the Code, the RSUs will vest and be settled by the Company through the issuance of shares of Stock immediately prior to the effective date of the Change in Control.

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11. Code Section 409A. Notwithstanding anything to the contrary in this Agreement, if the Company reasonably determines that Section 409A of the Code will result in the imposition of additional tax with respect to the payment of RSUs on account of the Employee's termination of employment, the RSUs (and/or at the election of the Employee the cash received from the sale of the shares of Stock underlying the vested RSUs) will not be paid to the Employee until the date six (6) months and one (1) day following the date of the Employee's termination.

12. Withholding of Taxes. Notwithstanding any contrary provision of this Agreement, no certificate representing the shares of Stock will be issued to Employee, unless and until satisfactory arrangements (as determined by the Company) will have been made by Employee with respect to the payment of income, employment, and other taxes which the Company determines must be withheld with respect to such shares of Stock. To the extent determined appropriate by the Company in its discretion, it shall have the right (but not the obligation) to satisfy any tax withholding obligations by reducing the number of shares of Stock otherwise deliverable to Employee. If the Employee fails to make satisfactory arrangements for the payment of any required tax withholding obligations hereunder at the time any applicable RSUs otherwise are scheduled to vest pursuant to paragraphs 3 or 10, Employee will permanently forfeit such RSUs and any right to receive shares of Stock thereunder and the RSUs will be returned to the Company at no cost to the Company.

13. Grant is Not Transferable. Except to the limited extent provided in paragraph 6, this grant and the rights and privileges conferred hereby will not be transferred, assigned, pledged, or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment, or similar process. Upon any attempt to transfer, assign, pledge, hypothecate, or otherwise dispose of this grant, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment, or similar process, this grant and the rights and privileges conferred hereby immediately will become null and void.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors, and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. If at any time the Company will determine, in its discretion, that the listing, registration, or qualification of the shares of Stock upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to the Employee (or his or her estate), such issuance will not occur unless and until such listing, registration, qualification, consent, or approval will have been effected or obtained free of any conditions not acceptable to the Company. The Company will make all reasonable efforts to meet the requirements of any such state or federal law or securities exchange and to obtain any such consent or approval of any such governmental authority.

16. Plan Governs. This Agreement and the Notice of Grant are subject to all terms and provisions of the Plan. In the event of a conflict between one or more provisions of this Agreement or the Notice of Grant and one or more provisions of the Plan, the provisions of the Plan will govern.

17. Administrator Authority. The Administrator will have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation, and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any RSUs have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith will be final and binding upon Employee, the Company, and all other interested persons. No member of the Administrator will be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan or this Agreement.

**LATTICE SEMICONDUCTOR CORPORATION  
2013 INCENTIVE PLAN  
STOCK OPTION AGREEMENT**

Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in this Option Agreement.

**I. NOTICE OF STOCK OPTION GRANT**

Dear %%FIRST\_NAME%--% %%LAST\_NAME %--%

You have been granted an option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

GRANT NUMBER: %%OPTION\_NUMBER%-%

DATE OF GRANT: %%OPTION\_DATE,'Month DD, YYYY'%-%

VESTING COMMENCEMENT DATE: %%VEST\_BASE\_DATE,'Month DD, YYYY'%-%

EXERCISE PRICE PER SHARE: %%OPTION\_PRICE,'\$999,999,999.9999'%-%

TOTAL SHARES GRANTED: %%TOTAL\_SHARES\_GRANTED,'999,999,999'%-%

TYPE OF OPTION: **Nonstatutory Stock Option**

TERM/EXPIRATION DATE: %%EXPIRE\_DATE\_PERIOD1,'Month DD, YYYY'%-%

Vesting Schedule:

This option shall vest in accordance with the following schedule:

One hundred percent (100%) of the shares subject to the Option shall vest two years after the Vesting Commencement Date, provided that vesting is suspended for the number of days by which a leave exceeds a full pay period. The number of shares that vest and are paid out is determined by the Performance Ratio. The Performance Ratio shall be the percentile rank of the Company's Relative Total Shareholder Return as compared to the distribution of the Total Shareholder Return of the component companies of the Philadelphia Stock Exchange Semiconductor Sector Index. The Relative Total Shareholder Return shall be determined by dividing the 60 day trailing average of the stock price as reported by the NASDAQ Global Market on May 13, 2018 by the 60 day trailing average as reported by the NASDAQ Global Market on May 13, 2016. The Payout Percentage shall be linear between a 25% Performance Ratio and a 75% Performance Ratio, with a 0% payout at a 25% Performance Ratio, a 100% payout at a 50% Performance Ratio, and a 200% payout at a 75% Performance Ratio.

Exercise Schedule:

Except as provided in the Plan and in Section 4 of Part II of this Agreement, vested shares of the Option may be exercised, in whole or in part, at any time during the term of the Option.

Termination Period:

Vested shares of this Option may be exercised for three months after termination of Optionee's employment relationship, or for such longer period and to such extent as may be applicable upon death or disability of Optionee as provided in the Plan and in Section 4 of Part II of this agreement, but in no event later than the Term/Expiration Date as provided above.

**II. ADDITIONAL PROVISIONS OF OPTION**

1. Grant of Option. The Plan Administrator of the Company hereby grants to the optionee named in the Notice of Grant attached as Part I of this Agreement (the "Optionee"), an option (the "Option") to purchase a number of Shares, as set forth in the Notice of Grant, at the exercise price per share set forth in the Notice of Grant (the "Exercise Price"), subject to the terms and conditions of the Plan, which is incorporated herein by reference. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option, this Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code.

2. Exercise of Option.

(a) Right to Exercise. This Option is exercisable during its term in accordance with the Exercise Schedule set out in the Notice of Grant (I, preceding) and the applicable provisions of the Plan and this Option Agreement. In the event of Optionee's death, disability or other termination of Optionee's employment relationship, the exercisability of the Option is governed by the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option is exercisable by delivery of an exercise notice, in the form attached as Exhibit A (the "Exercise Notice"), which shall state the election to exercise the Option, the number of Shares being exercised (the "Exercised Shares"), and such other representations and agreements (such as a stock restriction agreement) as may be required by the Company pursuant to the provisions of the Plan. The Exercise Notice and any other required agreements shall be signed by the Optionee and shall be delivered in person or by certified mail to the Stock Administrator of the Company. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice and any other required agreements accompanied by such aggregate Exercise Price (see 3. Method of Payment, below).

No Shares shall be issued pursuant to the exercise of this Option unless such issuance and exercise complies with all relevant provisions of law and the requirements of any stock exchange or quotation service upon which the Shares are then listed. Assuming such compliance, for U.S. Federal income tax purposes the Exercised Shares shall be considered transferred to the Optionee on the date the Option is exercised with respect to such Exercised Shares.

3. Method of Payment. Payment of the aggregate Exercise Price and applicable taxes shall be by any of the following, or a combination thereof, at the election of the Optionee:

- (a) cash; or
- (b) check; or
- (c) delivery of a properly executed exercise notice together with such other documentation as the Stock Administrator and the broker, if applicable, shall require to effect an exercise of the Option and delivery to the Company of the sale proceeds or broker loan proceeds required to pay the exercise price and taxes (commonly called same day sale); or
- (d) at the discretion of the Plan Administrator, either at the time of exercise in the case of Non-Statutory Stock Options or at the time of grant for Incentive Stock Options, by surrender of other Stock which (i) in the case of Stock acquired upon exercise of an option, has been owned by the Optionee for more than six (6) months on the date of surrender (unless the Plan Administrator consents to accepting Stock held for a lesser period of time), **and** (ii) has a fair market value on the date of surrender at least equal to the aggregate Exercise Price of the Exercised Shares.

4. Termination of Employment.

(a) In the event the employment of the Optionee 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 subsection (b) below, the Option held by the Optionee may be exercised at any time prior to its expiration date or the expiration of three months after the date of such termination of employment, 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 (i.e. no vesting occurs after termination).

(b) In the event the 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 IRC), the Option may be fully exercised with respect to all remaining unexercised shares, including those shares that would otherwise have been unvested on the date of death or disability, at any time prior to its expiration date or the expiration of one year after the date of such termination, whichever is the shorter period. If the Optionee's employment is terminated by death, the Option shall be exercisable only by the person or persons to whom the Optionee's rights under the 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.

(c) In the event of the death or termination of employment of the Optionee, to the extent the Option shall not have been exercised within the limited periods provided above, all further rights to purchase shares pursuant to the Option shall cease and terminate at the expiration of such periods.

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5. Transferability of Option.

(a) Option Generally Non-Transferable. 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. The terms of the Plan and this Option Agreement shall be binding upon the transferees, purchasers, executors, administrators, heirs, successors and assigns of the Optionee.

(b) Limited Transferability of Option. At the sole discretion of the Plan Administrator or its appointee, and subject to such terms and conditions as the Plan Administrator or its appointee deems advisable, the Plan Administrator or its appointee may allow, by means of a writing to the Optionee, for all or part of this Option, to the extent such shares of this Option are fully vested, to be assigned or transferred, including by means of sale, during the 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 the 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 provision of this Option Agreement and the Plan, and there shall be no further assignment or transfer of the Option.

6. Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

7. Employment At-Will. Nothing in the Plan or this Agreement shall confer upon the Optionee any right to continue in an employment relationship with 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 by whom the Optionee is employed to terminate the Optionee's employment at any time, for any reason, with or without cause.

8. Tax Consequences. Some of the U.S. Federal tax consequences relating to this Option, as of the date of this Option, are set forth below. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. THE OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(a) Exercising the Option.

(i) Nonqualified Stock Option ("NSO"). If this Option does not qualify as an ISO, the Optionee may incur regular U.S. Federal income tax liability upon exercise. The Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the fair market value of the Exercised Shares on the date of exercise over their aggregate Exercise Price. If the Optionee is an employee, the Company will be required to withhold from Optionee and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income at the time of exercise.

(ii) Incentive Stock Option ("ISO"). If this Option qualifies as an ISO, the Optionee will have no regular U.S. Federal income tax liability upon its exercise, although the excess, if any, of the fair market value of the Exercised Shares on the date of exercise over their aggregate Exercise Price will be treated as an adjustment to the alternative minimum tax for U.S. Federal tax purposes and may subject the Optionee to alternative minimum tax in the year of exercise.

(b) Disposition of Shares.

(i) NSO. Upon disposition of the Shares, any gain or loss will be treated as capital gain or loss for U.S. Federal income tax purposes.

(ii) ISO. If the Optionee holds ISO Shares for at least one year after exercise **and** two years after the grant date, any gain realized on disposition of the Shares will be treated as long-term capital gain for U.S. Federal income tax purposes. If the Optionee disposes of ISO Shares within one year after exercise or two years after the grant date, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the excess, if any, of the **lesser of (A) the difference between the fair market value of the Shares acquired on the date of exercise and the aggregate Exercise Price, or (B) the difference between the sale price of such Shares and the aggregate Exercise Price.**

(c) Notice of Disqualifying Disposition of ISO Shares. If the Optionee sells or otherwise disposes of any of the Shares acquired pursuant to an ISO on or before the later of (i) two years after the grant date, or (ii) one year after the exercise date, the Optionee shall immediately notify the Company in writing of such disposition. The Optionee agrees that he or she may be subject to income tax withholding by the Company on the compensation income recognized from such early disposition of ISO shares.

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9. Inside Information. By signing this Agreement, Optionee acknowledges that he or she has received, read and understood the Company's policy with respect to trading Company securities while possessing Inside Information.

### III. ACKNOWLEDGEMENTS

By your acceptance of this Stock Option Grant, you acknowledge and agree that this Option is granted under and governed by the terms and conditions of the Plan and this Option Agreement. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan and the Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Plan Administrator upon any questions relating to the Plan and Option Agreement.

Lattice Semiconductor Corporation

A handwritten signature in black ink, consisting of a stylized 'B' followed by a large, rounded 'M'.

Byron W. Milstead  
Corporate Vice President and General Counsel

**LATTICE SEMICONDUCTOR CORPORATION  
2013 INCENTIVE PLAN**

**NOTICE OF PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AND GLOBAL PERFORMANCE-BASED RESTRICTED STOCK UNIT AGREEMENT**

The Participant has been granted this Restricted Stock Unit (“RSU”) award according to the terms below and subject to the terms and conditions of the Lattice Semiconductor Corporation 2013 Incentive Plan (the “Plan”) and this Notice of Performance-Based Restricted Stock Unit Award and Global Restricted Stock Unit Agreement (the “Notice of Grant”), the Terms and Conditions of Performance-Based Restricted Stock Unit Award attached hereto as Exhibit A, the Performance Matrix attached hereto as Exhibit B, the Country-Specific Provisions attached hereto as Exhibit C, and any other appendices and exhibits to these documents (all together, the “Agreement”), as follows:

Participant \_\_\_\_\_

Participant I.D. \_\_\_\_\_

Grant Number \_\_\_\_\_

Grant Date \_\_\_\_\_

Vesting Commencement Date \_\_\_\_\_

Target Number of RSUs \_\_\_\_\_

Maximum Number of RSUs \_\_\_\_\_

Performance Periods      Single Performance Period: Grant Date through 3-year anniversary of Grant Date

Capitalized terms that are not defined in this Agreement have the meanings given to them in the Plan.

Vesting Schedule:

The Target Number of RSUs will be allocated into a single tranche (the “Tranche”). Unless the vesting is accelerated, the number of RSUs that will become eligible to vest according to the applicable vesting schedule below (“Eligible RSUs”) will depend upon achievement of the performance goal set forth in the Performance Matrix (the “Performance Goal”), attached hereto as Exhibit B, during the applicable Performance Period.

If a Change in Control does not occur before the last day of the applicable Performance Period, the Eligible RSUs for a Tranche will vest on the date the Board or the Compensation Committee of the Board, as applicable (in either case, the “Administrator”) certifies in writing the extent to which the Performance Goal is achieved, which will be as soon as administratively practicable following the end of the Performance Period (the “Vesting Date”), if Participant does not experience a Termination of Service before the Vesting Date.

If a Change in Control occurs before the last day of the applicable Performance Period, then the Administrator will certify in writing the extent to which the Performance Goal is achieved during the applicable Adjusted Performance Period (as described in Exhibit B), and 100% of the Eligible RSUs will vest on the last day of the Performance Period if Participant does not experience a Termination of Service before such date, subject to the terms set forth in “Vesting Acceleration” section below.

Except to the extent provided in the “Vesting Acceleration” section of this Notice of Grant, if the Participant experiences a Termination of Service for any or no reason before he or she fully vests in these RSUs, the unvested RSUs will terminate according to the terms of Section 5 of this Agreement, and any fractional shares subject to the vested RSUs will be treated in accordance with Section 10.2 of the Plan.

Vesting Acceleration:

The vesting of the RSUs shall be subject to any vesting acceleration provisions applicable to the RSUs contained in any agreement between (a) Participant and (b) the Company or any Related Company.

*[Signature page follows.]*

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The Participant's signature below indicates that:

- (i) He or she agrees that this RSU award is granted under and governed by the terms and conditions of the Plan and this Agreement, including their exhibits and appendices.
- (ii) He or she understands that the Company is not providing any tax, legal, or financial advice and is not making any recommendations regarding his or her participation in the Plan or his or her acquisition or sale of shares of Common Stock.
- (iii) He or she has reviewed the Plan and this Agreement, has had an opportunity to obtain the advice of personal tax, legal, and financial advisors prior to entering into this Agreement, and fully understands all provisions of the Plan and Agreement. He or she will consult with his or her own personal tax, legal, and financial advisors before taking any action related to the Plan.
- (iv) He or she has read and agrees to each provision of Sections 11 and 12 of this Agreement.
- (v) He or she will notify the Company of any change to the contact address below.

PARTICIPANT

Signature

Address: \_\_\_\_\_

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## EXHIBIT A

### TERMS AND CONDITIONS OF PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD

1. Grant. The Company grants the Participant an award of RSUs as described in the Notice of Grant. If there is a conflict between the Plan, this Agreement, or any other agreement with the Participant governing these RSUs, those documents will take precedence and prevail in the following order: (a) the Plan, (b) the Agreement, and (c) any other agreement between the Company and the Participant governing these RSUs.

2. Company's Obligation to Pay. Each RSU is a right to receive a share of Common Stock on the date it vests. Until an RSU vests, the Participant has no right to payment of the share of Common Stock. Before a vested RSU is paid, the RSU is an unsecured obligation of the Company, payable (if at all) only from the Company's general assets. A vested RSU will be paid to the Participant (or in the event of his or her death, to his or her estate) in whole shares of Common Stock as soon as practicable after vesting (but no later than 60 days following the vesting date), subject to him or her satisfying any obligations for Tax-Related Items (as defined in Section 8 of this Agreement) and any delay in payment required under Section 8 of this Agreement. The Participant cannot specify (directly or indirectly) the taxable year of the payment of any vested RSU under this Agreement.

3. Vesting. These RSUs will vest only under the Vesting Schedule in the Notice of Grant, the "Vesting Acceleration" section of the Notice of Grant, Section 4 of this Agreement, or Section 15.3 of the Plan. RSUs scheduled to vest on a certain date or upon the occurrence of a certain condition will not vest if the Participant has had a Termination of Service prior to the time such vesting is scheduled to occur. The Vesting Schedule may be modified under Section 3.2(c) of the Plan if the Participant takes a leave of absence or has a reduction in hours worked.

4. Committee Discretion. The Committee has the discretion to accelerate the vesting of any RSUs at any time, subject to the terms of the Plan. In that case, those RSUs will be vested as of the date specified by the Committee.

5. Forfeiture upon Termination of Service. Except to the extent provided in the "Vesting Acceleration" section of the Notice of Grant, upon the Participant's Termination of Service for any reason, these RSUs will immediately stop vesting and any of these RSUs that have not yet vested will be forfeited by the Participant upon: (a) the 30th day following the Termination of Service Date (or any earlier date on or following the Termination of Service Date determined by the Committee) if Participant's Termination of Service is due to the Participant's death or (b) the Termination of Service Date if Participant's Termination of Service is for any reason other than the Participant's death, in all cases, subject to applicable laws.

For purposes of the RSUs, the "Termination of Service Date" means the date on which the Participant last actively provides continuous services for a member of the Company Group (as defined below) (regardless of the reason such continuous service terminates and whether or not such termination is later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is providing services or the terms of the Participant's employment or service agreement, if any), however the Participant's right to vest in these RSUs will be extended by any notice period provided in a contract between the Participant and his or her employer. The Committee shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the RSUs (including whether the Participant may still be considered to be providing services while on a leave of absence).

6. Death of Participant. Any distribution or delivery to be made to the Participant under this Agreement will, if he or she is then deceased, be made to the administrator or executor of his or her estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations that apply to the transfer.

7. Change in Control. In the event of a Change in Control, after the determination of performance provided in the Change in Control section of Exhibit B, the acquiring corporation may, without the consent of the Participant, assume the Company's rights and obligations under outstanding Eligible RSUs and adjust such awards to reflect the acquiring corporation's stock. In the event that the acquiring corporation elects not to assume outstanding Eligible RSUs in connection with a Change in Control, or if the acquiring corporation is not a "publicly held corporation" within the meaning of Section 162(m) of the Code, the Eligible RSUs will vest and be settled by the Company through the issuance of shares of Stock immediately prior to the effective date of the Change in Control.

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## 8. Tax Obligations.

### (a) **Tax Withholding.**

(i) The Participant acknowledges that, regardless of any action taken by the Company or, if different, the Employer, the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account, and other tax-related items related to the Participant's participation in the Plan and legally applicable to the Participant ("**Tax-Related Items**") is and remains the Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant, vesting or settlement of the RSUs, the subsequent sale of shares of Common Stock acquired pursuant to such settlement and the receipt of any dividends or other distributions paid on the Common Stock, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant is subject to Tax-Related Items in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

(ii) Prior to any relevant taxable or tax withholding event, as applicable, the Participant agrees to make arrangements satisfactory to the Company and the Employer to satisfy any withholding obligations the Company or the Employer may have for Tax-Related Items. In this regard, the Participant authorizes the Company or the Employer, as applicable, and their respective agents, at their discretion, to satisfy any withholding obligation for Tax-Related Items by one or a combination of the following:

- (1) withholding from wages or other cash compensation payable to the Participant by the Company or the Employer;
- (2) requiring the Participant to tender a cash payment to the Company or the Employer;
- (3) by withholding from proceeds of a sale of shares of Common Stock acquired upon payment of these RSUs arranged by the Company (on the Participant's behalf pursuant to this authorization without further consent); and
- (4) by reducing the number of shares of Common Stock otherwise deliverable to the Participant (in which case the Participant will be deemed to have been issued the full number of shares of Common Stock subject to the vested portion of the RSUs, notwithstanding that a number of the shares of Common Stock is held back solely for the purpose of paying the Tax-Related Items).

(iii) The Company may withhold or account for Tax-Related Items by considering minimum statutory withholding rates or other applicable withholding rates, including up to the maximum applicable rates for the Participant's jurisdiction(s). If the maximum applicable rate for the Participant's jurisdiction is used in connection with the withholding methods described in (3) or (4) above, the Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent amount in shares of Common Stock.

(iv) If the Participant fails to make satisfactory arrangements for the payment of any Tax-Related Items under this Agreement when any of these RSUs otherwise are supposed to vest or Tax-Related Items related to RSUs otherwise are due, he or she will permanently forfeit the applicable RSUs and any right to receive shares of Common Stock under such RSUs, and such RSUs will be returned to the Company at no cost to the Company.

(b) **Code Section 409A.** This Section 8(b) does not apply if the Participant is not a U.S. taxpayer.

(i) If the vesting of any RSUs is accelerated in connection with the Participant's Termination of Service that is a "separation from service" within the meaning of Code Section 409A and (x) the Participant is a "specified employee" within the meaning of Code Section 409A at that time and (y) the payment of such accelerated RSUs would result in the imposition of additional tax under Code Section 409A if paid to the Participant within the 6-month period following such termination, then the accelerated RSUs will not be paid until the first day after the 6-month period ends.

(ii) If the Participant experiences a Termination of Service due to death or the Participant dies after his or her Termination of Service, the delay under Section 8(b)(i) of this Agreement will not apply, and these RSUs will be paid in shares of Common Stock to the Participant's estate as soon as practicable.

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(iii) All payments and benefits under this Agreement are intended to be exempt from Code Section 409A or comply with any requirements necessary to avoid the imposition of additional tax under Code Section 409A(a)(1)(B) so that none of these RSUs or shares of Common Stock issuable upon the vesting of RSUs will be subject to the additional tax imposed under Code Section 409A, and any ambiguities will be interpreted according to that intent.

(iv) Each payment under this Agreement is a separate payment under Treasury Regulations Section 1.409A-2(b)(2).

#### 9. Forfeiture Events.

(a) This RSU award will be subject to recoupment under any clawback policy in effect on the Date of Grant or that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. Unless this Section 9 is specifically mentioned and waived in any other document, no recovery of compensation under a clawback policy or otherwise will be an event that triggers or contributes to any right of the Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company and/or any Related Company (together, the "**Company Group**").

(b) If (i) the Participant (x) knowingly or through gross negligence engaged in the misconduct or knowingly or through gross negligence failed to prevent the misconduct or (y) is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002, and (ii) the Company is required to prepare an accounting restatement due to the material noncompliance of the Company, as a result of misconduct, with any financial reporting requirement under securities laws, the Participant must reimburse the Company the amount of any payment in settlement of this RSU award to the extent earned or accrued during the 12-month period following the first public issuance or filing with the United States Securities and Exchange Commission (whichever first occurred) of the financial document embodying such financial reporting requirement.

10. Rights as Stockholder. The Participant's rights as a stockholder of the Company (including the right to vote and to receive dividends and distributions) will not begin until shares of Common Stock have been issued and recorded on the records of the Company or its transfer agents or registrars.

11. Acknowledgements and Agreements. The Participant's acceptance of these RSUs by entering into this Agreement indicates that:

(a) HE OR SHE ACKNOWLEDGES AND AGREES THAT THE VESTING OF THESE RSUS IS EARNED ONLY BY CONTINUING SERVICE WITH THE COMPANY OR ANY RELATED COMPANY AND THAT BEING HIRED OR BEING GRANTED THESE RSUS WILL NOT RESULT IN VESTING.

(b) HE OR SHE FURTHER ACKNOWLEDGES AND AGREES THAT THESE RSUS AND THIS AGREEMENT DO NOT CREATE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER OF THE COMPANY OR ANY RELATED COMPANY FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL AND DOES NOT INTERFERE IN ANY WAY WITH HIS OR HER RIGHT OR THE RIGHT OF THE EMPLOYER(S) TO TERMINATE HIS OR HER RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE, SUBJECT TO APPLICABLE LAWS.

(c) The Participant acknowledges and agrees that the Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of the underlying shares of Common Stock. The Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

(d) The Participant agrees that this Agreement and its incorporated documents reflect all agreements on its subject matters and that he or she is not accepting this Agreement based on any promises, representations, or inducements other than those reflected in the Agreement.

(e) The Company may, in its sole discretion, decide to deliver any documents related to the RSUs awarded under the Plan or future RSUs that may be awarded under the Plan by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or a third party designated by the Company.

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(f) The Participant accepts that all good faith decisions or interpretations of the Committee regarding the Plan and Awards under the Plan are binding, conclusive, and final. No member of the Committee will be personally liable for any such decisions or interpretations.

12. Nature of Grant. In accepting the RSUs, the Participant acknowledges, understands, and agrees that:

(a) the Plan is established voluntarily by the Company, is discretionary in nature, and may be amended, suspended, or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of RSUs is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of restricted stock units or benefits in lieu of restricted stock units, even if restricted stock units have been granted in the past;

(c) all decisions regarding future Awards or other grants, if any, will be in the Company's sole discretion;

(d) the Participant is voluntarily participating in the Plan;

(e) the RSUs and any shares of Common Stock subject to the RSUs, and the income from and value of same, are not intended to replace any pension rights or compensation;

(f) the RSUs and any shares of Common Stock subject to the RSUs, and the income from and value of same, are not part of normal or expected compensation for any purpose, including for calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits, or similar payments;

(g) the future value of the shares of Common Stock underlying these RSUs is unknown, indeterminable, and cannot be predicted with certainty;

(h) no claim or entitlement to compensation or damages from any forfeiture of these RSUs resulting from his or her Termination of Service (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where he or she is providing services to the Employer or the terms of his or her employment or service agreement, if any); and

(i) no member of the Company Group shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of these RSUs or of any amounts due to him or her from the payment of these RSUs or the subsequent sale of any shares of Common Stock acquired upon such payment.

13. Data Privacy Information and Consent.

*The Company is located at 5555 NE Moore Court, Hillsboro, Oregon 97124 U.S.A. and grants employees of the Company and its Related Companies RSUs, at the Company's sole discretion. By entering into this Agreement, the Participant voluntarily consents to the collection, use and transfer, in electronic or other form, of Data (as defined below) by and among, as applicable, the Employer(s), the Company and any member of the Company Group for the exclusive purpose of implementing, administering, and managing his or her participation in the Plan. Accordingly, the Participant should review the following information about the Company's data processing practices.*

*(a) Data Collection and Usage. The Company collects, processes and uses the Participant's personal data, including the Participant's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, citizenship, job title, any shares of Common Stock or directorships held in the Company, and details of all RSUs or other entitlement to shares of Common Stock canceled, exercised, vested, unvested or outstanding in the Participant's favor ("Data"), which the Company receives from the Participant or the Employer. If the Company offers the Participant a grant of RSUs under the Plan, then the Company will collect the Participant's Data for purposes of allocating stock and implementing, administering and managing the Plan. The Company's legal basis for the processing of the Participant's Data would be the Participant's consent.*

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*(b) Stock Plan Administration Service Providers. The Company transfers Data to E\*TRADE, an independent service provider based in the United States, which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Data with another company that serves in a similar manner. The Company's service provider will open an account for the Participant to receive and trade shares of Common Stock. The Participant will be asked to agree on separate terms and data processing practices with the service provider, which is a condition to the Participant's ability to participate in the Plan.*

*(c) International Data Transfers. The Company and its service providers are based in the United States. The Participant should note that his or her country may have enacted data privacy laws that are different from the United States. For example, the European Commission has issued a limited adequacy finding with respect to the United States that applies only to the extent companies register for the EU-U.S. Privacy Shield program, which is open to companies subject to Federal Trade Commission jurisdiction and which the Company does not participate with respect to employee data. The Company's legal basis for the transfer of the Participant's Data is the Participant's consent.*

*(d) Data Retention. The Company will hold and use the Data only as long as is necessary to implement, administer and manage the Participant's participation in the Plan, or as required to comply with legal or regulatory obligations, including under tax, exchange control, labor and securities laws. This period may extend beyond the Participant's period of employment with the Employer.*

*(e) Voluntariness and Consequences of Consent Denial or Withdrawal. Participation in the Plan is voluntary and the Participant is providing the consents herein on a purely voluntary basis. If the Participant later seeks to revoke the Participant's consent, the Participant's salary from or employment with the Employer will not be affected solely by such actions of the Participant; the only consequence of refusing or withdrawing the Participant's consent is that the Company would not be able to grant RSUs or other equity awards to the Participant or administer or maintain such awards. Therefore, the Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan (including the right to retain these RSUs).*

*(f) Data Subject Rights. The Participant may have a number of rights under data privacy laws in the Participant's jurisdiction. Depending on where the Participant is based, such rights may include the right to (i) request access or copies of Data the Company processes, (ii) rectification of incorrect Data, (iii) deletion of Data, (iv) restrictions on processing of Data, (v) portability of Data, (vi) lodge complaints with competent authorities in the Participant's jurisdiction, and/or (vii) receive a list with the names and addresses of any potential recipients of Data. To receive clarification regarding these rights or to exercise these rights, the Participant can contact his or her local human resources representative.*

14. Insider Trading Restrictions/Market Abuse Laws. The Participant acknowledges that he or she may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions including, but not limited to, the United States and the Participant's country of residence, which may affect his or her ability to acquire or sell shares of Common Stock or rights to shares of Common Stock (e.g., RSUs) under the Plan during such time as the Participant is considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Company. The Participant is responsible for ensuring compliance with any applicable restrictions and should consult with his or her personal legal advisor on this matter.

15. Foreign Asset/Account, Exchange Control, and Tax Reporting. The Participant may be subject to foreign asset/account, exchange control and/or tax reporting requirements as a result of the RSUs, the acquisition, holding and/or transfer of shares of Common Stock or cash resulting from participation in the Plan and/or the opening and maintaining of a brokerage or bank account in connection with the Plan. The Participant may be required to report such assets, accounts, account balances and values, and/or related transactions to the applicable authorities in his or her country. The Participant also may be required to repatriate sale proceeds or other funds received as a result of the Participant's participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Participant acknowledges that he or she is responsible for ensuring compliance with any applicable foreign asset/account, exchange control and tax reporting and other requirements. The Participant further understands that the Participant should consult his or her personal tax and legal advisors, as applicable on these matters.

16. Miscellaneous.

(a) **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement must be addressed to the Company at Lattice Semiconductor Corporation, 5555 NE Moore Court, Hillsboro, OR 97124, U.S.A. until the Company designates another address in writing.

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(b) **Non-Transferability of RSUs.** These RSUs may not be transferred other than by will or the laws of descent or distribution.

(c) **Binding Agreement.** If any RSUs are transferred, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors, and assigns of the parties to this Agreement.

(d) **Additional Conditions to Issuance of Stock.** If the Company determines that the listing, registration, qualification, or rule compliance of the Common Stock on any securities exchange or under any U.S. or non-U.S. federal, state, or local law or tax code and related regulations or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares of Common Stock to the Participant (or his or her estate), the Company will try to meet the requirements of any such U.S. or non-U.S. federal, state, or local law or securities exchange and to obtain any such consent or approval of any such governmental authority or securities exchange, but the shares of Common Stock will not be issued until such conditions have been met in a manner acceptable to the Company.

(e) **Captions.** Captions provided in this Agreement are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

(f) **Agreement Severable.** If any provision of this Agreement is held invalid or unenforceable, that provision will be severed from the remaining provisions of this Agreement and the invalidity or unenforceability will have no effect on the remainder of the Agreement.

(g) **Country-Specific Provisions.** These RSUs are subject to any additional terms and conditions set forth in the Country-Specific Provisions attached hereto as Exhibit C. If the Participant relocates to a country included in Exhibit C, the additional terms and conditions for that country will apply to him or her to the extent the Company determines that applying such terms and conditions is necessary or advisable for legal or administrative reasons. Exhibit C constitutes part of this Agreement.

(h) **Choice of Law; Choice of Forum.** The Plan, this Agreement, these RSUs, and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under the Plan, the Participant's acceptance of these RSUs is his or her consent to the jurisdiction of the State of Oregon and his or her agreement that any such litigation will be conducted in the state or federal courts located in the State of Oregon and no other courts, regardless of where he or she is performing services.

(i) **Language.** The Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English, so as to allow the Participant to understand the terms and conditions of this Agreement. The Participant acknowledges and agrees that if he or she has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

(j) **Modifications to the Agreement.** The Plan and this Agreement constitute the entire understanding of the parties on the subjects covered. The Participant expressly warrants that he or she is not accepting this Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. The Company reserves the right to revise the Agreement as it deems necessary or advisable, in its sole discretion and without the consent of the Participant, to comply with Code Section 409A, to otherwise avoid imposition of any additional tax or income recognition under Code Section 409A in connection with these RSUs, or to comply with other applicable laws.

(k) **Waiver.** The Participant acknowledges that a waiver by the Company of a breach of any provision of this Agreement will not operate or be construed as a waiver of any other provision of this Agreement or of any subsequent breach of this Agreement by him or her.

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## EXHIBIT B

### LATTICE SEMICONDUCTOR CORPORATION 2013 INCENTIVE PLAN

#### PERFORMANCE MATRIX

##### Performance-Based Vesting Component:

The number of Eligible RSUs (if any) in each Tranche will be determined based on how the total shareholder return (“**TSR**”) of the Company during the applicable Performance Period compares to the TSRs of the Indexed Companies (as defined below) during the Performance Period. The “**Index**” means the Russell 2000 Index or any successor index thereto. “**Indexed Companies**” means the companies that are in the Index as of the beginning of the applicable Performance Period and remain actively traded on a nationally recognized stock exchange from the beginning of the Performance Period through the end of the Performance Period or Adjusted Performance Period (as defined below), as applicable. For the avoidance of doubt, if any company ceases to be actively traded on a nationally recognized stock exchange during the applicable Performance Period or Adjusted Performance Period (as applicable), such company will cease to be an Indexed Company.

##### Relative TSR:

Except as provided under the section below entitled “Change in Control,” the number of Eligible RSUs (if any) in each Tranche will be determined based on the TSR of the Company (the “**Company TSR**”) during the applicable Performance Period relative to the TSRs of the Indexed Companies (each, an “**Indexed Company TSR**”) during the Performance Period, determined as follows:

- Step 1:** Calculate the beginning price with respect to the Company and each Indexed Company by determining the average of the closing market prices of such company’s common stock on the principal exchange on which such stock is traded for the 30 consecutive calendar days ending with the last calendar day before the beginning of the Performance Period (each, a “**Beginning Price**”).
- Step 2:** Calculate the ending price with respect to the Company and each Indexed Company by determining the average of the closing market prices of such company’s common stock on the principal exchange on which such stock is traded for the 30 consecutive calendar days ending on the last calendar day of the Performance Period (each, an “**Ending Price**”).
- Step 3:** Calculate the Company TSR and each Indexed Company TSR by applying the following formula:  $(\text{Ending Price}/\text{Beginning Price})-1$ . The Company TSR and each Indexed Company TSR will each be expressed as a percent of increase (i.e., a positive percent) or decrease (i.e., a negative percent) rounded to the closest two decimal places.
- Step 4:** Rank the Company TSR and the Indexed Company TSRs from highest (highest positive percentage) to lowest (highest negative percentage).
- Step 5:** Based on the percentile ranking of the Company TSR relative to the Indexed Company TSRs under Step 4, calculate the number of RSUs that will become Eligible RSUs (if any) by determining the product of (x) the Applicable Percentage (in the table below) *multiplied by* (y) the Target Number of RSUs, with the number of resulting Eligible RSUs rounded to the nearest whole RSU.

The Applicable Percentage will be determined as follows:

Percentile Rank	Applicable Percentage of Target Number of RSUs That Become Eligible RSUs
25 <sup>th</sup> percentile or below	None
55 <sup>th</sup> percentile	100%
75 <sup>th</sup> percentile	200%

If the Company TSR ranks among the Indexed Company TSRs at a percentile that falls between the percentile thresholds set forth above, the Applicable Percentage will be determined based on a linear interpolation between the corresponding Applicable Percentages for such thresholds.

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For avoidance of doubt the relative TSR is to be calculated without reference to dividends or other distributions. The Administrator's determination as to the number of RSUs that become Eligible RSUs (if any) will be final and binding on Participant and any other holder of this Award and will be given the maximum deference permitted by Applicable Laws.

Change in Control:

Notwithstanding the foregoing section entitled "Relative TSR," if Participant does not experience a Termination of Service before a Change in Control that occurs before the last day of the applicable Performance Period, the number of RSUs in each Tranche that will become Eligible RSUs (if any) will be calculated applying Steps 1 through 5, except as follows:

- (a) Rather than being determined based on the Company TSR relative to the Indexed Company TSRs during the Performance Period, the number of Eligible RSUs (if any) will instead be determined based on the Company TSR during the period beginning on the first day of the Performance Period and ending on the date of the Change in Control (the "**Adjusted Performance Period**") relative to the Indexed Company TSRs during the Adjusted Performance Period, and any references to the "Performance Period" under the "Relative TSR" section will refer to the "Adjusted Performance Period."
- (b) The Ending Price for purposes of calculating Company TSR will equal the price payable for a Share in connection with the Change in Control, with the final determination of the amount so payable determined by the Administrator.
- (c) The Ending Prices for each share of an Indexed Company will be the average of the closing market prices of such company's common stock on the principal exchange on which such stock is traded for the 30 consecutive calendar days ending on the last calendar day of the Adjusted Performance Period.

All determinations regarding the Beginning Price, the Ending Price, the Company TSR, the Indexed Company TSRs, and the Applicable Percentage will be made by the Administrator in its sole discretion and all such determinations will be final and binding on all parties.

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## EXHIBIT C

### LATTICE SEMICONDUCTOR CORPORATION 2013 INCENTIVE PLAN

#### COUNTRY-SPECIFIC PROVISIONS FOR NON-U.S. PARTICIPANTS

Unless otherwise defined herein, capitalized terms used but not defined herein shall have the same meanings as set forth in the Plan or in the Terms and Conditions of Performance-Based Restricted Stock Unit Award, as applicable.

##### *Terms and Conditions*

This Exhibit C includes additional terms and conditions that govern these RSUs granted to the Participant under the Plan if he or she resides and /or works in one of the countries listed below. If the Participant is a citizen or resident of a country other than the one in which the Participant is currently residing and/or working (or is considered as such for local law purposes), or if the Participant transfers employment and/or residency to a different country after the RSUs are granted, the Company will, in its discretion, determine the extent to which the terms and conditions contained herein will apply to the Participant.

##### *Notifications*

This Exhibit C may include information regarding certain issues of which the Participant should be aware with respect to participation in the Plan. The information is based on the securities, exchange control, and other applicable laws in effect in the respective countries as of October 2019. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant not rely on the information in this Exhibit C as the only source of information relating to the consequences of participation in the Plan because the information may be out of date at the time the RSUs vest or the Participant sells shares of Common Stock acquired under the Plan.

In addition, the information contained in this Exhibit C is general in nature and may not apply to the Participant's particular situation, and the Company is not in a position to assure him or her of a particular result. The Participant should seek appropriate professional advice as to how the applicable laws in his or her country may apply to his or her individual situation.

Finally, if the Participant is a citizen or resident of a country (or if the Participant is considered as such for local law purposes) other than the one in which he or she is currently residing and/or working, or if the Participant transfers employment to another country after these RSUs are granted, the information in this Exhibit C may not apply to him or her in the same manner, and the Committee will determine to what extent the terms and conditions in this Exhibit C apply.

##### CHINA

*The following provisions apply only if the Participant is subject to exchange control restrictions imposed by the State Administration of Foreign Exchange ("SAFE"), as determined by the Company in its sole discretion:*

##### *Terms and Conditions*

Forfeiture Upon Termination of Service. Notwithstanding anything to the contrary in this Agreement, any shares of Common Stock held by the Participant at the time of Termination of Service must be sold by the Participant within six (6) months from the date of Termination of Service (for any reason) and thereafter the Participant shall have no entitlement to the underlying shares of Common Stock. If not sold by the Participant within such timeframe, the Company will force the sale of the shares of Common Stock as described in the Restriction on Sale of Shares section below.

Restriction on Sale of Shares. Due to local regulatory requirements, the Company reserves the right to force the sale of any shares of Common Stock issued upon settlement of the RSUs. The sale may occur (i) immediately upon issuance, (ii) following the Participant's Termination of Service, (iii) following the Participant's transfer of employment to the Company, or a Related Company outside China, or (iv) within any other timeframe as the Company determines to be necessary or advisable to comply with local regulatory requirements. The Participant is required to maintain any shares of Common Stock acquired under the Plan in an account at a broker designated by the Company (the "**Designated Account**") and any shares of Common Stock deposited into the Designated Account cannot be transferred out of the Designated Account unless and until they are sold.

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In order to facilitate the foregoing, the Company is authorized to instruct its designated broker to assist with the sale of the shares of Common Stock (on the Participant's behalf pursuant to this authorization without further consent) and the Participant expressly authorizes the Company's designated broker to complete the sale of such shares of Common Stock. The Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the shares of Common Stock at any particular price. Upon the sale of the shares of Common Stock, the Company will pay to the Participant the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. If the shares of Common Stock acquired under the Plan are sold, the repatriation requirements described below shall apply.

**Repatriation of Sale Proceeds and Dividends.** The Participant understands and agrees that, due to exchange control laws in China, the Participant will be required to immediately repatriate to the SAFE Account described below the proceeds from the sale of shares of Common Stock that Participant acquires upon vesting of the RSUs. The Participant also understands and agrees that this repatriation requirement also applies to any dividends that are paid on the Common Stock, which must be repatriated to China at the time and in the manner established by the Company. The Participant further agrees that such proceeds and dividends must be transferred directly from the participant trust or other account established under the Plan to the dedicated foreign exchange account established by the Company or a Related Company in China and approved by SAFE or its local counterpart under applicable exchange control rules (the "**SAFE Account**") before such proceeds and dividends can be remitted to the Participant. The Participant further agrees not to instruct or cause the Company to transfer such cash proceeds and dividends to any person, broker or entity other than the SAFE Account. The Participant further agrees to cooperate with and comply with any other requests made by the Company or the Employer in the future in order to facilitate compliance with the exchange control requirements in China. The Participant undertakes to reimburse the Company and any Related Company for any penalties or other charges that they may incur resulting from any failure by the Participant to ensure compliance with the requirements set forth in this paragraph. The Participant also understands that the Company will deliver such proceeds and dividends to the Participant as soon as possible, but that there may be delays in distributing the funds to the Participant due to exchange control requirements. The Participant understands that the proceeds and dividends may be paid to the Participant in U.S. dollars or in local currency, at the Company's discretion. If the proceeds are paid in U.S. dollars, the Participant will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid in local currency, the Company is under no obligation to secure any particular exchange conversion rate and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions.

Finally, the Participant agrees to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

### ***Notifications***

**Exchange Control Information.** Chinese residents may be required to report to SAFE all details of their foreign financial assets and liabilities (including shares of Common Stock acquired under the Plan), as well as details of any economic transactions conducted with non-Chinese residents.

## **FRANCE**

### ***Terms and Conditions***

**Consent to Receive Information in English.** By accepting the RSUs, the Participant confirms having read and understood the Plan and Agreement, which were provided in the English language. The Participant accepts the terms of those documents accordingly.

**Consentement relatif à la réception d'informations en langue anglaise.** En acceptant l'Attribution, vous confirmez avoir lu et compris le Plan et la Convention d'Attribution, qui ont été fournis en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.

### ***Notifications***

**Tax Information.** The RSUs are not intended to qualify for special tax or social security treatment in France.

**Foreign Asset/Account Reporting Information.** If the Participant holds shares of Common Stock acquired under the Plan outside France or maintains a foreign bank account, the Participant is required to report such shares and/or account to the French tax authorities when filing his or her annual tax return.

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## **GERMANY**

### ***Notifications***

**Exchange Control Information.** German residents must electronically report cross-border payments in excess of €12,500 to the German Federal Bank (*Bundesbank*) on a monthly basis. In case of payments in connection with securities (including any proceeds realized upon the sale of shares of Common Stock or the receipt of any dividends), the report must be made by the fifth day of the month following the month in which the payment was received. The form of report ("*Allgemeines Meldeportal Statistik*") can be accessed via the Bundesbank's website (www.bundesbank.de). *The Participant should consult his or her personal advisor to ensure compliance with applicable reporting obligations.*

**Foreign Asset/Account Reporting Information.** If the acquisition of shares of Common Stock under the Plan leads to a "qualified participation" at any point during the calendar year, the Participant will need to report the acquisition when the Participant files his or her tax return for the relevant year. A "qualified participation" is attained if (i) the value of the shares of Common Stock acquired exceeds €150,000 or (ii) in the unlikely event the Participant holds shares of Common Stock exceeding 10% of the total number of shares of Common Stock.

## **ITALY**

### ***Terms and Conditions***

**Plan Document Acknowledgment.** In accepting the grant of RSUs, the Participant acknowledges that he or she has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement.

The Participant further acknowledges that he or she has read and specifically and expressly approves the following sections of the Terms and Conditions of Performance-Based Restricted Stock Unit Award: Section 5 regarding "Forfeiture upon Termination of Service;" Section 8(a) regarding "Tax Withholding;" Section 12 regarding "Nature of Grant;" Section 13 regarding "Data Privacy Information and Consent;" Section 16(h) regarding "Choice of Law; Choice of Forum;" and Section 16(i) regarding "Language."

### ***Notifications***

**Foreign Asset/Account Reporting Notification.** The Participant is required to report investments held abroad or foreign financial assets (*e.g.*, cash, RSUs, and shares of Common Stock) that may generate income taxable in Italy on an annual tax return (UNICO Form, RW Schedule) or on a special form if no tax return is due, irrespective of their value. The same reporting duties apply to Italian residents who, even if they do not directly hold investments abroad or foreign financial assets (*e.g.*, cash, RSUs and shares of Common Stock), are beneficial owners of the investment pursuant to Italian money laundering provisions. The Participant should consult his or her personal tax advisor for details regarding this requirement.

**Foreign Financial Assets Tax Notification.** The fair market value of any shares of Common Stock held outside Italy is subject to an annual foreign assets tax. The fair market value for this purpose is the value of the Common Stock on the Nasdaq Stock Market on December 31 of the year or, for shares disposed of during the course of the year, on the last day the Participant held the Common Stock (in such case, or when the shares of Common Stock are acquired during the course of the year, the tax is levied in proportion to the actual days of holding over the calendar year). The Participant should consult with his or her personal tax advisor about the foreign financial assets tax.

## **JAPAN**

### ***Notifications***

**Foreign Asset/Account Reporting Information.** Japanese residents and foreign nationals with permanent residency in Japan are required to report details of any assets held outside Japan as of December 31 (including shares of Common Stock acquired under the Plan), to the extent such assets have a total net fair market value exceeding ¥50 million. Such report will be due by March 15 each year. *The Participant should consult with his or her personal tax advisor to ensure compliance with applicable reporting obligations.*

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## **KOREA**

### ***Notifications***

**Foreign Asset / Account Tax Reporting Information.** Korean residents must declare all foreign financial accounts (*e.g.*, non-Korean bank accounts, brokerage accounts) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 500 million (or an equivalent amount in foreign currency). *The Participant should consult with his or her personal tax advisor to ensure compliance with the applicable requirements.*

## **PHILIPPINES**

**Securities Law Information.** The RSUs are being offered pursuant to an exemption from registration under the Philippines Securities Regulation Code.

The Participant should be aware of the risks of participating in the Plan, which include (without limitation) the risk of fluctuation in the price of the Common Stock on the Nasdaq Stock Market and the risk of currency fluctuations between the U.S. Dollar and the Participant's local currency. In this regard, the Participant should note that the value of any shares of Common Stock he or she may acquire under the Plan may decrease, and fluctuations in foreign exchange rates between the Participant's local currency and the U.S. Dollar may affect the value of the RSUs or any amounts due to the Participant upon vesting and settlement of the RSUs or upon sale of any shares of Common Stock acquired by the Participant at settlement. The Company is not making any representations, projections or assurances about the value of the Common Stock now or in the future.

For further information on risk factors impacting the Company's business that may affect the value of the Common Stock, the Participant should refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at [www.sec.gov](http://www.sec.gov), as well as on the Company's website at <http://ir.latticesemi.com/>. In addition, the Participant may receive, free of charge, a copy of the Company's Annual Report, Quarterly Reports or any other reports, proxy statements or communications distributed to the Company's stockholders by contacting the Company at the address below:

Lattice Semiconductor Corporation  
5555 NE Moore Court  
Hillsboro, Oregon 97124 U.S.A.  
+1 (503) 268-8000

## **SINGAPORE**

### ***Terms and Conditions***

**Restriction on Sale of Shares.** The RSUs are subject to section 257 of the Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA") and the Participant will not be able to make any subsequent offer to sell or sale of the shares of Common Stock in Singapore, unless such offer or sale is made (1) after six (6) months from the date the RSUs are granted or (2) pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

### ***Notifications***

**Securities Law Notice.** The offer of the Plan, the grant of the RSUs, and the issuance of the underlying shares of Common Stock at vesting are being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the SFA. The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore.

**Chief Executive Officer and Director Notification.** The Participant understands and acknowledges that if he or she is the Chief Executive Officer ("CEO"), director, associate director or shadow director of a Related Company in Singapore, the Participant is subject to certain notification requirements under the Singapore Companies Act, regardless of whether the Participant is a Singapore resident or employed in Singapore. Among these requirements is an obligation to notify the Singapore Related Company in writing when the Participant receives an interest in the Company (*e.g.*, the RSUs or shares of Common Stock). In addition, the Participant must notify the Singapore Related Company when the Participant sells shares of Common Stock (including when the Participant sells shares of Common Stock acquired under the Plan). These notifications must be made within two days of acquiring or disposing of any interest in the Company. In addition, a notification must be made of the Participant's interests in the Company within two days of becoming a CEO, director, associate director or shadow director.

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## **TAIWAN**

### ***Terms and Conditions***

**Data Privacy.** The Participant hereby acknowledges that he or she has read and understood the terms regarding collection, processing and transfer of Data contained in Section 13 of the Terms and Conditions of Performance-Based Restricted Stock Unit Award and agrees that, by accepting the RSUs, the Participant is agreeing to such terms. In this regard, upon request of the Company or the Employer, the Participant agrees to provide an executed data privacy consent form to the Employer or the Company (or any other agreements or consents that may be required by the Employer or the Company) that the Company and/or the Employer may deem necessary to obtain under the data privacy laws in his or her country, either now or in the future. The Participant understands that he or she may not be able to participate in the Plan if the Participant fails to execute any such consent or agreement.

### ***Notifications***

**Securities Law Information.** The RSUs and the shares of Common Stock to be issued pursuant to the Plan are available only for employees and certain service providers. It is not a public offer of securities by a Taiwanese company. Therefore, it is exempt from registration in Taiwan.

**Exchange Control Information.** The Participant may acquire and remit foreign currency (including proceeds from the sale of shares of Common Stock or the receipt of dividends) up to US\$5,000,000 per year without justification. However, if the transaction amount is TWD500,000 or more in a single transaction, the Participant must submit a Foreign Exchange Transaction Form and provide supporting documentation to the satisfaction of the remitting bank.

## **UNITED KINGDOM**

### ***Terms and Conditions***

**RSUs Payable Only in Common Stock.** Notwithstanding anything to the contrary in the Plan, the RSUs shall be paid in shares of Common Stock only and do not provide the Participant with any right to receive a cash payment. This provision is without prejudice to the application of Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award.

**Responsibility for Taxes.** The following provisions supplement Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award:

Without limitation to Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award, the Participant agrees that he or she is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or, if different, the Employer or by Her Majesty's Revenue and Customs ("**HMRC**") (or any other tax authority or any other relevant authority). The Participant also agrees to indemnify and keep indemnified the Company or the Employer against any Tax-Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Participant's behalf.

Notwithstanding the foregoing, if the Participant is a director or executive officer of the Company (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply if the indemnification is viewed as a loan. In such case, if the amount of any income tax due is not collected from or paid by the Participant within 90 days of the end of the U.K. tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income taxes may constitute a benefit to the Participant on which additional income tax and National Insurance contributions ("**NICs**") may be payable. The Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying to the Company or the Employer, as applicable, any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Participant by any of the means referred to in Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award.



**LATTICE SEMICONDUCTOR CORPORATION  
2013 INCENTIVE PLAN**

**NOTICE OF PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AND GLOBAL PERFORMANCE-BASED RESTRICTED STOCK UNIT AGREEMENT**

The Participant has been granted this Restricted Stock Unit (“**RSU**”) award according to the terms below and subject to the terms and conditions of the Lattice Semiconductor Corporation 2013 Incentive Plan (the “**Plan**”) and this Notice of Performance-Based Restricted Stock Unit Award and Global Restricted Stock Unit Agreement (the “**Notice of Grant**”), the Terms and Conditions of Performance-Based Restricted Stock Unit Award attached hereto as Exhibit A, the Performance Matrix attached hereto as Exhibit B, the Country-Specific Provisions attached hereto as Exhibit C, and any other appendices and exhibits to these documents (all together, the “**Agreement**”), as follows:

Participant \_\_\_\_\_

Participant I.D. \_\_\_\_\_

Grant Number \_\_\_\_\_

Grant Date \_\_\_\_\_

Vesting Commencement Date \_\_\_\_\_

Target Number of RSUs \_\_\_\_\_

Maximum Number of RSUs \_\_\_\_\_

Performance Periods: First Performance Period: Fiscal year ending January 1, 2022

Second Performance Period: Fiscal year ending December 31, 2022

Third Performance Period: Fiscal year ending December 30, 2023

Fourth Performance Period: Fiscal year ending December 28, 2024

Capitalized terms that are not defined in this Agreement have the meanings given to them in the Plan.

Vesting Schedule:

The Target Number of RSUs will be allocated into four separate tranches (each, a “**Tranche**”) as follows:

- 1/4 of the Target Number of RSUs will be allocated to the First Performance Period;
- 1/4 of the Target Number of RSUs will be allocated to the Second Performance Period;
- 1/4 of the Target Number of RSUs will be allocated to the Third Performance Period; and
- 1/4 of the Target Number of RSUs will be allocated to the Fourth Performance Period.

If the Target Number of RSUs is not evenly divisible into four Tranches, each of the first three Tranches will be 1/4 of the Target Number of RSUs, rounded down to the nearest whole RSU and any fractional RSUs will be allocated to the Second Performance Period.

Unless the vesting is accelerated, the number of RSUs in each Tranche that will become eligible to vest according to the applicable vesting schedule below (“**Eligible RSUs**”) will depend upon achievement of the performance goal set forth in the Performance Matrix (the “**Performance Goal**”), attached hereto as Exhibit B, during the applicable Performance Period.

The Eligible RSUs for a Tranche will vest on the last day of the thirteenth month after the last day of the applicable Performance Period (the “**Vesting Date**”) if Participant does not experience a Termination of Service before the Vesting Date.

Except to the extent provided in the “Vesting Acceleration” section of this Notice of Grant, if the Participant experiences a Termination of Service for any or no reason before he or she fully vests in these RSUs, the unvested RSUs will terminate according to the terms of Section 5 of this Agreement, and any fractional shares subject to the vested RSUs will be treated in accordance with Section 10.2 of the Plan.

Vesting Acceleration:

The vesting of the RSUs shall be subject to any vesting acceleration provisions applicable to the RSUs contained in any agreement between (a) Participant and (b) the Company or any Related Company.

*[Signature page follows.]*

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The Participant's signature below indicates that:

- (i) He or she agrees that this RSU award is granted under and governed by the terms and conditions of the Plan and this Agreement, including their exhibits and appendices.
- (ii) He or she understands that the Company is not providing any tax, legal, or financial advice and is not making any recommendations regarding his or her participation in the Plan or his or her acquisition or sale of shares of Common Stock.
- (iii) He or she has reviewed the Plan and this Agreement, has had an opportunity to obtain the advice of personal tax, legal, and financial advisors prior to entering into this Agreement, and fully understands all provisions of the Plan and Agreement. He or she will consult with his or her own personal tax, legal, and financial advisors before taking any action related to the Plan.
- (iv) He or she has read and agrees to each provision of Sections 11 and 12 of this Agreement.
- (v) He or she will notify the Company of any change to the contact address below.

PARTICIPANT

Signature

Address: \_\_\_\_\_

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## EXHIBIT A

### TERMS AND CONDITIONS OF PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD

1. Grant. The Company grants the Participant an award of RSUs as described in the Notice of Grant. If there is a conflict between the Plan, this Agreement, or any other agreement with the Participant governing these RSUs, those documents will take precedence and prevail in the following order: (a) any other agreement between the Company and the Participant governing these RSUs, including without limitation the Executive Employment Agreement between the Company and Participant (the "Executive Employment Agreement"), (b) the Plan and (c) the Agreement.

2. Company's Obligation to Pay. Each RSU is a right to receive a share of Common Stock on the date it vests. Until an RSU vests, the Participant has no right to payment of the share of Common Stock. Before a vested RSU is paid, the RSU is an unsecured obligation of the Company, payable (if at all) only from the Company's general assets. A vested RSU will be paid to the Participant (or in the event of his or her death, to his or her estate) in whole shares of Common Stock as soon as practicable after vesting (but no later than 60 days following the vesting date), subject to him or her satisfying any obligations for Tax-Related Items (as defined in Section 8 of this Agreement) and any delay in payment required under Section 8 of this Agreement. The Participant cannot specify (directly or indirectly) the taxable year of the payment of any vested RSU under this Agreement.

3. Vesting. These RSUs will vest only under the Vesting Schedule in the Notice of Grant, the "Vesting Acceleration" section of the Notice of Grant, Section 4 of this Agreement, the terms of the Executive Employment Agreement or Section 15.3 of the Plan. RSUs scheduled to vest on a certain date or upon the occurrence of a certain condition will not vest if the Participant has had a Termination of Service prior to the time such vesting is scheduled to occur. The Vesting Schedule may be modified under Section 3.2(c) of the Plan if the Participant takes a leave of absence or has a reduction in hours worked.

4. Committee Discretion. The Committee has the discretion to accelerate the vesting of any RSUs at any time, subject to the terms of the Plan. In that case, those RSUs will be vested as of the date specified by the Committee.

5. Forfeiture upon Termination of Service. Except to the extent provided in the "Vesting Acceleration" section of the Notice of Grant, upon the Participant's Termination of Service for any reason, these RSUs will immediately stop vesting and any of these RSUs that have not yet vested will be forfeited by the Participant upon: (a) the 30th day following the Termination of Service Date (or any earlier date on or following the Termination of Service Date determined by the Committee) if Participant's Termination of Service is due to the Participant's death or (b) the Termination of Service Date if Participant's Termination of Service is for any reason other than the Participant's death, in all cases, subject to applicable laws; provided however, that if Participant's Termination of Service is an Involuntary Termination within the meaning of the Executive Employment Agreement, such that Participant is entitled to Cash Severance as provided therein, then acceleration of the vesting of these RSUs shall occur in accordance with Section 6(c) of the Executive Employment Agreement.

For purposes of the RSUs, the "Termination of Service Date" means the date on which the Participant last actively provides continuous services for a member of the Company Group (as defined below) (regardless of the reason such continuous service terminates and whether or not such termination is later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is providing services or the terms of the Participant's employment or service agreement, if any), however the Participant's right to vest in these RSUs will be extended by any notice period provided in a contract between the Participant and his or her employer. The Committee shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the RSUs (including whether the Participant may still be considered to be providing services while on a leave of absence).

6. Death of Participant. Any distribution or delivery to be made to the Participant under this Agreement will, if he or she is then deceased, be made to the administrator or executor of his or her estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations that apply to the transfer.

7. Change in Control. In the event of a Change in Control, after the determination of performance provided in the Change in Control section of Exhibit B, the acquiring corporation may, without the consent of the Participant, assume the Company's rights and obligations under outstanding Eligible RSUs and adjust such awards to reflect the acquiring corporation's stock. In the event that the acquiring corporation elects not to assume outstanding Eligible RSUs in connection with a Change in Control, or if the acquiring corporation is not a "publicly held corporation" within the meaning of Section 162(m) of the Code, the Eligible RSUs will vest and be settled by the Company through the issuance of shares of Stock immediately prior to the effective date of the Change in Control.

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## 8. Tax Obligations.

### (a) **Tax Withholding.**

(i) The Participant acknowledges that, regardless of any action taken by the Company or, if different, the Employer, the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account, and other tax-related items related to the Participant's participation in the Plan and legally applicable to the Participant ("**Tax-Related Items**") is and remains the Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (i) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including, but not limited to, the grant, vesting or settlement of the RSUs, the subsequent sale of shares of Common Stock acquired pursuant to such settlement and the receipt of any dividends or other distributions paid on the Common Stock, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant is subject to Tax-Related Items in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

(ii) Prior to any relevant taxable or tax withholding event, as applicable, the Participant agrees to make arrangements satisfactory to the Company and the Employer to satisfy any withholding obligations the Company or the Employer may have for Tax-Related Items. In this regard, the Participant authorizes the Company or the Employer, as applicable, and their respective agents, at their discretion, to satisfy any withholding obligation for Tax-Related Items by one or a combination of the following:

- (1) withholding from wages or other cash compensation payable to the Participant by the Company or the Employer;
- (2) requiring the Participant to tender a cash payment to the Company or the Employer;
- (3) by withholding from proceeds of a sale of shares of Common Stock acquired upon payment of these RSUs arranged by the Company (on the Participant's behalf pursuant to this authorization without further consent); and
- (4) by reducing the number of shares of Common Stock otherwise deliverable to the Participant (in which case the Participant will be deemed to have been issued the full number of shares of Common Stock subject to the vested portion of the RSUs, notwithstanding that a number of the shares of Common Stock is held back solely for the purpose of paying the Tax-Related Items).

(iii) The Company may withhold or account for Tax-Related Items by considering minimum statutory withholding rates or other applicable withholding rates, including up to the maximum applicable rates for the Participant's jurisdiction(s). If the maximum applicable rate for the Participant's jurisdiction is used in connection with the withholding methods described in (3) or (4) above, the Participant may receive a refund of any over-withheld amount in cash and will have no entitlement to the equivalent amount in shares of Common Stock.

(iv) If the Participant fails to make satisfactory arrangements for the payment of any Tax-Related Items under this Agreement when any of these RSUs otherwise are supposed to vest or Tax-Related Items related to RSUs otherwise are due, he or she will permanently forfeit the applicable RSUs and any right to receive shares of Common Stock under such RSUs, and such RSUs will be returned to the Company at no cost to the Company.

(b) **Code Section 409A.** This Section 8(b) does not apply if the Participant is not a U.S. taxpayer.

(i) If the vesting of any RSUs is accelerated in connection with the Participant's Termination of Service that is a "separation from service" within the meaning of Code Section 409A and (x) the Participant is a "specified employee" within the meaning of Code Section 409A at that time and (y) the payment of such accelerated RSUs would result in the imposition of additional tax under Code Section 409A if paid to the Participant within the 6-month period following such termination, then the accelerated RSUs will not be paid until the first day after the 6-month period ends.

(ii) If the Participant experiences a Termination of Service due to death or the Participant dies after his or her Termination of Service, the delay under Section 8(b)(i) of this Agreement will not apply, and these RSUs will be paid in shares of Common Stock to the Participant's estate as soon as practicable.

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(iii) All payments and benefits under this Agreement are intended to be exempt from Code Section 409A or comply with any requirements necessary to avoid the imposition of additional tax under Code Section 409A(a)(1)(B) so that none of these RSUs or shares of Common Stock issuable upon the vesting of RSUs will be subject to the additional tax imposed under Code Section 409A, and any ambiguities will be interpreted according to that intent.

(iv) Each payment under this Agreement is a separate payment under Treasury Regulations Section 1.409A-2(b)(2).

#### 9. Forfeiture Events.

(a) This RSU award will be subject to recoupment under any clawback policy in effect on the Date of Grant or that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. Unless this Section 9 is specifically mentioned and waived in any other document, no recovery of compensation under a clawback policy or otherwise will be an event that triggers or contributes to any right of the Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company and/or any Related Company (together, the "**Company Group**").

(b) If (i) the Participant (x) knowingly or through gross negligence engaged in the misconduct or knowingly or through gross negligence failed to prevent the misconduct or (y) is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002, and (ii) the Company is required to prepare an accounting restatement due to the material noncompliance of the Company, as a result of misconduct, with any financial reporting requirement under securities laws, the Participant must reimburse the Company the amount of any payment in settlement of this RSU award to the extent earned or accrued during the 12-month period following the first public issuance or filing with the United States Securities and Exchange Commission (whichever first occurred) of the financial document embodying such financial reporting requirement.

10. Rights as Stockholder. The Participant's rights as a stockholder of the Company (including the right to vote and to receive dividends and distributions) will not begin until shares of Common Stock have been issued and recorded on the records of the Company or its transfer agents or registrars.

11. Acknowledgements and Agreements. The Participant's acceptance of these RSUs by entering into this Agreement indicates that:

(a) HE OR SHE ACKNOWLEDGES AND AGREES THAT THE VESTING OF THESE RSUS IS EARNED ONLY BY CONTINUING SERVICE WITH THE COMPANY OR ANY RELATED COMPANY AND THAT BEING HIRED OR BEING GRANTED THESE RSUS WILL NOT RESULT IN VESTING.

(b) HE OR SHE FURTHER ACKNOWLEDGES AND AGREES THAT THESE RSUS AND THIS AGREEMENT DO NOT CREATE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER OF THE COMPANY OR ANY RELATED COMPANY FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL AND DOES NOT INTERFERE IN ANY WAY WITH HIS OR HER RIGHT OR THE RIGHT OF THE EMPLOYER(S) TO TERMINATE HIS OR HER RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE, SUBJECT TO APPLICABLE LAWS.

(c) The Participant acknowledges and agrees that the Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Participant's participation in the Plan, or the Participant's acquisition or sale of the underlying shares of Common Stock. The Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

(d) The Participant agrees that this Agreement and its incorporated documents reflect all agreements on its subject matters and that he or she is not accepting this Agreement based on any promises, representations, or inducements other than those reflected in the Agreement.

(e) The Company may, in its sole discretion, decide to deliver any documents related to the RSUs awarded under the Plan or future RSUs that may be awarded under the Plan by electronic means or request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or a third party designated by the Company.

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(f) The Participant accepts that all good faith decisions or interpretations of the Committee regarding the Plan and Awards under the Plan are binding, conclusive, and final. No member of the Committee will be personally liable for any such decisions or interpretations.

12. Nature of Grant. In accepting the RSUs, the Participant acknowledges, understands, and agrees that:

(a) the Plan is established voluntarily by the Company, is discretionary in nature, and may be amended, suspended, or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of RSUs is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of restricted stock units or benefits in lieu of restricted stock units, even if restricted stock units have been granted in the past;

(c) all decisions regarding future Awards or other grants, if any, will be in the Company's sole discretion;

(d) the Participant is voluntarily participating in the Plan;

(e) the RSUs and any shares of Common Stock subject to the RSUs, and the income from and value of same, are not intended to replace any pension rights or compensation;

(f) the RSUs and any shares of Common Stock subject to the RSUs, and the income from and value of same, are not part of normal or expected compensation for any purpose, including for calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits, or similar payments;

(g) the future value of the shares of Common Stock underlying these RSUs is unknown, indeterminable, and cannot be predicted with certainty;

(h) no claim or entitlement to compensation or damages from any forfeiture of these RSUs resulting from his or her Termination of Service (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where he or she is providing services to the Employer or the terms of his or her employment or service agreement, if any); and

(i) no member of the Company Group shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of these RSUs or of any amounts due to him or her from the payment of these RSUs or the subsequent sale of any shares of Common Stock acquired upon such payment.

13. Data Privacy Information and Consent.

*The Company is located at 5555 NE Moore Court, Hillsboro, Oregon 97124 U.S.A. and grants employees of the Company and its Related Companies RSUs, at the Company's sole discretion. By entering into this Agreement, the Participant voluntarily consents to the collection, use and transfer, in electronic or other form, of Data (as defined below) by and among, as applicable, the Employer(s), the Company and any member of the Company Group for the exclusive purpose of implementing, administering, and managing his or her participation in the Plan. Accordingly, the Participant should review the following information about the Company's data processing practices.*

*(a) Data Collection and Usage. The Company collects, processes and uses the Participant's personal data, including the Participant's name, home address and telephone number, date of birth, social insurance number or other identification number, salary, citizenship, job title, any shares of Common Stock or directorships held in the Company, and details of all RSUs or other entitlement to shares of Common Stock canceled, exercised, vested, unvested or outstanding in the Participant's favor ("Data"), which the Company receives from the Participant or the Employer. If the Company offers the Participant a grant of RSUs under the Plan, then the Company will collect the Participant's Data for purposes of allocating stock and implementing, administering and managing the Plan. The Company's legal basis for the processing of the Participant's Data would be the Participant's consent.*

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*(b) Stock Plan Administration Service Providers. The Company transfers Data to E\*TRADE, an independent service provider based in the United States, which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share the Participant's Data with another company that serves in a similar manner. The Company's service provider will open an account for the Participant to receive and trade shares of Common Stock. The Participant will be asked to agree on separate terms and data processing practices with the service provider, which is a condition to the Participant's ability to participate in the Plan.*

*(c) International Data Transfers. The Company and its service providers are based in the United States. The Participant should note that his or her country may have enacted data privacy laws that are different from the United States. For example, the European Commission has issued a limited adequacy finding with respect to the United States that applies only to the extent companies register for the EU-U.S. Privacy Shield program, which is open to companies subject to Federal Trade Commission jurisdiction and which the Company does not participate with respect to employee data. The Company's legal basis for the transfer of the Participant's Data is the Participant's consent.*

*(d) Data Retention. The Company will hold and use the Data only as long as is necessary to implement, administer and manage the Participant's participation in the Plan, or as required to comply with legal or regulatory obligations, including under tax, exchange control, labor and securities laws. This period may extend beyond the Participant's period of employment with the Employer.*

*(e) Voluntariness and Consequences of Consent Denial or Withdrawal. Participation in the Plan is voluntary and the Participant is providing the consents herein on a purely voluntary basis. If the Participant later seeks to revoke the Participant's consent, the Participant's salary from or employment with the Employer will not be affected solely by such actions of the Participant; the only consequence of refusing or withdrawing the Participant's consent is that the Company would not be able to grant RSUs or other equity awards to the Participant or administer or maintain such awards. Therefore, the Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan (including the right to retain these RSUs).*

*(f) Data Subject Rights. The Participant may have a number of rights under data privacy laws in the Participant's jurisdiction. Depending on where the Participant is based, such rights may include the right to (i) request access or copies of Data the Company processes, (ii) rectification of incorrect Data, (iii) deletion of Data, (iv) restrictions on processing of Data, (v) portability of Data, (vi) lodge complaints with competent authorities in the Participant's jurisdiction, and/or (vii) receive a list with the names and addresses of any potential recipients of Data. To receive clarification regarding these rights or to exercise these rights, the Participant can contact his or her local human resources representative.*

14. Insider Trading Restrictions/Market Abuse Laws. The Participant acknowledges that he or she may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions including, but not limited to, the United States and the Participant's country of residence, which may affect his or her ability to acquire or sell shares of Common Stock or rights to shares of Common Stock (e.g., RSUs) under the Plan during such time as the Participant is considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Company. The Participant is responsible for ensuring compliance with any applicable restrictions and should consult with his or her personal legal advisor on this matter.

15. Foreign Asset/Account, Exchange Control, and Tax Reporting. The Participant may be subject to foreign asset/account, exchange control and/or tax reporting requirements as a result of the RSUs, the acquisition, holding and/or transfer of shares of Common Stock or cash resulting from participation in the Plan and/or the opening and maintaining of a brokerage or bank account in connection with the Plan. The Participant may be required to report such assets, accounts, account balances and values, and/or related transactions to the applicable authorities in his or her country. The Participant also may be required to repatriate sale proceeds or other funds received as a result of the Participant's participation in the Plan to his or her country through a designated bank or broker and/or within a certain time after receipt. The Participant acknowledges that he or she is responsible for ensuring compliance with any applicable foreign asset/account, exchange control and tax reporting and other requirements. The Participant further understands that the Participant should consult his or her personal tax and legal advisors, as applicable on these matters.

16. Miscellaneous.

(a) **Address for Notices.** Any notice to be given to the Company under the terms of this Agreement must be addressed to the Company at Lattice Semiconductor Corporation, 5555 NE Moore Court, Hillsboro, OR 97124, U.S.A. until the Company designates another address in writing.

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(b) **Non-Transferability of RSUs.** These RSUs may not be transferred other than by will or the laws of descent or distribution.

(c) **Binding Agreement.** If any RSUs are transferred, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors, and assigns of the parties to this Agreement.

(d) **Additional Conditions to Issuance of Stock.** If the Company determines that the listing, registration, qualification, or rule compliance of the Common Stock on any securities exchange or under any U.S. or non-U.S. federal, state, or local law or tax code and related regulations or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of shares of Common Stock to the Participant (or his or her estate), the Company will try to meet the requirements of any such U.S. or non-U.S. federal, state, or local law or securities exchange and to obtain any such consent or approval of any such governmental authority or securities exchange, but the shares of Common Stock will not be issued until such conditions have been met in a manner acceptable to the Company.

(e) **Captions.** Captions provided in this Agreement are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

(f) **Agreement Severable.** If any provision of this Agreement is held invalid or unenforceable, that provision will be severed from the remaining provisions of this Agreement and the invalidity or unenforceability will have no effect on the remainder of the Agreement.

(g) **Country-Specific Provisions.** These RSUs are subject to any additional terms and conditions set forth in the Country-Specific Provisions attached hereto as Exhibit C. If the Participant relocates to a country included in Exhibit C, the additional terms and conditions for that country will apply to him or her to the extent the Company determines that applying such terms and conditions is necessary or advisable for legal or administrative reasons. Exhibit C constitutes part of this Agreement.

(h) **Choice of Law; Choice of Forum.** The Plan, this Agreement, these RSUs, and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under the Plan, the Participant's acceptance of these RSUs is his or her consent to the jurisdiction of the State of Oregon and his or her agreement that any such litigation will be conducted in the state or federal courts located in the State of Oregon and no other courts, regardless of where he or she is performing services.

(i) **Language.** The Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English, so as to allow the Participant to understand the terms and conditions of this Agreement. The Participant acknowledges and agrees that if he or she has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

(j) **Modifications to the Agreement.** The Plan and this Agreement constitute the entire understanding of the parties on the subjects covered. The Participant expressly warrants that he or she is not accepting this Agreement in reliance on any promises, representations, or inducements other than those contained herein. Modifications to this Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. The Company reserves the right to revise the Agreement as it deems necessary or advisable, in its sole discretion and without the consent of the Participant, to comply with Code Section 409A, to otherwise avoid imposition of any additional tax or income recognition under Code Section 409A in connection with these RSUs, or to comply with other applicable laws.

(k) **Waiver.** The Participant acknowledges that a waiver by the Company of a breach of any provision of this Agreement will not operate or be construed as a waiver of any other provision of this Agreement or of any subsequent breach of this Agreement by him or her.

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**EXHIBIT B**

**LATTICE SEMICONDUCTOR CORPORATION  
2013 INCENTIVE PLAN**

**PERFORMANCE MATRIX**

Performance-Based Vesting Component:

The number of Eligible RSUs (if any) in each Tranche will be determined based on the Company's Revenue Growth during the applicable Performance Period as compared to the payment matrix.

"Revenue Growth" for a Performance Period is determined using the following formula rounding down to the closest .01.

$$\text{Revenue Growth} = \left( \frac{\text{Organic Revenue}}{\text{Baseline Revenue}} \right) - 1 \times 100$$

"Organic Revenue" means revenue determined under generally accepted accounting principles (GAAP) less Revenue attributable to any acquired business either during the year of acquisition or the first full fiscal year following the fiscal year of acquisition. For avoidance of doubt, during the second fiscal year after the fiscal year of acquisition, Organic Revenue will include revenue attributable to acquired businesses.

"Baseline Revenue" for a Performance Period means the highest Organic Revenue for a fiscal year during the period beginning in fiscal 2020 and ending in the fiscal year prior to the start of a Performance Period; provided that where Organic Revenue includes revenue from an acquisition in a fiscal year the revenue from that acquisition in the prior year shall be included.

Except as provided under the section below entitled "Change in Control," the number of Eligible RSUs (if any) in each Tranche will be determined based on the Revenue Growth for Performance Period, determined as follows:

**Step 1:** Calculate the Revenue Growth for the Performance Period.

**Step 2:** Calculate the number of RSUs that will become Eligible RSUs (if any) by determining the product of (x) the Applicable Percentage (in the table below) multiplied by (y) the Target Number of RSUs, with the number of resulting Eligible RSUs rounded to the nearest whole RSU.

The Applicable Percentage will be determined as follows:

Revenue Growth	Applicable Percentage of Target Number of RSUs That Become Eligible RSUs
Below 7%	None
7%	50%
10%	100%
20% or more	200%

If Revenue Growth is greater than 7% and falls between the thresholds set forth above, the Applicable Percentage will be determined based on a linear interpolation between the corresponding Applicable Percentages for such thresholds.

**Step 3:** Any portion of the Target Number of RSUs that do not become Eligible RSUs under Step 2, will be forfeited without payment of any consideration.

The Administrator's determination as to the number of RSUs that become Eligible RSUs (if any) will be final and binding on Participant and any other holder of this Award and will be given the maximum deference permitted by Applicable Laws.

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Change in Control:

Notwithstanding the foregoing section if Participant does not experience a Termination of Service before a Change in Control that occurs after the last day of the applicable Performance Period but before the Vesting Date, the number of RSUs in the Tranche applicable to that performance period that will become Eligible RSUs (if any) will be the number of RSUs determined at the last day of that Performance Period. If Participant does not experience a Termination of Service before a Change in Control that occurs before the last day of an applicable Performance Period, the number of RSUs in each Tranche that will become Eligible RSUs (if any) will be the Target Number of RSUs. The number of RSUs that were eligible to vest for measurement periods ending on or after the date of the Change in Control will be converted to restricted stock units at the Target Number of RSUs and will vest on the originally scheduled measurement dates, subject to Executive remaining a service provider to the Company or its successor through such dates.

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## EXHIBIT C

### LATTICE SEMICONDUCTOR CORPORATION 2013 INCENTIVE PLAN

#### COUNTRY-SPECIFIC PROVISIONS FOR NON-U.S. PARTICIPANTS

Unless otherwise defined herein, capitalized terms used but not defined herein shall have the same meanings as set forth in the Plan or in the Terms and Conditions of Performance-Based Restricted Stock Unit Award, as applicable.

##### *Terms and Conditions*

This Exhibit C includes additional terms and conditions that govern these RSUs granted to the Participant under the Plan if he or she resides and /or works in one of the countries listed below. If the Participant is a citizen or resident of a country other than the one in which the Participant is currently residing and/or working (or is considered as such for local law purposes), or if the Participant transfers employment and/or residency to a different country after the RSUs are granted, the Company will, in its discretion, determine the extent to which the terms and conditions contained herein will apply to the Participant.

##### *Notifications*

This Exhibit C may include information regarding certain issues of which the Participant should be aware with respect to participation in the Plan. The information is based on the securities, exchange control, and other applicable laws in effect in the respective countries as of October 2019. Such laws are often complex and change frequently. As a result, the Company strongly recommends that the Participant not rely on the information in this Exhibit C as the only source of information relating to the consequences of participation in the Plan because the information may be out of date at the time the RSUs vest or the Participant sells shares of Common Stock acquired under the Plan.

In addition, the information contained in this Exhibit C is general in nature and may not apply to the Participant's particular situation, and the Company is not in a position to assure him or her of a particular result. The Participant should seek appropriate professional advice as to how the applicable laws in his or her country may apply to his or her individual situation.

Finally, if the Participant is a citizen or resident of a country (or if the Participant is considered as such for local law purposes) other than the one in which he or she is currently residing and/or working, or if the Participant transfers employment to another country after these RSUs are granted, the information in this Exhibit C may not apply to him or her in the same manner, and the Committee will determine to what extent the terms and conditions in this Exhibit C apply.

##### CHINA

*The following provisions apply only if the Participant is subject to exchange control restrictions imposed by the State Administration of Foreign Exchange ("SAFE"), as determined by the Company in its sole discretion:*

##### *Terms and Conditions*

Forfeiture Upon Termination of Service. Notwithstanding anything to the contrary in this Agreement, any shares of Common Stock held by the Participant at the time of Termination of Service must be sold by the Participant within six (6) months from the date of Termination of Service (for any reason) and thereafter the Participant shall have no entitlement to the underlying shares of Common Stock. If not sold by the Participant within such timeframe, the Company will force the sale of the shares of Common Stock as described in the Restriction on Sale of Shares section below.

Restriction on Sale of Shares. Due to local regulatory requirements, the Company reserves the right to force the sale of any shares of Common Stock issued upon settlement of the RSUs. The sale may occur (i) immediately upon issuance, (ii) following the Participant's Termination of Service, (iii) following the Participant's transfer of employment to the Company, or a Related Company outside China, or (iv) within any other timeframe as the Company determines to be necessary or advisable to comply with local regulatory requirements. The Participant is required to maintain any shares of Common Stock acquired under the Plan in an account at a broker designated by the Company (the "**Designated Account**") and any shares of Common Stock deposited into the Designated Account cannot be transferred out of the Designated Account unless and until they are sold.

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In order to facilitate the foregoing, the Company is authorized to instruct its designated broker to assist with the sale of the shares of Common Stock (on the Participant's behalf pursuant to this authorization without further consent) and the Participant expressly authorizes the Company's designated broker to complete the sale of such shares of Common Stock. The Participant acknowledges that the Company's designated broker is under no obligation to arrange for the sale of the shares of Common Stock at any particular price. Upon the sale of the shares of Common Stock, the Company will pay to the Participant the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items. If the shares of Common Stock acquired under the Plan are sold, the repatriation requirements described below shall apply.

**Repatriation of Sale Proceeds and Dividends.** The Participant understands and agrees that, due to exchange control laws in China, the Participant will be required to immediately repatriate to the SAFE Account described below the proceeds from the sale of shares of Common Stock that Participant acquires upon vesting of the RSUs. The Participant also understands and agrees that this repatriation requirement also applies to any dividends that are paid on the Common Stock, which must be repatriated to China at the time and in the manner established by the Company. The Participant further agrees that such proceeds and dividends must be transferred directly from the participant trust or other account established under the Plan to the dedicated foreign exchange account established by the Company or a Related Company in China and approved by SAFE or its local counterpart under applicable exchange control rules (the "**SAFE Account**") before such proceeds and dividends can be remitted to the Participant. The Participant further agrees not to instruct or cause the Company to transfer such cash proceeds and dividends to any person, broker or entity other than the SAFE Account. The Participant further agrees to cooperate with and comply with any other requests made by the Company or the Employer in the future in order to facilitate compliance with the exchange control requirements in China. The Participant undertakes to reimburse the Company and any Related Company for any penalties or other charges that they may incur resulting from any failure by the Participant to ensure compliance with the requirements set forth in this paragraph. The Participant also understands that the Company will deliver such proceeds and dividends to the Participant as soon as possible, but that there may be delays in distributing the funds to the Participant due to exchange control requirements. The Participant understands that the proceeds and dividends may be paid to the Participant in U.S. dollars or in local currency, at the Company's discretion. If the proceeds are paid in U.S. dollars, the Participant will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid in local currency, the Company is under no obligation to secure any particular exchange conversion rate and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions.

Finally, the Participant agrees to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

### ***Notifications***

**Exchange Control Information.** Chinese residents may be required to report to SAFE all details of their foreign financial assets and liabilities (including shares of Common Stock acquired under the Plan), as well as details of any economic transactions conducted with non-Chinese residents.

## **FRANCE**

### ***Terms and Conditions***

**Consent to Receive Information in English.** By accepting the RSUs, the Participant confirms having read and understood the Plan and Agreement, which were provided in the English language. The Participant accepts the terms of those documents accordingly.

**Consentement relatif à la réception d'informations en langue anglaise.** En acceptant l'Attribution, vous confirmez avoir lu et compris le Plan et la Convention d'Attribution, qui ont été fournis en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.

### ***Notifications***

**Tax Information.** The RSUs are not intended to qualify for special tax or social security treatment in France.

**Foreign Asset/Account Reporting Information.** If the Participant holds shares of Common Stock acquired under the Plan outside France or maintains a foreign bank account, the Participant is required to report such shares and/or account to the French tax authorities when filing his or her annual tax return.

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## **GERMANY**

### ***Notifications***

**Exchange Control Information.** German residents must electronically report cross-border payments in excess of €12,500 to the German Federal Bank (*Bundesbank*) on a monthly basis. In case of payments in connection with securities (including any proceeds realized upon the sale of shares of Common Stock or the receipt of any dividends), the report must be made by the fifth day of the month following the month in which the payment was received. The form of report ("*Allgemeines Meldeportal Statistik*") can be accessed via the Bundesbank's website (www.bundesbank.de). *The Participant should consult his or her personal advisor to ensure compliance with applicable reporting obligations.*

**Foreign Asset/Account Reporting Information.** If the acquisition of shares of Common Stock under the Plan leads to a "qualified participation" at any point during the calendar year, the Participant will need to report the acquisition when the Participant files his or her tax return for the relevant year. A "qualified participation" is attained if (i) the value of the shares of Common Stock acquired exceeds €150,000 or (ii) in the unlikely event the Participant holds shares of Common Stock exceeding 10% of the total number of shares of Common Stock.

## **ITALY**

### ***Terms and Conditions***

**Plan Document Acknowledgment.** In accepting the grant of RSUs, the Participant acknowledges that he or she has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement in their entirety and fully understands and accepts all provisions of the Plan and the Agreement.

The Participant further acknowledges that he or she has read and specifically and expressly approves the following sections of the Terms and Conditions of Performance-Based Restricted Stock Unit Award: Section 5 regarding "Forfeiture upon Termination of Service;" Section 8(a) regarding "Tax Withholding;" Section 12 regarding "Nature of Grant;" Section 13 regarding "Data Privacy Information and Consent;" Section 16(h) regarding "Choice of Law; Choice of Forum;" and Section 16(i) regarding "Language."

### ***Notifications***

**Foreign Asset/Account Reporting Notification.** The Participant is required to report investments held abroad or foreign financial assets (*e.g.*, cash, RSUs, and shares of Common Stock) that may generate income taxable in Italy on an annual tax return (UNICO Form, RW Schedule) or on a special form if no tax return is due, irrespective of their value. The same reporting duties apply to Italian residents who, even if they do not directly hold investments abroad or foreign financial assets (*e.g.*, cash, RSUs and shares of Common Stock), are beneficial owners of the investment pursuant to Italian money laundering provisions. The Participant should consult his or her personal tax advisor for details regarding this requirement.

**Foreign Financial Assets Tax Notification.** The fair market value of any shares of Common Stock held outside Italy is subject to an annual foreign assets tax. The fair market value for this purpose is the value of the Common Stock on the Nasdaq Stock Market on December 31 of the year or, for shares disposed of during the course of the year, on the last day the Participant held the Common Stock (in such case, or when the shares of Common Stock are acquired during the course of the year, the tax is levied in proportion to the actual days of holding over the calendar year). The Participant should consult with his or her personal tax advisor about the foreign financial assets tax.

## **JAPAN**

### ***Notifications***

**Foreign Asset/Account Reporting Information.** Japanese residents and foreign nationals with permanent residency in Japan are required to report details of any assets held outside Japan as of December 31 (including shares of Common Stock acquired under the Plan), to the extent such assets have a total net fair market value exceeding ¥50 million. Such report will be due by March 15 each year. *The Participant should consult with his or her personal tax advisor to ensure compliance with applicable reporting obligations.*

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## **KOREA**

### ***Notifications***

**Foreign Asset / Account Tax Reporting Information.** Korean residents must declare all foreign financial accounts (*e.g.*, non-Korean bank accounts, brokerage accounts) to the Korean tax authority and file a report with respect to such accounts if the value of such accounts exceeds KRW 500 million (or an equivalent amount in foreign currency). *The Participant should consult with his or her personal tax advisor to ensure compliance with the applicable requirements.*

## **PHILIPPINES**

**Securities Law Information.** The RSUs are being offered pursuant to an exemption from registration under the Philippines Securities Regulation Code.

The Participant should be aware of the risks of participating in the Plan, which include (without limitation) the risk of fluctuation in the price of the Common Stock on the Nasdaq Stock Market and the risk of currency fluctuations between the U.S. Dollar and the Participant's local currency. In this regard, the Participant should note that the value of any shares of Common Stock he or she may acquire under the Plan may decrease, and fluctuations in foreign exchange rates between the Participant's local currency and the U.S. Dollar may affect the value of the RSUs or any amounts due to the Participant upon vesting and settlement of the RSUs or upon sale of any shares of Common Stock acquired by the Participant at settlement. The Company is not making any representations, projections or assurances about the value of the Common Stock now or in the future.

For further information on risk factors impacting the Company's business that may affect the value of the Common Stock, the Participant should refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at [www.sec.gov/](http://www.sec.gov/), as well as on the Company's website at <http://ir.latticesemi.com/>. In addition, the Participant may receive, free of charge, a copy of the Company's Annual Report, Quarterly Reports or any other reports, proxy statements or communications distributed to the Company's stockholders by contacting the Company at the address below:

Lattice Semiconductor Corporation  
5555 NE Moore Court  
Hillsboro, Oregon 97124 U.S.A.  
+1 (503) 268-8000

## **SINGAPORE**

### ***Terms and Conditions***

**Restriction on Sale of Shares.** The RSUs are subject to section 257 of the Securities and Futures Act (Chapter 289, 2006 Ed.) ("**SFA**") and the Participant will not be able to make any subsequent offer to sell or sale of the shares of Common Stock in Singapore, unless such offer or sale is made (1) after six (6) months from the date the RSUs are granted or (2) pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

### ***Notifications***

**Securities Law Notice.** The offer of the Plan, the grant of the RSUs, and the issuance of the underlying shares of Common Stock at vesting are being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the SFA. The Plan has not been lodged or registered as a prospectus with the Monetary Authority of Singapore.

**Chief Executive Officer and Director Notification.** The Participant understands and acknowledges that if he or she is the Chief Executive Officer ("**CEO**"), director, associate director or shadow director of a Related Company in Singapore, the Participant is subject to certain notification requirements under the Singapore Companies Act, regardless of whether the Participant is a Singapore resident or employed in Singapore. Among these requirements is an obligation to notify the Singapore Related Company in writing when the Participant receives an interest in the Company (*e.g.*, the RSUs or shares of Common Stock). In addition, the Participant must notify the Singapore Related Company when the Participant sells shares of Common Stock (including when the Participant sells shares of Common Stock acquired under the Plan). These notifications must be made within two days of acquiring or disposing of any interest in the Company. In addition, a notification must be made of the Participant's interests in the Company within two days of becoming a CEO, director, associate director or shadow director.

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## **TAIWAN**

### ***Terms and Conditions***

**Data Privacy.** The Participant hereby acknowledges that he or she has read and understood the terms regarding collection, processing and transfer of Data contained in Section 13 of the Terms and Conditions of Performance-Based Restricted Stock Unit Award and agrees that, by accepting the RSUs, the Participant is agreeing to such terms. In this regard, upon request of the Company or the Employer, the Participant agrees to provide an executed data privacy consent form to the Employer or the Company (or any other agreements or consents that may be required by the Employer or the Company) that the Company and/or the Employer may deem necessary to obtain under the data privacy laws in his or her country, either now or in the future. The Participant understands that he or she may not be able to participate in the Plan if the Participant fails to execute any such consent or agreement.

### ***Notifications***

**Securities Law Information.** The RSUs and the shares of Common Stock to be issued pursuant to the Plan are available only for employees and certain service providers. It is not a public offer of securities by a Taiwanese company. Therefore, it is exempt from registration in Taiwan.

**Exchange Control Information.** The Participant may acquire and remit foreign currency (including proceeds from the sale of shares of Common Stock or the receipt of dividends) up to US\$5,000,000 per year without justification. However, if the transaction amount is TWD500,000 or more in a single transaction, the Participant must submit a Foreign Exchange Transaction Form and provide supporting documentation to the satisfaction of the remitting bank.

## **UNITED KINGDOM**

### ***Terms and Conditions***

**RSUs Payable Only in Common Stock.** Notwithstanding anything to the contrary in the Plan, the RSUs shall be paid in shares of Common Stock only and do not provide the Participant with any right to receive a cash payment. This provision is without prejudice to the application of Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award.

**Responsibility for Taxes.** The following provisions supplement Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award:

Without limitation to Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award, the Participant agrees that he or she is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items as and when requested by the Company or, if different, the Employer or by Her Majesty's Revenue and Customs ("**HMRC**") (or any other tax authority or any other relevant authority). The Participant also agrees to indemnify and keep indemnified the Company or the Employer against any Tax-Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Participant's behalf.

Notwithstanding the foregoing, if the Participant is a director or executive officer of the Company (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision will not apply if the indemnification is viewed as a loan. In such case, if the amount of any income tax due is not collected from or paid by the Participant within 90 days of the end of the U.K. tax year in which an event giving rise to the indemnification described above occurs, the amount of any uncollected income taxes may constitute a benefit to the Participant on which additional income tax and National Insurance contributions ("**NICs**") may be payable. The Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying to the Company or the Employer, as applicable, any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Participant by any of the means referred to in Section 8(a) of the Terms and Conditions of Performance-Based Restricted Stock Unit Award.



**LATTICE SEMICONDUCTOR CORPORATION****2022 Cash Incentive Plan Summary**

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**Purpose**

The Lattice Cash Incentive Plan (the "Plan") directly supports the achievement of business objectives while rewarding individual contribution. Employees will be compensated both for achievement of specific financial measures derived from the Company's annual operating plan and corporate performance measured by the achievement of corporate MBOs. The Plan is established under the terms of and is governed by the Company's 2013 Incentive Plan and the Plan accordingly is subject to administration by the Compensation Committee of the Company's Board of Directors (the "Compensation Committee").

**Effective Date**

The Plan is effective the first day of the fiscal year as defined by the Lattice Finance Department.

**Incentive Period**

The Incentive Period is the fiscal year as defined by the Lattice Finance Department.

**Incentive Payment**

Incentives are paid annually following the close of the fiscal year, audit of the Company's financial results for the year, determination of the achievement of Corporate MBOs and Compensation Committee approval of the proposed payment.

**Eligibility**

Regular employees become eligible to participate in the plan beginning on their hire date, except as otherwise provided under the heading Other General Provisions hereafter. Employees in Grade 16 and above (hereafter "Executives") become eligible to participate as provided in their initial offer letter or Employment Agreement, as applicable.

Eligibility excludes the following:

- Those who are eligible under the Company's Sales Incentive Plan ("SIP");
- Temporary employees (including interns) and contractors; and
- Any other persons deemed ineligible by application of the provisions set forth under the heading "Other General Provisions" hereafter.

**Incentive Targets**

Each participant will be assigned an incentive target ("Individual Target") established under the Company's compensation practices. The Individual Target, stated as a percentage of Eligible Wages, is the potential incentive amount that an employee may earn if all funding and performance criteria for the Incentive Period are met at 100% of target. Changes in the Individual Target during the fiscal year will be prorated as provided under the heading Other General Provisions hereafter.

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## Performance Metrics

The table below contains the three (3) performance metrics and their respective weights that are applied to determine the 2022 CIP pool funding. The Compensation Committee of the Board of Directors approves the Corporate MBOs as well as the payout factor of the Corporate MBOs at the end of the preceding fiscal year. The determination of the Committee is final.

2022 Performance Metric	Metric Weight
1 - Financial Metric: Operating Income	33.3%
2 - Financial Metric: Revenue	33.3%
3 - Corporate MBOs	33.3%
Total	100.0%

## Funding

Pool funding is based on the achievement of the financial metrics Revenue and Operating Income. No funding will take place until either the Revenue threshold or Operating Income threshold are achieved. Once the Revenue threshold or Operating Income threshold is attained, the Corporate MBOs will begin to payout and will be based on the Corporate MBOs payout factor approved by the Compensation Committee of the Board of Directors. The 2022 Corporate MBOs have a maximum payout factor of 100%.

Once each financial metric achieves its threshold, the metric will fund the plan on a linear basis starting with a payout factor of 0% and continuing until 100% target is reached; and once each financial metric achieves its Target, the metric will fund the plan on a linear basis above 100% until the maximum payout factor of 250%.

Operating Income is defined as Non-GAAP Operating Income.

The Compensation Committee of the Board of Directors reserves the right to adjust the financial metrics in the event the Company engages in non-ordinary course transactions, including without limitation, mergers, acquisitions or divestitures.

## Employee Payout

At the end of the Incentive Period, employees will be eligible for an incentive based on the following formula.

New for 2022, 100% of an employee's incentive is variable based upon management discretion and is variable based on the CIP funding % and employee's individual target.

$$\text{Employee Payout} = \{[\text{Employee's Eligible Wages} * \text{Individual CIP Target}] * [\text{Weighted Company CIP Funding \%} * 0\text{-}200\% \text{ Manager Discretion}]\}$$

Note: Lattice's Board Compensation Committee maintains the right to reduce or increase any amount payable under this Plan, including without limitation, any amounts payable on application of this formula.

## Other General Provisions

### Current Employees

Employee must be both a regular and active employee to participate in the plan. Employee payments will be prorated to exclude the number of calendar days the employee is not both a regular and active employee during the incentive period.

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### New Employees

New regular employees will be eligible to participate in the plan effective on the date they become actively employed. The employee payout will be prorated based on the number of calendar days they are actively employed during the incentive period.

### Transfers

Regular employees that transfer either on to or off of the Sales Incentive Plan will have their employee payout prorated based on the number of calendar days they are eligible to participate in the Corporate Incentive Plan during the incentive period.

### Changes in Incentive Targets

Changes in incentive targets will be prorated based on the number of calendar days the incentive target is in effect during the incentive period.

### Leaves of Absence

Employee payments will be prorated to exclude the number of calendar days the employee is on leave during the incentive period, unless otherwise provided by local law.

### Terminations - Voluntary and Involuntary

Employee must be in an active, eligible employment status as of the date incentive payments are actually paid to be eligible to receive an incentive payout for the prior Incentive Period and such incentive is not deemed to be earned until the payment date. No pro rata or partial payment will be paid for employees who are not actively employed on the date payments are made.

The following exception is applicable to all payments: An eligible employee whose termination date, as a result of an approved Employee Restructure Plan, is on or after the last day of the incentive period, but prior to the actual payment date shall remain eligible for an incentive payout for that plan year, subject to all other plan provisions.

### Incentive Payments

Incentive payments will be made after the end of the fiscal year, once financial results have been determined and audited, and the Corporate MBOs have been reviewed and approved by the Compensation Committee and Board of Directors as provided above.

### Eligible Wages

Eligible Wages means the 12-month base salary paid during the applicable incentive period, exclusive of any bonuses, allowances, or wage supplements, unless otherwise required by local law. In the case of hourly employees, Eligible Wages mean ordinary wages earned and paid exclusive of any overtime wages paid during the incentive period.

### Taxing

All required and applicable taxes and deductions will be withheld from incentive payments.

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### Plan Administrators

The Compensation Committee of the Board of Directors will oversee the Plan. The Lattice Finance Department will make all determinations of the Revenue and Operating Income metrics. The Lattice Human Resources Department will administer the Plan.

### Manager Discretion

100% of each employee's CIP award is subject to manager discretion, which can vary from 0 – 200% of the final 2022 CIP funding %. Manager discretion is based upon an assessment of each employee's relative contributions to Lattice's success in 2022.

### Company Discretion

Participation in this plan does not constitute a contract of employment with the Company for any specified period of time, nor is it an entitlement to participate in any other program or any future program. The Compensation Committee reserves the right to cancel, revise, interpret, and apply this Plan and its provisions and to reduce any amounts payable under its terms at its sole discretion. Changes to the Plan must be in writing. Changes impacting the Executives must be approved by the Compensation Committee. The Company's senior employee of Human Resources, and CEO must approve any exceptions to the Plan.

# LATTICE SEMICONDUCTOR CORPORATION SUBSIDIARIES OF THE REGISTRANT

	<b>Name</b>	<b>Jurisdiction of Incorporation</b>
1.	Lattice Semiconductor Limited	Bermuda
2.	Lattice Semiconductor (Shanghai) Co. Ltd.	China
3.	Lattice Semiconducteurs SARL	France
4.	Lattice Semiconductor GmbH	Germany
5.	Lattice Semiconductor (India) Pvt. Ltd.	India
6.	Lattice Semiconductor SRL	Italy
7.	Lattice Semiconductor KK	Japan
8.	Lattice Semiconductor Korea Co. Ltd.	Korea
9.	Lattice Semiconductor B.V.	Netherlands
10.	Lattice Semiconductor (PH) Corporation	Philippines
11.	Lattice SG Pte. Ltd.	Singapore
12.	HDMI Licensing, LLC	Delaware, USA
13.	MHL, LLC	Delaware, USA
14.	SiBEAM, Inc.	Delaware, USA
15.	Lattice Connectivity, LLC	Delaware, USA
16.	Lattice Semiconductor International LLC	Delaware, USA
17.	Lattice Semiconductor Operations LLC	Delaware, USA
18.	SPMT, LLC	Delaware, USA
19.	WirelessHD, LLC	Delaware, USA
20.	Lattice Semiconductor UK Limited	United Kingdom
21.	Mirametrix Inc.	Canada
22.	Latticesemiconductor Malaysia Sdn. Bhd.	Malaysia

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statements (No. 333-176133, No. 333-182047, No. 333-188455, No. 333-195888, No. 333-220987, No. 333-224933, No. 333-227153, No. 333-232337, and No. 333-253594) of Lattice Semiconductor Corporation of our reports dated February 17, 2023, with respect to the consolidated financial statements of Lattice Semiconductor Corporation and the effectiveness of internal control over financial reporting of Lattice Semiconductor Corporation included in this Annual Report (Form 10-K) of Lattice Semiconductor Corporation for the year ended December 31, 2022.

/s/ Ernst & Young LLP

San Jose, California  
February 17, 2023

# CERTIFICATION

I, James Anderson, 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: February 17, 2023

/s/ James Anderson

James Anderson

Chief Executive Officer

# CERTIFICATION

I, Sherri Luther, 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: February 17, 2023

/s/ Sherri Luther

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Sherri Luther  
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 31, 2022 (the Report), I, James Anderson, 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/ James Anderson*  
James Anderson  
*Chief Executive Officer*

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Date: February 17, 2023

# **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 31, 2022 (the Report), I, Sherri Luther, 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/ Sherri Luther*  
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Sherri Luther  
*Chief Financial Officer*

Date: February 17, 2023