CYBEROPTICS CORP
Form 10-K
March 09, 2016
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) of the Securities Exchange Act of 1934 for the Year Ended December 31, 2015.
o TRANSITION PURSUANT TO SECTION 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from _____ to _____.
COMMISSION FILE NO. (0-16577)
CYBEROPTICS CORPORATION
(Exact name of registrant as specified in its charter)

Minnesota	41-1472057
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5900 Golden Hills Drive MINNEAPOLIS, MINNESOTA	55416
(Address of principal executive offices)	(Zip Code)

(763) 542-5000
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Exchange Act: Title of each class: Common Stock, no par value
Name of Exchange: NASDAQ Stock Market LLC
Securities registered pursuant to Section 12(g) of the Exchange 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 þ
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 o NO þ
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 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 þ No o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes þ No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ
Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer" or "large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o	Accelerated filer o	Non-accelerated filer o	Smaller Reporting Company þ

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes o No þ

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: $67,047,043.

As of February 29, 2016, there were 6,778,265 shares of the registrant's Common Stock, no par value, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

The responses to Part III items 10, 11, 12, 13 and 14 herein are incorporated by reference to certain information in the Company's definitive Proxy Statement for its Annual Meeting of Shareholders to be held May 20, 2016.

CYBEROPTICS CORPORATION
FORM 10-K
For the Fiscal Year Ended December 31, 2015
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PART I.

ITEM 1. DESCRIPTION OF BUSINESS

Background

CyberOptics Corporation was founded in 1984 and is a leading global developer and manufacturer of high precision sensing technology solutions. Our headquarters are located at 5900 Golden Hills Drive in Golden Valley, Minnesota. Our website address is www.cyberoptics.com. You can access, free of charge, our filings with the Securities and Exchange Commission, including our annual report on Form 10-K, our quarterly reports on Form 10-Q, current reports on Form 8-K and any other amendments to those reports, at our website, or at the Commission's website at www.sec.gov. Proxy materials for our upcoming 2016 annual shareholders meeting to be held on May 20, 2016 will be available electronically via the internet at the following address: http://www.idelivercommunications.com/proxy/cybe/.

On March 14, 2014, we acquired substantially all of the assets of Laser Design, Inc. (LDI), a general purpose metrology company headquartered in Minneapolis, Minnesota for aggregate consideration of $3.1 million cash, plus the assumption of certain current liabilities. LDI provides three-dimensional (3D) scanning solutions and services to the global general purpose metrology market. Global demand for 3D scanning is growing as this technology is deployed increasingly in markets ranging from automotive and aerospace to medical and consumer electronics.

We are working to establish CyberOptics as a global leader in high precision 3D sensors. Our objective is to deliver profitable growth by leveraging our 3D technologies in our key vertical markets of surface mount technology (SMT), semiconductor and 3D scanning solutions and services.

Our products and services are used in the SMT, semiconductor and 3D scanning solutions and services markets to significantly improve our customers' manufacturing yields and productivity, and to assist our customers in meeting their rigorous demands for manufacturing quality. Our products use a variety of proprietary technologies such as lasers, optics and machine vision, combined with software, electronics and mechanical design. Our SMT and semiconductor products enable manufacturers to increase production volume, product yields and quality by measuring the characteristics and placement of electronic components and semiconductor packages both during and after the assembly process, or by providing SMT electronic circuit board and semiconductor manufacturers with key metrics related to their manufacturing processes that allow them to improve production volumes and yields. Our 3D scanning solutions and services help manufacturers quickly solve their most complex 3D inspection, analysis and product engineering challenges, allowing them to improve product yields and quality.

The majority of our products (60% of revenue in 2015) are developed and sold for use in SMT electronic circuit board assembly or with equipment used in SMT electronic circuit board assembly. We sell products in these markets both as sensor components that are incorporated into products manufactured by other companies for sale to circuit board assembly companies, and as complete stand-alone inspection systems that are sold directly to circuit board assembly companies.

We manufacture 3D and 2D optical sensors for use in our own proprietary SMT inspection systems and for sale to original equipment manufacturers (OEMs) in our key vertical markets and adjacent markets. Our SMT electronic assembly alignment sensor products are sold to manufacturers of pick-and-place machines to align electronic surface mount components during placement on the circuit board and to a solder paste screen printer company to align stencils with circuit boards. We also sell sensors to OEMs for solder paste inspection (SPI) systems, and more recently, high precision 3D sensors to KLA-Tencor for use in systems that inspect back-end semiconductor packaging.

Our SMT inspection system products are sold to electronic manufacturing services (EMS) companies and other manufacturers of SMT electronic circuit boards to control quality as in-line systems. These products are used by manufacturers to measure screen printed solder paste, to inspect circuit boards and components after component placement, to confirm proper placement after full assembly of circuit boards and to inspect solder joints on printed circuit boards. Manufacturers of DRAM and Flash Memory also use our inspection system products to inspect assembly of their memory modules both before and after module singulation.

Our semiconductor products assist with yield improvement and tool uptime in the semiconductor wafer fabrication process by providing highly accurate measurements of critical process factors. These measurements are impossible or

very difficult to obtain without powering down the wafer fabrication equipment. Customers who use our products have better yields, through-put and tool up-time. Our products are more accurate when compared to the various manual techniques historically used by semiconductor manufacturers to obtain critical wafer fabrication process measurements.

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Our 3D scanning solutions capture surface data for product engineering and inspection. Our 3D scanning services scan, model and inspect objects of all sizes and complexity for customers who do not have their own general purpose metrology equipment.

Recent Developments in the Business

Our recent and planned product introductions are designed to strengthen our competitive position in our current markets and to expand into adjacent markets. We believe 3D inspection represents high-growth segments in both the electronic assembly and semiconductor markets. For this reason we are working to strategically reposition ourselves as a leading developer and manufacturer of high-precision 3D sensors. A key element in our strategic re-positioning is the development of new high precision 3D sensors based on our proprietary Multi-Reflection Suppression (MRS) technology. MRS technology inhibits reflections that can result in measurement inaccuracies, which is particularly critical for inspecting shiny objects. We believe that MRS is a break-through technology for optical inspection, with the potential to facilitate expansion of our markets in the future.

For our existing markets in SMT, semiconductor inspection and 3D scanning solutions, we are introducing new products based on MRS technology that we believe present a significant opportunity for growth. Our 3D MRS technology has also been deployed in our new 3D automated optical inspection (AOI) system, the SQ3000, which is designed to expand our presence in markets requiring high precision inspection. In these markets, identifying defects has become highly challenging and critical due to smaller electronics packaging and increasing component density on circuit boards. We believe the combination of our MRS technology and sophisticated 3D fusing algorithms allows us to offer microscopic image quality at production speeds. We recognized our initial revenues from sales of the SQ3000 in the second quarter of 2015, and since the start of the fourth quarter of 2015 have received follow-on orders totaling approximately $4.7 million for the SQ3000 from a key customer. Our recent success and the competitive advantages offered by our MRS technology causes us to be very optimistic about the future sales potential of the SQ3000.

LDI represents another aspect of our 3D strategy. We are incorporating our MRS technology into a new 3D scanning system, CyberGage360, that we believe will serve a wide range of inspection applications in the general purpose 3D metrology market. Beta testing for CyberGage360 commenced in the first quarter of 2016. We believe customer interest in this product is high, and we presently anticipate initial CyberGage360 sales in 2016. We believe the unique performance characteristics of MRS, which inhibit reflections and enable very accurate measurements at fast speeds, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning systems.

In February 2015 we entered into a mutually exclusive agreement to supply KLA-Tencor with high-precision 3D sensor subsystems for its back-end semiconductor packaging inspection systems. We also have entered into an agreement to supply Nordson Corporation (Nordson) with high-precision 3D sensor subsystems for the SMT market and have sold initial units for testing and demonstration purposes. The sensor subsystems are based on our new MRS technology.

In addition to deploying MRS equipped 3D sensors in our key vertical markets of SMT, semiconductor and 3D scanning solutions and services, we intend to expand sales of this technology into adjacent markets that require high precision optical 3D inspection, including pursuing new OEM opportunities with our MRS technology.

We also have committed funds to development of new products for inspecting memory modules. To date, we have received orders worth approximately $3.9 million from one of the world’s top four memory manufacturers for our newly-developed MX600 system that will inspect memory modules at the end of the production line after singulation. We recognized our first revenue from the sale of the MX600 system in the third quarter of 2015, and we had a backlog of MX600 orders at December 31, 2015 totaling approximately $3.4 million.

We also have continued to invest in our WaferSense/ReticleSense product lines and have recently announced new offerings for advanced particle measurement and a line of multi-purpose sensors that measure leveling, vibration and humidity in an all-in-one wireless real-time device.

Our ability to achieve our forecast and to implement our strategy effectively is subject to numerous uncertainties and risks, including the risks identified in Item 1A of this Annual Report on Form 10-K. We cannot assure you that our efforts will be successful.

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OPERATIONS AND PRODUCTS

We develop, manufacture and sell intelligent, non-contact sensors and systems for process control and inspection and, through LDI, for metrology applications and services. Our product offerings are sold to OEMs and end-user customers in the SMT circuit board assembly and semiconductor industries. Our OEMs incorporate our sensor offerings into capital equipment serving these industries. We also sell sensors and stand-alone inspection systems directly to end-users. We create value-added products by integrating LDI's proprietary software with sensors and other hardware purchased from third parties, and sell these products and complete metrology systems manufactured by third parties for use to create detailed, 3D digital maps of objects. These 3D digital images are used in manufacturing, 3D printing, and similar applications. Through LDI, we also provide services for 3D mapping for those customers who cannot justify the capital cost of a scanning project, or need services for special projects.

Our principal products are used by manufacturers to increase operating efficiencies and yields, and to assist them in meeting rigorous demands for product quality. In addition to proprietary hardware designs that combine precision optics, various light sources and multiple detectors, our products incorporate software that controls the hardware and filters and converts raw data into application specific information. Our 3D scanning solutions and services help manufacturers quickly solve their most complex 3D inspection, analysis and product engineering challenges, allowing them to improve product yields and quality.

Optical Sensors

We manufacture high precision sensors for use in our own products in key vertical markets and for sale into adjacent markets, mainly through OEM relationships. Although most of our revenue from sensor sales has historically come from our alignment sensors, we began selling the sensor used in our SPI systems under an OEM agreement in 2011. We have integrated the new MRS 3D sensor technology into our own stand-alone products for 3D AOI and 3D scanning. We also sell 3D MRS sensor subsystems to OEMs for integration into their own proprietary stand-alone products.

In February 2015 we entered into a mutually exclusive agreement to supply KLA-Tencor with high-precision 3D sensor subsystems for its back-end semiconductor packaging inspection systems. We also have entered into an agreement to supply Nordson with high-precision 3D sensor subsystems for the SMT market and have sold initial units for testing and demonstration purposes. The sensor subsystems are based on our new MRS technology. We intend to negotiate agreements for sale of these sensors to OEMs and end-users in other markets. We also have developed a strobe inspection module (SIM) that features extremely fast image acquisition and low false call rates in 2D applications. We use the SIM in our 2D AOI products and intend to sell it as a sensor kit.

We believe that a strategy of developing and selling complete inspection systems and of refining the sensors and sensor subsystems that are part of these complete systems and selling them to OEM customers allows us to have direct end-user customer input as to the features of inspection systems that are most desired and purchased in our markets. At the same time, sales to OEMs allow us to capitalize on our strengths in optical physics and software implementations, such as noise suppression. We believe that the resulting sensor products and subsystems are unique and add significant value to the products of our OEM customers.

SMT Electronic Assembly Alignment Sensors

Our SMT electronic assembly alignment sensor products, which had generated the largest component of our sales until 2011, is a family of alignment sensors that are customized and incorporated into the equipment manufactured by our customers for use in SMT circuit board assembly. We work closely with our OEM customers to integrate sensors into their equipment.

Sales of our SMT electronic assembly alignment sensor products, including service repairs, to Juki Corporation accounted for approximately 10% of our revenue in 2015 and 17% of our revenue in 2014. Sales of these products, including service repairs, to Assembleon B.V. (acquired by Kulicke and Soffa Industries in January 2015) accounted for approximately 11% of our revenue in 2015 and 8% of our revenue in 2014. Historically, our revenues and operations have been heavily influenced by the level of purchases from these two customers, reflecting their success in the market for pick-and-place machines, the cyclical nature of the SMT production industry and their ability to accurately forecast production requirements and need for our sensors. We anticipate that our future revenue and

operations will be less dependent on these two customers, given the recent success we have had with sales of new MRS-enabled products, including the SQ3000 and 3D sensor subsystems, and the anticipated future sales of our new CyberGage360, 3D scanning system.

LaserAlign®. Our LaserAlign sensor family has accounted for the vast majority of our sales in the SMT electronic assembly alignment sensors product line. These sensors are primarily sold for incorporation into pick-and-place machines manufactured and sold by a number of different OEM customers for use in SMT production lines.

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The LaserAlign family of products aligns both large and extremely small surface mount and through-hole components, known as chip capacitors and resistors, during transport on a pick-and-place machine prior to placement. LaserAlign sensors are incorporated into the placement heads of pick-and-place machines to ensure accurate component placement at high production speeds. Various high-speed pick-and-place machines use between one and twenty LaserAlign sensors per machine. LaserAlign integrates an intelligent sensor, composed of a laser, optics and detectors with a microprocessor and software for making specific measurements. LaserAlign enables quick and accurate alignment of each component as it is being transported by the pick-and-place arm for surface mount or through-hole assembly. Using non-contact technology, LaserAlign facilitates orientation and placement of components at higher speeds than can be achieved using conventional mechanical or machine vision component centering systems.

The LaserAlign sensor is offered in several different configurations to satisfy the requirements of the machines on which it is used. The latest version of the LaserAlign sensor technology was introduced in 2013 as a sixth generation sensor for Juki Corporation. Revenue from product shipments of LaserAlign sensors has been a principal contributor to revenue during the past five years and accounted for 14% of our revenue in 2015 and 20% of our revenue in 2014.

BoardAlign Camera (BA Camera). The BA Camera, which is incorporated directly into the placement head of a pick-and-place machine, identifies fiducial markings on a circuit board and aligns the board in the pick-and-place machine prior to component placement. The BA Camera was first introduced in a sensor for Assembleon B.V. during 2003 and a second generation BA Camera, which was introduced in 2012, has been incorporated into the latest version of Assembleon B.V.'s component placement machine. Revenue from shipments of BA Camera sensors to Assembleon B.V. (acquired by Kulicke and Soffa Industries in January 2015) accounted for 6% of our revenue in 2015 and 5% in 2014.

InPrinter Inspection Camera. The InPrinter Inspection Camera, which is mounted directly in DEK brand screen printers manufactured by ASM Pacific Technology Ltd., is used to identify fiducial markings on a circuit board to ensure accurate board registration prior to placement of solder paste, as well as to provide an upgraded capability for 2D solder paste and stencil inspection. The InPrinter Inspection Camera was introduced for DEK brand screen printers during the third quarter of 2005. Revenue from shipments of the InPrinter Inspection Camera accounted for 5% of our revenue in 2015 and 4% in 2014.

3D Solder Paste Inspection (SPI) Sensors

We manufacture custom designed 3D SPI sensors for use in our own family of SPI systems. We also sell our 3D SPI sensors to Viscom GmbH for use in their SPI platforms. Sales of 3D SPI sensors to Viscom accounted for less than 1% of our revenue in 2015 and less than 2% of revenue in 2014.

MRS Sensors for Semiconductor and SMT

Although we have been focusing on development of the MRS sensor for application in the SMT industry, in January 2015, we entered into a mutually exclusive agreement with KLA-Tencor to supply MRS sensor subsystems for its back-end semiconductor package inspection systems. We also have entered into an agreement to supply Nordson with high-precision 3D sensor subsystems for the SMT market. Our high precision 3D sensors are based on commercially available cameras, DLP projectors and other hardware components, combined with our proprietary MRS technology and 3D fusing algorithms. The combination of these elements allows our sensor to capture, what we believe, are microscopic quality images, at production speeds. Revenue from shipments of high precision 3D MRS sensor subsystems accounted for 4% of our revenue in 2015.

Strobe Inspection Modules (SIM)

We also design and manufacture 2D sensors based on our strobe inspection module or SIM technology and proprietary Autonomous Image Interpretation (Ai^2) software for automated optical inspection. These sensors are based on a proprietary hardware design utilizing a strobed based lighting concept for extremely fast image acquisition. We deploy these sensors in our family of 2D AOI inspection systems which, we believe, offer an industry leading level of low false call performance, at fast in-line production speeds. We also utilize this technology in our newly-developed MX600 system for post-singulation inspection of memory modules. To date our use of the SIM technology has been limited to our own 2D AOI offerings for SMT. We intend to develop sensor kits based on our SIM technology that

can be used for a variety of inspection tasks outside of traditional SMT applications, including inspecting for completeness and accuracy at end of line final assembly.

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SMT Inspection System Products

Our SMT inspection system products are used in the SMT electronic assembly industry for process control and inspection. These systems are sold directly to end-user manufacturing customers that use them in a production line or along-side a production line to maintain process and quality control. Our products incorporate our proprietary 3D and 2D optical sensors, off the shelf, translation or robotics hardware and conveyors and complete computer systems or processors with internally developed software.

Solder Paste Inspection (SPI) Products

We have been selling in-line 3D solder paste measurement machines for over a decade and have continued to develop and evolve our SPI family of products since their introduction.

SE600. The SE600 is an in-line system based on a dual-illumination sensor that measures in 3D the amount of solder paste applied to the circuit board after the first step of the SMT circuit board assembly process. Because of the small size of the components that must be placed on each pad of solder paste and the density of components placed on the circuit board, a significant amount of SMT assembly problems are related to the quality of solder paste deposition. Misplaced solder paste or excess or inadequate amounts of paste can lead to improper connections or bridges between leads causing an entire circuit board to malfunction. The SE600 inspects the height, area and volume of solder paste placed on an entire circuit board at production line speeds and with resolution that allows the SE600 to measure the smallest chip scale packages and micro ball array component sites. The SE600 can be integrated into most SMT production lines, providing real time quality control immediately after a printed circuit board leaves the screen printer and before component placement commences.

SE500ULTRA. The SE500ULTRA is an in-line solder paste inspection system incorporating the same proprietary 3D inspection technology as the SE600, but with a single illumination sensor. The SE500ULTRA inspects at faster speeds than the SE600 and is intended for use in high-volume production environments. Because the SE500ULTRA prioritizes speed, it does not provide the same level of resolution and measurement performance as the SE600.

Revenues from shipments of our SPI products accounted for 8% of our revenue in 2015 and 15% of our revenue in 2014.

Automated Optical Inspection (AOI) Products

We have been selling AOI products for well over a decade and have continued to develop and evolve our AOI offerings since inception. These products inspect circuit boards after component placement to determine whether all components are present and have been placed correctly. AOI products can also be used to measure the quality of solder joints after reflow.

SQ3000. Our first 3D AOI system, the SQ3000, is designed to expand our presence in markets requiring high precision inspection. Identifying defects on circuit boards has become highly challenging and critical due to smaller electronics packaging and increasing component density, combined with smaller and more complex solder joints. We believe the combination of our MRS technology and sophisticated 3D fusing algorithms allows us to offer microscopic image quality at production speeds. We recognized our initial revenues from sales of the SQ3000 in the second quarter of 2015, and since the start of the fourth quarter of 2015 have received follow-on orders totaling approximately $4.7 million for the SQ3000 from a key customer. Our recent success and the competitive advantages offered by our MRS technology causes us to be very optimistic about the future sales potential of the SQ3000.

QX600 and QX150i. Our next generation 2D QX600 and QX150i AOI systems feature our SIM sensor technology and advanced Ai^2 software which, we believe, offer an industry leading level of low false call performance. We have invested in significant software enhancements for all of our AOI products that improve set-up and programming time and ease of use for the customer. Our QX600 is also available in versions that can accommodate dual production lanes and larger circuit board sizes.

QX500 and QX100i. We market our 2D QX500 and QX100i AOI systems for production lines requiring faster inspection speeds. These products also feature our SIM sensor technology and advanced Ai^2 software. The QX500 and QX100i do not offer the resolution capability of the QX600 or QX150i, but instead were designed to provide the fastest AOI inspection times currently available in the market and also an industry leading level of low false call performance. The QX500 can also accommodate dual production lanes and larger circuit board sizes.

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MX600. Our newly-developed MX600 system is based on our 2D SIM module and Ai^2 software technology and is used for post-singulation inspection of memory modules. To date, we have received orders worth approximately $3.9 million from one of the world's top four memory manufacturers for our newly-developed MX600 system that will inspect memory modules at the end of the production line after singulation. We recognized our first revenue from the sale of the MX600 system in the third quarter of 2015, and we had a backlog of MX600 orders at December 31, 2015 totaling approximately $3.4 million.

Revenues from shipments of our AOI products accounted for 20% of our revenue in 2015 and 19% of our revenue in 2014.

3D Scanning Solutions and Services

LDI provides 3D scanning systems and services to the global general purpose metrology market. Global demand for 3D scanning, which digitally captures the shape of an object, is growing as this technology is deployed increasingly in markets ranging from automotive and aerospace to medical and consumer electronics.

LDI's high end 3D scanners are sold either as kits or as complete systems that integrate LDI's proprietary Surveyor series software with coordinate measuring machines or articulated robotic arms manufactured by other companies. LDI also sells other types of 3D scanning equipment manufactured by other suppliers. Using its 3D scanners, LDI also provides services that scan, model and inspect objects of all sizes and complexity for customers who do not have their own 3D scanning equipment, or the in-house capability to scan complex parts. Revenue from sales of LDI's 3D scanning solutions and services accounted for 17% of our revenue in 2015 and 11% of our revenue in 2014.

One of the principal reasons for our acquisition of LDI was a high-speed 3D scanning system that it had developed. We are further enhancing this scanning system by integrating it with our new MRS technology. Beta testing for this new MRS equipped scanning system, CyberGage360, commenced in the first quarter of 2016. We believe customer interest in this product is high, and we presently anticipate initial CyberGage360 sales in 2016. We believe the unique performance characteristics of MRS which inhibit reflections and enable very accurate measurements at fast speeds, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning systems.

Semiconductor Products

Our principal semiconductor products, the WaferSense® and ReticleSense™ family of products, are a series of wireless sensors that provide measurements of critical factors in the semiconductor fabrication process. We sell our semiconductor products to both OEM and end-user customers through a network of independent sales representatives. Sales of our semiconductor products constituted 19% of our revenue in 2015 and 16% of our revenue in 2014.

WaferSense/ReticleSense Sensors. We designed our WaferSense/ReticleSense family of sensors to go where wafers go in semiconductor fabrication and provide measurements of critical factors that are currently impossible or extremely difficult to obtain without powering down the fabrication process equipment. Because the user is not required to break down semiconductor fabrication equipment when using our WaferSense/ReticleSense products, significant time is saved and accuracy is increased compared to the manual techniques currently used by many customers when checking the process parameters measured by our WaferSense/ReticleSense products. As a result of WaferSense/ReticleSense technology, up-time, through-put and process yield for semiconductor fabrication equipment is improved.

We introduced our first WaferSense product, the automatic leveling sensor (ALS), in late 2004 and have since continued to add new products to the WaferSense family. The ALS is a wireless, vacuum-compatible sensor that can be placed in cassettes, FOUPS, on end effectors, aligners, in load locks and process chambers used in semiconductor fabrication to ensure that all stations are level and coplanar. The automatic gapping sensor (AGS) is a gapping tool that measures the gap in three places between the shower head and pedestal in semiconductor process equipment. The automatic teaching sensor (ATS) measures X-Y-Z offset from robotic transfers of wafers to the pedestal in semiconductor process equipment. The amount of gap and offset after robotic transfer of wafers to the shower pedestal can affect film thickness and uniformity when material is deposited on semiconductor wafers, impacting quality and product yields. The automatic vibration sensor (AVS) measures X-Y-Z acceleration for shock and vibration, which can generate wafer particles, scratches or wafer breakage, thereby reducing yield. The automatic particle sensor (APS), allows engineers to efficiently detect and classify particles and their exact sources in a process as wafers are

transferred, slit valves are actuated and chambers are cycled, pumped down and purged. APS is designed to be compatible with front-ends, coater/developer tracks, and deposition and etch equipment.

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In 2014, we expanded our particle sensing technology by launching a particle sensor in a reticle shaped form factor. The wireless, real-time capability of ReticleSense allows users to quickly identify geographic particle sources in reticle environments. In early 2015, we launched a ReticleSense Airborne Particle Sensor with a quartz housing (APSRQ) for use in semiconductor tools that handle quartz reticles. Designed and developed specifically for use with scanners in the semiconductor fabs, the ReticleSense APSRQ has all of the necessary alignment marks and bar codes for compatibility with ASML, Nikon and Canon scanners. The APSRQ can be loaded directly into a scanner and can travel the entire reticle path to detect in real-time when and where particles occur. By extending the line to include a quartz airborne particle sensor, we are helping our customers exceed manufacturing quality and productivity standards in the Photo Lithography scanner environment.

We also have recently announced new offerings for advanced particle measurement and new WaferSense/ReticleSense Auto Multi Sensors (AMS/AMSR) that measure leveling, vibration and humidity in an all-in-one wireless real-time device. We intend to continue to enhance and expand the WaferSense/ReticleSense product lines in the future.

Markets and Customers

We sell the majority of our products into the SMT electronics assembly and memory manufacturing markets (60% of total revenue in 2015). The value of automation is high in these markets because the products produced have high unit costs and are manufactured at speeds too high for effective human intervention. Moreover, the trend toward smaller electronic devices with higher circuit densities, smaller circuit paths and extremely small components requires manufacturing and testing equipment capable of extremely accurate alignment and multidimensional measurement, which can be achieved using non-contact optical sensors. Trends in these markets include further efforts to reduce the cost of the manufacturing process, and to limit human intervention through automation.

Our SMT electronic assembly alignment sensors are sold to OEMs serving the SMT circuit board assembly market. The vast majority of our 3D and 2D optical sensors are used in our own SPI and AOI system products that we sell to circuit board assembly manufacturers serving the electronics assembly market or to OEMs which manufacture their own circuit boards. Our AOI and SPI system sales occur in all global geographies. Our sales of inspection systems are more heavily concentrated in Asia where a significant portion of the worldwide production capacity for circuit board assembly occurs, and Europe where we have a strong sales channel. We manufacture all of our sensor products in our Minneapolis, Minnesota headquarters facility. All final assembly and integration for our inspection system products takes place in our Singapore facility.

We sell our SMT sensor and inspection system products worldwide to many of the leading manufacturers of electronic circuit board assembly equipment, manufacturers of semiconductor DRAM and SSD memory and end-user electronic assembly manufacturers, including original design manufacturers (ODMs), EMS providers and outsourced semiconductor assembly and test (OSAT) companies, which manufacture cell phones, smart phones, notebook computers, server boards, and other electronic devices. We have sales and service offices in China and Singapore to serve the market for manufacturing production equipment in Asia. Our sales and service office in the United Kingdom serves the European market, and we have sales and service team members based in the United States to serve the Americas market. We have partnered with Viscom, a German distributor with significant sales to the automotive industry, to better penetrate the European market with our SPI sensors. We intend to expand our global sales and marketing efforts across all geographies.

In January 2015, we qualified as a supplier to KLA-Tencor and entered into a mutually exclusive agreement to supply 3D sensor subsystems for KLA-Tencor's back-end semiconductor package inspection systems. We believe that our MRS technology is a breakthrough 3D inspection technology that can be deployed in a wide range of markets, including the semiconductor market served by KLA-Tencor, and that selling sensor subsystems to leading manufacturers such as KLA-Tencor will allow us to reach these markets more effectively. We also have entered into an agreement to supply Nordson with high-precision 3D MRS sensor subsystems for the SMT market and have sold initial units for testing and demonstration purposes. The sensor subsystems are based on our new MRS technology. We believe our arrangement with Nordson will allow us to better penetrate the SMT market with our 3D MRS sensor offerings.

Our semiconductor products, primarily consisting of the WaferSense and ReticleSense family of products, accounted for 19% of our revenue in 2015. This market has many of the same characteristics as the SMT electronics assembly market and requires non-contact optical measurement tools that enable the production of more complex, higher density and smaller semiconductor devices. Our WaferSense/ReticleSense family of precision measurement tools for process optimization in semiconductor processing equipment is sold directly to semiconductor fabrication facilities or through semiconductor capital equipment manufacturers to semiconductor fabrication facilities. Our semiconductor products are used by process and equipment engineers during the production of semiconductor wafers. The world's largest semiconductor manufacturers purchase our products.

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We sell our high end 3D scanning solutions and services directly in the United States and through a small channel of Asian based resellers. We intend to use the global distribution channel for our SMT inspection system products to sell the CyberGage360 3D scanning product that we plan to introduce in 2016. We support our sales efforts for 3D scanning products and services by utilizing an internet based search engine marketing program to generate leads from prospects who have expressed interest in obtaining these types of products and services.

Export sales represent a large percentage of our total sales because a large portion of the global capacity for electronics assembly and semiconductor production occurs outside the United States. In addition, a significant portion of our export sales include SMT electronic assembly alignment sensors and 3D MRS sensors sold to OEM customers located in Europe and Asia.

The following table sets forth the percentage of total sales revenue represented by total export sales (sales for delivery to countries other than the United States, including sales delivered through distributors) by location during the past two years:

	December 31,			
	2015		2014	
Asia	39	%	44	%
Europe	29	%	25	%
Other export sales (1)	4	%	4	%

(1) Includes export sales in the Americas, primarily Canada, Mexico and Latin America.

See Note 14 to our consolidated financial statements contained in Item 8 of this Annual Report on Form 10-K. Most of our international export sales are negotiated, invoiced and paid in U.S. dollars. We manufacture our SMT system products in Singapore and a portion of our raw material purchases are denominated in Singapore dollars. We also have R&D and sales personnel located in Singapore and sales offices located in other parts of the world. Although currency fluctuations do not significantly affect our revenue, they can impact our costs and influence the price competitiveness of our products and the willingness of existing and potential customers to purchase the products.

Sales and Marketing

Our SMT alignment and 3D high precision MRS sensors for back-end semiconductor packaging and the SMT inspection systems market are sold to large OEM customers by a direct sales staff located in Minnesota. Our stand-alone SMT inspection system products for end-user customers are primarily sold through independent representatives and distributors managed by direct sales personnel located in Singapore, as well as in the United Kingdom, the U.S. and China. We have agreements with 40 independent representatives and distributors which focus on sales and service of our stand-alone system products to end-user customers. These agreements cover North and South America (12), Europe (16) and China and the rest of Asia (12).

We have established a separate worldwide sales representative organization for our WaferSense and ReticleSense semiconductor products. We currently have agreements in place or in process with sales representatives in the U.S. (3), Europe (3) and the Pacific Rim (6). In some cases we sell our WaferSense and ReticleSense products directly to large OEM customers. Our independent sales representatives and sales to OEM customers are managed by direct sales personnel located in the U.S. and Asia.

We sell 3D scanning solutions and services through a direct sales staff located in Minnesota, and three resellers located in Asia. We intend to sell our CyberGage360 product by using the same independent sales representatives and distributors which sell our SPI and AOI system products.

We market our products through appearances at industry trade shows, advertising in industry journals, articles published in industry and technical journals and on the Internet. In addition, we have strategic relationships with certain key customers that serve as highly visible references.

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Backlog

Product backlog was $15.0 million at December 31, 2015, compared to $5.9 million at December 31, 2014. Our products are typically shipped two weeks to two months after the receipt of an order. Sales of some SMT inspection system products may require customer acceptance due to performance or other acceptance criteria included in the terms of sale. For these SMT product sales, revenue is recognized at the time of customer acceptance. Although our business is generally not of a highly seasonal nature, sales may vary based on the capital procurement practices in the SMT electronics assembly, general industrial manufacturing and semiconductor fabrication industries. For example, production capacity expansion in the SMT electronics assembly industry for anticipated holiday or back to school demands can result in higher levels of sales in our second and third quarters. However, we are not able to quantify with any level of precision, the impact of these events on our sales in any given quarterly period, and any seasonal cyclicality is often masked by more dramatic changes in demand caused by the normal volatility in electronics markets that is associated with changes in the economy. Our scheduled backlog at any time may vary significantly based on the timing of orders from OEM customers. Accordingly, backlog may not be an accurate indicator of performance in the future.

Research and Development

We differentiate our products primarily on the basis of customer benefits afforded by the use of innovative and proprietary technology and on our ability to combine several different technical disciplines to address industry and customer needs. In addition, we actively seek ongoing strategic customer relationships with leading product innovators in both our existing and new markets. We actively investigate the needs of, and seek input from, these customers to ensure adoption of current technologies and to identify opportunities to improve manufacturing processes.

We commit substantial resources to the development of important next-generation technologies that, we believe, will position us to be a global technology leader in high precision 3D sensors and capture additional market share in our key vertical markets of SMT, semiconductor and 3D scanning solutions and services. We maintain our commitment to research and development and product development even during periods when demand in our markets is weak. During the past two years, research and development efforts have been focused on a number of activities that are critical to our future growth and success, including the following:

- Development of our new MRS technology, a high speed metrology grade 3D measurement capability using commercially available components and proprietary algorithms that we believe will solve many of the reflecting issues impacting all triangulation sensor technologies.
- Development of our first 3D AOI system, the SQ3000. This system is designed to expand our presence in markets requiring high precision measurement and inspection. Identifying defects on circuit boards has become highly challenging and critical due to smaller electronics packaging and increasing component density, combined with smaller and more complex solder joints. We believe the combination of our MRS technology and sophisticated 3D fusing algorithms offers microscopic image quality at production speeds. We recognized our initial revenues from sales of the SQ3000 in the second quarter of 2015, and since the start of the fourth quarter of 2015 have received follow-on orders totaling approximately $4.7 million for the SQ3000 from a key customer. Our recent success and the competitive advantages offered by our MRS technology causes us to be very optimistic about the future sales potential of the SQ3000.
- Development of our first system for post-singulation inspection of memory modules, the MX600. This system is based on our 2D SIM sensor technology and Ai^2 image recognition software. The inspection requirements for this system are similar to AOI requirements for circuit board production. We recognized our first revenue from the sale of the MX600 system in the third quarter of 2015, and we had a backlog of MX600 orders at December 31, 2015 totaling approximately $3.4 million from one of the world's top four memory manufacturers. We believe the MX600 system offers superior speed, inspection performance and a low level of false calls.
- Development of a new 3D scanning system, CyberGage360, which incorporates our new MRS technology. We believe this system will be used to inspect and measure a wide range of components and manufactured parts in the general industrial market. Beta testing for CyberGage360 commenced in the first quarter of 2016. We believe

customer interest in this product is high, and we presently anticipate initial CyberGage360 sales in 2016. We believe the unique performance characteristics of MRS that inhibit reflections and enable very accurate measurements at fast speeds, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning systems.

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- Continued development of our WaferSense/ReticleSense line of products by introducing a particle sensor in a reticle shaped form factor (ReticleSense™) and a ReticleSense Airborne Particle Sensor with a quartz housing (APSRQ) for use in semiconductor tools that handle quartz reticles. We also have announced new offerings for advanced particle measurement and new WaferSense/ReticleSense AMS and AMSR that measure leveling, vibration and humidity in an all-in-one wireless real-time device.

Research and development expenses were $7.6 million in 2015 and $8.8 million in 2014. These amounts represent 18% of revenue in 2015 and 19% in 2014, and include LDI research and development expenses since the date of acquisition. Research and development expenses consist primarily of salaries, project materials, contract labor and other costs associated with ongoing product development and enhancement efforts. Research and development resource utilization is centrally managed based on market opportunities and the status of individual projects.

Manufacturing

All of our 3D and 2D optical sensors, SMT alignment sensors and WaferSense/ReticleSense semiconductor sensor products are assembled at our Minneapolis, Minnesota headquarters facility. Our SMT inspection system products are assembled in Singapore. Much of our product manufacturing, which is primarily circuit board manufacturing, lens manufacturing and metal parts production, is contracted with outside suppliers. Our production personnel inspect incoming parts, perform final assembly, calibrate and perform final quality control testing of finished products. Our products are not well suited for the large production runs that would justify the capital investment necessary for complete internal manufacturing.

A variety of components used in our products are available only from single sources and involve relatively long order cycles, in some cases over one year. We believe we have identified alternative assembly contractors for most of our sub-assemblies. Use of those alternative contractors could require substantial rework of the product designs, resulting in periods during which we could not satisfy customer orders. An actual change in such contractors would likely require a period of training and testing. Accordingly, an interruption in a supply relationship or the production capacity of one or more of such contractors could result in the inability to deliver one or more products for a period of several months. To help prevent delays in the shipment of our products, we maintain in inventory, or on scheduled delivery from suppliers, components that we believe will be sufficient to meet forecast demand (our forecast extends a minimum of 6 months).

Competition

We face competition from a number of companies in the machine vision, image processing and inspection systems market, some of which are larger and have greater financial resources.

Our 3D and 2D optical sensors and SMT electronic assembly alignment sensors primarily compete with the sensors and vision systems developed by OEMs using their own design staff for incorporation into their products. We believe our high precision 3D sensors based on our MRS technology are unique in the marketplace based on the ability to offer microscopic quality images at fast production line speeds. Our 2D SIM sensors and SMT electronic assembly alignment sensor products also compete with vision (camera and software based) systems and component libraries available from Cognex Corporation and others. Although advances in vision systems have reduced some of the advantages of our SMT electronic assembly alignment sensor products in some configurations, we continue to believe that our sensors compete favorably based on our ability to custom design products with stringent physical form requirements, speed, flexibility, low cost and ease of use.

The primary competition for sales of our SPI and AOI systems has been from Korean based companies, including Koh Young Technology, MirTec Ltd., and Parmi (SPI). We also compete with Taiwanese based Test Research, Inc. and German based Viscom, among others. Sales of AOI systems account for roughly two-thirds of the approximate $500 million total SPI/AOI inspection systems market, with 3D AOI representing the fastest growing segment of this market. We believe our 2D SIM and 3D MRS sensor technology and the Ai^2 software used in our QX and SQ family of products is differentiated from the competition and that these products compete effectively in the AOI market based on cost, ease of use at rapid production line speeds and the low rate of false calls. We believe that our new SQ3000 3D AOI offering, enabled by our proprietary MRS technology and 3D fusing algorithms, is differentiated and will allow us to gain market share based on our ability to offer microscopic quality images at production line speeds.

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The approximate $1.0 billion plus market for 3D scanning solutions and services is highly fragmented. The primary competition for our 3D scanning solutions include CMM based products from Zeiss and others, articulated robotic arm products from Faro and assorted other 3D measurement technologies offering varying combinations of speed and accuracy. The market for 3D scanning services is dominated by small regional market participants. We believe the unique performance characteristics of MRS that inhibit reflections, particularly critical for shiny objects, and enable extremely accurate measurements at high speeds, will give CyberGage360 a competitive advantage in the portion of the market that prioritizes these performance characteristics.

We believe our WaferSense and ReticleSense products are unique to the marketplace and primarily face competition from the manual techniques currently used by most customers to monitor their semiconductor fabrication equipment. Because the user is not required to break down semiconductor fabrication equipment, or pressurize a vacuum chamber, we believe that our WaferSense/ReticleSense products save significant time and increase measurement accuracy over the manual techniques currently used by customers and that these products improve tool up-time, through-put and process yield.

We believe our current and planned products offer advantages in terms of price and suitability for specific applications. Although we have attempted to protect the proprietary nature of such products, it is possible that any of our products could be duplicated by other companies in the same general markets in which we participate.

Employees

As of December 31, 2015, we had 154 full-time employees worldwide, including 36 in sales, marketing and customer support, 55 in manufacturing, purchasing and production operations, 48 in engineering, research and development, and 15 in finance, administration and information services. Of these employees, 86 are located at our corporate headquarters in Minneapolis, Minnesota, 22 are located at LDI’s facility in Bloomington, Minnesota and 46 are located in other offices (5 in the United Kingdom, 1 in Oregon, 1 in California, 31 in Singapore, 4 in China, 2 in Taiwan, 1 in Japan and 1 in Korea). To date, we have been successful in attracting and retaining qualified technical personnel, although there can be no assurance that this success will continue. None of our employees are covered by collective bargaining agreements or are members of a union.

Proprietary Protection

We rely on the technical expertise and know-how of our personnel and trade secret protection, as well as on patents, to maintain our competitive position. We attempt to protect intellectual property by restricting access to proprietary methods by a combination of technical and internal security measures. In addition, we make use of non-disclosure agreements with customers, consultants, suppliers and employees. Nevertheless, there can be no assurance that any of the above measures will be adequate to protect our proprietary technology.

We hold 57 patents (34 U.S. and 23 foreign) on a number of technologies, including those used in our 3D optical sensors, MRS technology, LaserAlign products, SIM sensor technology, inspection systems, WaferSense/ReticleSense products, CyberGage360 3D scanning system and other products. Some of the patents relate to equipment such as pick-and-place machines into which our products are integrated. In addition, we have 16 pending patents (6 U.S. and 10 foreign). We protect the proprietary nature of our software primarily through copyright and license agreements, but also through close integration with our hardware offerings. We utilize 18 registered trademarks (11 U.S. and 7 foreign) and have 8 trademark registrations pending (1 U.S. and 7 foreign). We also have 14 domain names and several common law trademarks. It is our policy to protect the proprietary nature of our new product developments whenever they are likely to become significant sources of revenue. No guarantee can be given that we will be able to obtain patent or other protection for other products.

As the number of our products increases and the functionality of those products expands, we may become increasingly subject to attempts to duplicate our proprietary technology and to infringement claims. In addition, although we do not believe that any of our products infringe the rights of others, there can be no assurance that third parties will not assert infringement claims in the future or that any such assertion will not require us to enter into a royalty arrangement or result in litigation.

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Government Regulation

Many of our products contain lasers. Products containing lasers are classified as either Class I, Class II or Class IIIb Laser Products under applicable rules and regulations of the Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration. Such regulations generally require a self-certification procedure pursuant to which a manufacturer must file with the CDRH with respect to each product incorporating a laser device, periodic reporting of sales and purchases and compliance with product labeling standards. Our lasers are generally not harmful to human tissue, but could result in injury if directed into the eyes of an individual or otherwise misused. We are not aware of any incident involving injury or a claim of injury from our laser devices and believe that our sensors and sensor systems comply with all applicable laws for the manufacture of laser devices.

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ITEM 1A. RISK FACTORS

Our operations are subject to a number of risks and uncertainties that may affect our financial results, and the accuracy of the forward looking statements we make in this Annual Report on Form 10-K. We make statements regarding anticipated product introductions and performance, changes in markets, customers and customer order rates, expenditures in research and development, growth in revenue and improvement in profits, taxation levels, the effects of pricing, and competition, all of which represent our expectations and beliefs about future events. Our actual results may vary from these expectations because of a number of factors that affect our business, the most important of which include the following:

- We have recently introduced or are in the process of introducing a number of products based upon our new 3D MRS technology and the failure of this technology to perform up to our expectations would materially adversely affect our anticipated operating results. We believe our MRS technology is unique in the marketplace based upon its ability to inhibit reflections and offer microscopic quality images at production line speeds, and we have high expectations about the prospect for longer-term sales of products based on this technology. We have incorporated the MRS technology into several of the products that we have recently introduced or are about to launch, including our new 3D AOI offering, the SQ3000, the CyberGage360 product we intend to introduce in the 3D scanning market in 2016, and new products for OEM customers, including KLA-Tencor and Nordson. We also expect to use this technology in other next generation inspection products and in products for new applications. If the performance of the MRS technology does not meet our expectations, if the products we have introduced or are about to introduce based upon the MRS technology do not operate up to specifications, if the market otherwise does not find this technology attractive, or if we are unable to efficiently identify new customers and new applications for this technology given our current sales channels, our operating results for 2016, and our expectations for longer term growth in revenue, would be materially adversely affected.

Our business has been and will continue to be significantly impacted by the global economy and uncertainty in the outlook for the global economy makes it more likely that our actual results will differ materially from expectations. In 2009, the world economy experienced the worst economic recession since the great depression of the 1930's. The severe economic conditions were brought about by extreme disruptions in global credit and financial markets including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, and uncertainty about economic stability. These economic uncertainties affect businesses such as ours in a number of ways, making it difficult to accurately forecast and plan our future business activities. Further political instability or uncertainty could cause new tightening of credit in financial

- markets, may lead consumers and businesses to postpone spending, and may cause our customers to cancel, decrease or delay their existing and future orders with us. In addition, financial difficulties experienced by our suppliers or distributors could result in product delays, increased accounts receivable defaults and inventory challenges. The OEMs and semiconductor manufacturers that purchase our sensors and the circuit board manufacturers and others that purchase our SMT inspection system products are largely dependent on continued demand for consumer and commercial electronics, including smart phones, tablets and computers. Demand for electronics is a function of the health of the economies in the United States and around the world. Sales of our 3D scanning solutions and services are also dependent upon the health of the global economy. Our results would be adversely affected in the future, if these economies were to experience recessions.

- World events beyond our control may affect our operations. Our operations and markets could be negatively affected by world events that effect economies and commerce in the specific countries, such as China, Singapore and Japan, in which we do business. Natural disasters, such as the tsunami and earthquake that hit Japan and the floods that hit Thailand in 2011, have affected travel patterns and accessibility in these countries in the past and other natural occurrences, such as a bird flu outbreak, could affect the business we do in these countries in the future. Terrorist activity or other armed conflicts that could occur in countries in which we do business, labor disputes that impact complex international shipping arrangements, or other unanticipated actions by local populations could affect our ability to do business in specific geographies. Many of the countries in which we do business can be affected by

economic forces that are different from the forces that affect the United States and change the amount of business we conduct.

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Our operating results have varied, and will likely continue to vary significantly, from quarter to quarter, causing volatility in our stock price. Our quarterly operating results have varied in the past and will likely continue to vary significantly from quarter to quarter, causing volatility in our stock price. Some of the factors that may influence our operating results and subject our stock to price and volume fluctuations include the following: changes in customer demand for our sensors, inspection systems and 3D scanning solutions, which is influenced by economic conditions in these industries and the overall health of the global economy; demand for products that use circuit boards and semiconductors; market acceptance of our products and those developed by our customers; competition; seasonal variations in customer demand; the timing, cancellation or delay of customer orders, shipments and acceptances; and product development costs, including increased research, development, engineering and marketing expenses associated with our introduction of new products and product enhancements.

- The markets for capital equipment in the electronics assembly and semiconductor industries in which we operate are cyclical and we cannot predict with precision when market downturns will occur. We operate in cyclical markets–the electronics assembly and semiconductor capital equipment markets–that periodically adjusts independent of global economic conditions. We have been unable to predict with accuracy the timing or magnitude of periodic downturns in this market. These downturns, particularly the severe downturns in electronics production markets from 2001 through 2003, and from 2008 through 2009, severely affected our operations and generated several years of unprofitable operations. Ultimately, we have difficulty determining the duration or severity of any market downturns, the strength of any subsequent recoveries, and the long-term impact that the market may have on our business.

- Our operating results and financial position could be negatively affected by acquisitions, including our acquisition of LDI. In March 2014, we acquired substantially all of the assets of LDI, a 3D metrology company located in Minneapolis, Minnesota, for aggregate consideration of $3.1 million cash, plus the assumption of certain current liabilities. If the LDI business does not perform as anticipated, we may be forced to incur additional expense to enhance its development, sales or marketing capabilities, negatively impacting our earnings and financial position. In addition, we may be unable to successfully integrate other businesses that we choose to acquire in the future in a cost-effective and non-disruptive manner. Business acquisitions present a number of risks, including:
  - diversion of management's attention from daily operational matters, current products and customers;
  - lack of synergy, or the inability to realize expected synergies;
  - failure to commercialize or meet the expected performance of the new technology or business;
  - failure to retain key employees and customer or supplier relationships;
  - lower-than-expected market opportunities or market acceptance of any new products; and
  - unexpected reduction of sales of existing products by new products.

  Our failure to realize the intended benefits of one or more acquisitions could have a material adverse effect on our business, liquidity, financial position and/or results of operations, including our assumption of unforeseen contingent liabilities.

- Sales of SMT electronic assembly alignment sensors to two OEM customers constituted 21% of our revenue in 2015, and the loss of either of these customers would have a materially adverse impact on our results of operations. Although we anticipate that our future revenue and operations will be less dependent on these two customers, given recent success with new products based on our high precision 3D MRS sensor technology, and anticipated future revenue potential of our new CyberGage360 3D scanning system, if the order rates from these customers are negatively impacted by global economic events beyond their control or competitive factors, if they choose sensors manufactured by other suppliers, or otherwise terminate their relationships with us, our results of operations would be adversely affected.

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- We generate approximately three quarters of our revenue from export sales that are subject to risks of international operations. Our export sales are subject to many of the risks of international operations, including:
  - currency controls and fluctuations in currency exchange rates;
  - changes in local market business requirements and increased cost and development time required to modify and translate our products for local markets;
  - inability to recruit qualified personnel in a specific country or region;
  - difficulty in establishing and maintaining relationships with local vendors;
  - differing foreign technical standards;
  - differing regulatory requirements;
  - export restrictions and controls, tariffs and other trade barriers;
  - reduced protection for intellectual property rights;
  - changes in political and economic conditions;
  - potentially adverse tax assessments; and
  - terrorism, disease, or other events that may affect local economies and access.

  Our development and assembly operations in Singapore, and our sales operations in Asia, are subject to unique risks because of the remote nature of the operations. Our Singapore development and manufacturing operations, and our Asian sales operations, present a number of risks related to the retention of personnel, management of product development and operations, management and access to customer and distributor interactions, control over administrative and business processes, regulatory and legal issues we may encounter and other matters relating to foreign operations. We cannot be certain that we will be able to retain software development and management personnel in Singapore, and sales personnel in other territories, who are reliable and who will accept employment terms that are attractive. Although most components for our system products are more readily available in Singapore, some of the hardware components used in our system products necessary for manufacture in Singapore may be difficult to import at satisfactory prices. Our financial performance, ability to serve our customers and ability to manufacture and sell products could be negatively impacted if we are unable to retain our Asian based employees, if it costs more than expected to retain these employees or hire other experienced employees in a timely manner, if we are unable to manage these employees appropriately, or if we are unable to locate suitable sources of supply for our products manufactured in Asia.
- We price our products in U.S. dollars, and as a result, our products may have difficulty competing in periods of increasing strength of the dollar. Most of our international export sales are negotiated, invoiced and paid in U.S. dollars, and accordingly, currency fluctuations do not affect our revenue per unit. However, significant fluctuations in the value of the U.S. dollar relative to other currencies could have an impact on the price competitiveness of our products relative to foreign competitors, which could impact the willingness of customers to purchase our products and have an impact on our results of operations.
- Because of our significant operations in Singapore, our costs are negatively impacted when the U.S. dollar weakens relative to the Singapore dollar. A significant portion of our cost of revenues, research and development and sales and marketing costs are denominated in the Singapore dollar. In addition, other sales and marketing costs are denominated in British Pounds Sterling and the Chinese Yuan, resulting from our sales offices located in the UK and China. Our costs will increase, and our results will be negatively impacted in future periods, if the U.S. dollar weakens relative to the currencies of these countries. The ultimate impact of any fluctuation in the relationship between the U.S. dollar and the currencies of other geographies where we have operations, is dependent on the level of cash flows denominated in these currencies in future periods.
- Our products could become obsolete. Our current products, as well as the products we have under development, are designed to operate with the technology that we believe currently exists or may exist for electronic components, printed circuit boards, memory modules and semiconductor manufacturing markets, and other adjacent markets, including general purpose metrology. The products we develop to meet customer needs and requirements are subject to rapid technological change, and because it takes considerable time to develop new products, we must anticipate

industry trends, as well as technological developments, in order to effectively compete. Further, because we do not have unlimited development resources, we might choose to forgo the pursuit of what becomes a leading technology or market and devote our resources to technologies and markets that are less successful. If we incorrectly anticipate technology developments or market trends, or have inadequate resources to develop our products to deal with changes in technology and markets, our products could become obsolete.

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Advances in the SMT electronics assembly alignment sensor market have eliminated some of the advantages of our sensors. Our SMT electronic assembly alignment sensor products compete with products made by larger machine vision companies and other optical sensor companies, and with solutions internally developed by our customers.

- Advances in machine vision technology in recent years have eliminated some, but not all, of the advantages that have differentiated our products from some of these competitors, and advances in other technologies could eliminate other advantages.

The market for surface mount capital equipment has become more mature and price competitive, negatively impacting our margins. The electronics capital equipment market for surface mount technologies is becoming more mature, resulting in increased price pressure on suppliers of equipment. Consequently, our SMT electronic assembly

- inspection systems and alignment sensor products have become subject to increased levels of price competition and competition from other suppliers and technologies, including suppliers in Asia who have specifically designed their products to compete favorably against our products.

Because of the high cost of changing equipment, customers in our markets are sometimes resistant to purchasing our products even if they are superior. We believe that, because of the high cost of installation and integration of new inspection equipment into production lines, once an SMT customer has selected a vendor's capital equipment, the

- customer generally relies upon that capital equipment and, to the extent possible, subsequent generations of the same vendor's equipment. Accordingly, unless our systems offer performance or cost advantages that outweigh the expense of installing and integrating new systems, it may be difficult for us to achieve significant sales to a customer that currently uses a competitor's equipment.

- Our ability to compete in the market for SMT inspection systems is dependent upon the sales skills of our channel of independent sales representatives, value added resellers and distributors. Our ability to successfully compete in the market for SMT inspection systems is dependent upon the ability of our channel partners to sell our products. To the extent our competitors have relationships with stronger channel partners, it may be difficult for us to achieve significant sales, even if our products are technologically superior.

Competitors in Asia may be able to compete favorably with us based on lower production and employee costs, and in some cases, governmental support. We compete with large multinational companies when selling our inspection system products, many of which are able to take advantage of greater financial resources and larger sales distribution networks. We also compete with new Asian based suppliers, many of which may have lower overall production and

- employee costs and are willing to offer their products at lower selling prices to customers. Further, we believe some competitors receive government sponsored research and manufacturing assistance that can cause their relative cost of development of new products to be lower. These competitors may also be under less market pressure to forgo the short-term negative financial impact of concentrated investment in research and development.

We are exposed to credit risk through sales to our OEM customers and distributors of our stand-alone system products. We sell our products through key OEM customers, and usually have significant credit exposure with respect to these customers. In addition, we sell our stand-alone inspection system products through a network of international

- distributors. These distributors tend to be small and have limited financial resources and access to capital. Although these distributors do not hold our products in inventory for re-sale, we are exposed to credit risk and would incur losses if they are unable to pay for the products they have purchased from us.

We are dependent upon outside suppliers for components of our products, and delays in or unavailability of those components would adversely affect our results. We use outside contractors to manufacture the components used in many of our products and some of the components we order require significant lead times that could affect our ability

- to sell our products if the components are not available. In addition, if these components do not meet stringent quality requirements or become obsolete, there could be delays in the availability of our products, and we could be required to make significant investments in designing replacement components.

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Future sales of MX600 will require a significant upfront investment in working capital. The materials handling component of our MX600 system for post-singulation memory inspection, which constitutes the vast majority of the content and cost of the system, is manufactured by a third-party contractor. We are required to make significant upfront inventory investments with that contractor to facilitate future sales of the MX600 system, and we cannot be assured that, if significant orders of the system were received, the contractor would be able to satisfy our production needs. If for some reason our supplier for the MX600 system should fail to appropriately complete its work in a timely manner, or if our end customer should ultimately fail to accept and pay for these systems, we could incur losses.

- We may fail to adequately protect our intellectual property and, therefore, lose our competitive advantage. Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology for our principal product families, and we rely, in part, on patent and trade secret law and confidentiality agreements to protect that technology. If we fail to adequately protect our intellectual property, our competitors may be able to duplicate and enhance the products we have developed. We own or have licensed a number of patents, and have filed applications for additional patents. Any of our pending patent applications may be rejected, and we may be unable to develop additional proprietary technology that is patentable in the future. In addition, the patents that we do own or that have been issued or licensed to us may not provide us with competitive advantages and may be challenged by third parties. Further, third parties may also design around these patents. In addition to patent protection, we rely upon trade secret protection for our confidential and proprietary information and technology. We routinely enter into confidentiality agreements with our employees and other third parties. Even though these agreements are in place, there can be no assurance that trade secrets and proprietary information will not be disclosed, that others will not independently develop technology substantially equivalent to our proprietary technology or otherwise gain access to our trade secrets, or that we can fully protect our trade secrets and proprietary information. Violations by others of our confidentiality agreements and the loss of employees who have specialized knowledge and expertise could harm our competitive position and cause our sales and operating results to decline as a result of increased competition. Costly and time-consuming litigation might be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection might adversely affect our ability to continue our research or bring products to market.

- Protection of our intellectual property rights, or the efforts of third parties to enforce their own intellectual property rights against us, may result in costly and time-consuming litigation, substantial damages, lost product sales and/or the loss of important intellectual property rights. We may be required to initiate litigation in order to enforce any patents issued to or licensed by us, or to determine the scope or validity of a third party's patent or other proprietary rights. Any litigation, regardless of outcome, could be expensive and time consuming, and could subject us to significant liabilities or require us to re-engineer our products or obtain expensive licenses from third parties. There can be no assurance that any patents issued to or licensed by us will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide us with a competitive advantage. In addition, our commercial success depends in part on our ability to avoid infringing or misappropriating patents or other proprietary rights owned by third parties. From time to time, we may receive communications from third parties asserting that our products infringe, or may infringe, the proprietary rights of these third parties. These claims of infringement may lead to protracted and costly litigation, which could require us to pay substantial damages or have the sale of our products stopped by an injunction. Infringement claims could also cause product delays or require us to redesign our products and these delays could result in the loss of substantial revenues. We may also be required to obtain a license from the third party or cease activities utilizing the third party's proprietary rights. We may not be able to enter into such a license or such a license may not be available on commercially reasonable terms. Accordingly, the loss of important intellectual property rights could hinder our ability to sell our products, or make the sale of these products more expensive.

- Our efforts to protect our intellectual property may be less effective in certain foreign countries, where intellectual property rights are not as well protected as in the United States. The laws of some foreign countries do not protect our proprietary rights to as great an extent as do the laws of the U.S., and many U.S. companies have encountered substantial problems in protecting their proprietary rights against infringement abroad. Consequently, there is a risk

that we may be unable to adequately protect our proprietary rights in certain foreign countries. If this occurs, it would be easier for our competitors to develop and sell competing products in these countries.

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- Breaches of our network security could expose us to losses. We manage and store on our network systems various proprietary information and sensitive or confidential data relating to our operations. There has been an increasing incidence of unauthorized access to the computer networks of various technology companies, and we are not immune to attempted unauthorized access. Computer programmers and hackers may be able to gain unauthorized access to our network system and steal proprietary information, compromise confidential information, create system disruptions, or cause shutdowns. These parties may also be able to develop and deploy viruses, worms, and other malicious software programs that disrupt our operations and create security vulnerabilities. Attacks on our network systems could result in significant losses, compromise our competitive advantages and damage our reputation with customers.
- The absence of significant market liquidity in our common stock could impact the ability of our shareholders to purchase and sell larger blocks, the attractiveness of our stock to institutional shareholders, and the market value of our common stock. There were 6,771,668 shares of our common stock outstanding as of December 31, 2015. Although our common stock is traded in the NASDAQ Global Market, in part because of the number of shares we have outstanding and available for trading, the daily trading volume in our stock is low, averaging less than 50,000 shares per day. Shareholders wishing to purchase or sell larger blocks of stock may not be able to do so quickly, and disposal by any shareholder of a significant block of stock could adversely affect the sale price in the marketplace. Further, institutional investors often have policies against investment in stock that is illiquid, and many institutional investors may elect not to purchase or hold our stock because of the inability to dispose of it. The reduced institutional interest, as well as the lack of current research reports by securities analysts, has had and can be expected to continue to have a further adverse impact on the market price and liquidity of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

We lease a 50,724 square foot mixed office and warehouse facility built to our specifications in Golden Valley, Minnesota, which functions as our corporate headquarters and primary manufacturing facility for all of our sensor products, including those used in our SMT inspection system products. Our lease for the Golden Valley facility expires December 31, 2018, contains an escalation clause and two renewal options of three years each.

We lease a 19,805 square foot mixed office and warehouse facility in Singapore that serves as a sales, development and final assembly and integration facility for our SMT inspection system products. We recently extended the lease for our Singapore facility for a period of one year expiring on July 24, 2017. The new lease contains one three year renewal option.

We lease a 10,165 square foot mixed office and warehouse facility in Bloomington, Minnesota that serves as a sales, service, final assembly and integration facility for our 3D scanning solutions and services. Our lease for the Bloomington, Minnesota facility expires April 30, 2018.

As of December 31, 2015, we also have operating leases in the United Kingdom and China, which expire in June 2018 and September 2016, respectively. We believe that our leased facilities are adequate for our anticipated needs for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS

We are not currently subject to any material pending or threatened legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

None.

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PART II.

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

Our common stock is traded on the Nasdaq Global Market. The following table sets forth, for the fiscal periods indicated, the high and low sales prices for our common stock as reported by the Nasdaq Global Market. These prices do not reflect adjustments for retail markups, markdowns or commissions.

	2015		2014	
Quarter	High	Low	High	Low
First	$11.75	$9.01	$9.17	$6.13
Second	$11.24	$9.77	$8.45	$7.49
Third	$10.46	$4.80	$12.84	$7.97
Fourth	$8.48	$5.86	$11.30	$7.54

As of February 29, 2016, there were approximately 200 holders of record of our common stock and approximately 3,000 beneficial holders. We have never paid a dividend on our common stock. Dividends are payable at the discretion of the Board of Directors out of funds legally available. Our Board has no current intention of paying dividends.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable

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

Results of Operations for the Two Years Ended December 31, 2015:

General Overview

Our products are sold primarily into the electronics assembly, DRAM and flash memory, and semiconductor fabrication capital equipment markets. We sell products in these markets both to OEMs of production equipment and to end-user customers that assemble circuit boards and semiconductor wafers and devices. In March 2014, we completed our acquisition of LDI for aggregate consideration of approximately $3.1 million in cash plus the assumption of certain current liabilities. LDI provides 3D scanning solutions and services to the global 3D scanner and services metrology market and enabled us to enter the growing market for general purpose 3D metrology.

Our recent and planned product introductions are designed to strengthen our competitive position in our current markets and expand into adjacent markets. We believe 3D inspection represents a high-growth segment of both the electronic assembly market and the semiconductor market. For this reason we are working to strategically reposition ourselves as a leading developer and manufacturer of high-precision 3D sensors. A key element in our strategic re-positioning is the development of new high precision 3D sensors based on our proprietary MRS technology. MRS technology inhibits reflections that can result in measurement inaccuracies, which is particularly critical for inspecting shiny objects.

We believe that MRS is a break-through technology for optical inspection, with the potential to facilitate expansion of our markets in the future. In the existing markets for our SMT, semiconductor inspection and 3D scanning solutions, we are introducing new products based on MRS technology that we believe present a significant opportunity for increased revenues.

We recently entered into a mutually exclusive agreement to supply KLA-Tencor with high-precision 3D sensor subsystems for its back-end semiconductor packaging inspection systems. We also have entered into an agreement to supply Nordson Corporation (Nordson) with high-precision 3D sensor subsystems for the SMT market and have sold initial units for testing and demonstration purposes. The sensor subsystems are based on the new MRS technology that we have been developing for the past several years. We intend to expand sales of MRS technology into both the SMT market and adjacent markets that require high precision 3D optical inspection. We also plan to sell products based on our MRS technology to OEMs. Sales of high-precision 3D sensor subsystems have started to increase in recent months.

Our 3D MRS technology has also been deployed in our new 3D AOI system, the SQ3000, which is designed to expand our presence in markets requiring high precision inspection. In these markets identifying defects has become highly challenging and critical due to smaller electronics packaging and increasing component density on circuit boards. We believe the combination of our MRS technology and sophisticated 3D fusing algorithms allows us to offer microscopic quality images at production speeds. We recognized initial revenues from sales of the SQ3000 in the second quarter of 2015, and since the start of the fourth quarter of 2015 have received follow-on orders totaling approximately $4.7 million for the SQ3000 from a key customer. Our recent success and the competitive advantages offered by our MRS technology causes us to be very optimistic about the future sales potential of the SQ3000.

LDI represents another aspect of our 3D strategy. We are incorporating our MRS technology into a new 3D scanning system, CyberGage360, which we believe will serve a wide range of inspection applications in the general purpose 3D metrology market. Beta testing for CyberGage360 commenced in the first quarter of 2016. We believe customer interest in this product is high, and we presently anticipate initial CyberGage360 sales in 2016. We believe the unique performance characteristics of MRS that inhibit reflections and enable very accurate measurements at fast speeds, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning systems.

We also have committed funds to development of new products for inspecting memory modules. To date, we have received orders worth approximately $3.9 million from one of the world's top four memory manufacturers for our newly-developed MX600 system that will inspect memory modules at the end of the production line after singulation. We recognized our first revenue from the sale of the MX600 system in the third quarter of 2015, and had an order backlog for MX600 at December 31, 2015 totaling approximately $3.4 million.

We have continued to invest in our WaferSense and ReticleSense product lines and have recently announced new offerings for advanced particle measurement and new AMS and AMSR sensors that measure leveling, vibration and humidity in an all-in-one wireless real-time device.

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We ended 2015 with a $15.0 million order backlog and are forecasting strongly improved sales and profitable operations for the first quarter of 2016, reflecting growing demand and shipment schedules for SQ3000 systems and 3D MRS-enabled sensors. We also are very optimistic about our full-year 2016 prospects. We expect to receive customer acceptance and recognize revenues for our backlog of MX600 systems in the first half of 2016. The recent sizable orders for our 3D products demonstrate they are gaining traction in the marketplace, and we believe this sales momentum should continue during 2016. In addition to the positive outlook for CyberGage360, we also expect to benefit from future growth of our WaferSense/ReticleSense product lines.

Longer term, the anticipated sales growth of our MRS-enabled products and promising outlook for the WaferSense/ReticleSense product lines should increase our revenues and net income. We believe that we have the resources required to attain our growth objectives, given our available cash and marketable securities balances totaling $17.6 million at December 31, 2015.

Our ability to achieve our forecast and to implement our strategy effectively is subject to numerous uncertainties and risks, including the risks identified in Item 1A of this Annual Report on Form 10-K. We cannot assure you that our efforts will be successful.

Revenues

Our revenues decreased by 12% to $41.1 million in 2015 from $46.5 million in 2014 and increased by 40% in 2014 from $33.3 million in 2013. The following table sets forth, for the years indicated, revenues by product line (in thousands):

(In thousands)	2015	2014	2013
SMT and High Precision 3D OEM Sensors	$13,022	$15,493	$10,792
Semiconductor Sensors	7,677	7,595	7,096
SMT Inspection Systems	13,578	18,089	15,420
3D Scanning Solutions and Services	6,853	5,306	—
Total	$41,130	$46,483	$33,308

Revenue from sales of SMT and high precision 3D OEM sensors decreased by $2.5 million or 16% to $13.0 million in 2015, and increased by $4.7 million, or 44%, to $15.5 million in 2014, from $10.8 million in 2013. Revenue decreases resulted from soft demand for traditional electronic assembly sensors from OEM customers selling into the China market, where market conditions have been challenging. During 2015, we sold additional 3D MRS sensors to KLA-Tencor under our long-term supply agreement. Revenue increases in 2014 were driven by demand for LaserAlign sensors from our two largest OEM customers. Strong sales to other key customers in 2014, including sales of 3D SPI sensors to Viscom also contributed to the higher revenue levels.

Sales to KLA-Tencor are expected to increase in 2016 as our 3D MRS sensor subsystems are being incorporated into a growing portion of its back-end semiconductor packaging inspection systems. We also have entered into an agreement to supply Nordson with high-precision 3D sensor subsystems for the SMT market and have sold initial units for testing and demonstration purposes. Nordson recently launched its product incorporating our sensor and we believe this new relationship has potential for considerable 2016 revenues.

Revenue from sales of semiconductor sensors, primarily consisting of our WaferSense and ReticleSense family of products, increased by $82,000 or 1% to $7.7 million in 2015, and increased by $499,000, or 7%, to $7.6 million in 2014, from $7.1 million in 2013. Sales of semiconductor sensors in 2015 were negatively impacted by a general slowdown in the semiconductor capital equipment market. Semiconductor sensor sales were also impacted by production delays for our new Auto Multi Sensor (AMS) line, the first wireless sensors to combine leveling, vibration and humidity measurements. Sales increases in 2014 were due to increased customer awareness and account penetration at major semiconductor manufacturers and capital equipment suppliers.

We anticipate that the benefits from growing market awareness and new product introductions will lead to additional WaferSense and ReticleSense sales in future periods. We are devoting additional resources to increased marketing of our WaferSense and ReticleSense products. We anticipate that the benefits from growing market awareness and new product introductions, including recent new offerings for advanced particle measurement and new AMS and AMSR sensors that measure leveling, vibration and humidity in an all-in-one wireless real-time device, will result in

additional sales. We also are starting to generate sales of our WaferSense products to manufacturers of flat panel displays, as these customers have determined that WaferSense is able to significantly improve their manufacturing processes and yields.

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Revenue from sales of SMT inspection system products decreased by $4.5 million or 25% to $13.6 million in 2015, and increased by $2.7 million, or 17%, to $18.1 million in 2014, from $15.4 million in 2013. Revenue decreases in 2015 resulted from lower sales of older more established SPI and 2D AOI systems, offset in part by initial sales of our newly developed MX600 system, that inspects memory modules at the end of the production line, and our new 3D AOI system, the SQ3000. Revenue from sales of new 3D AOI and MX600 products in 2015 totaled approximately $3.7 million. Revenue increases from sales of SMT inspection system products in 2014 were due to sales of new SPI and 2D AOI system products featuring improved measurement performance and ease of use.

Our backlog of MX600 and SQ3000 systems products totaled approximately $4.2 million at December 31, 2015. The timing of revenue recognition for this backlog is dependent upon receipt of customer acceptance. We expect to receive customer acceptance and recognize revenues for our backlog of MX600 systems in the first half of 2016.

We believe the markets for 2D AOI and SPI systems have become highly competitive and a growing number of companies are transitioning from 2D AOI to 3D AOI to meet the increasingly demanding inspection requirements of the electronics and industrial markets. We believe sales of our new 3D MRS enabled AOI products will represent an increasing percentage of our AOI and SPI sales in the future. We believe our differentiated 3D MRS platform technology will provide us with an opportunity to capture meaningful market share in the 3D AOI market, due to the competitive advantages of our MRS technology.

LDI contributed $6.9 million to our revenue in 2015 and $5.3 million to our revenue in 2014. Revenue from sales of 3D scanning solutions and services increased significantly in 2015, when compared to 2014, due to the fact that we acquired LDI in 2014. Future revenue growth in 3D scanning solutions and services will be driven in part by our new MRS-equipped CyberGage360 scanning system. We believe the unique performance characteristics of MRS that inhibit reflections, which is particularly critical for shiny objects, and enable very accurate measurements at fast speeds, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning technology. We started beta testing for CyberGage360 in the first quarter of 2016, and presently anticipate initial sales of our 3D MRS-equipped CyberGage360 scanning system in 2016.

Export revenue totaled $29.7 million or 72% of total revenue in 2015, compared to $34.1 million or 73% of total revenue in 2014, and $26.0 million or 78% of revenue in 2013. Export revenue as a percentage of total revenue declined in 2015 due to the decline in sales of SMT systems and electronic assembly alignment sensors, which tend to have a higher proportion of sales outside the United States compared to our other products. Export revenue as a percentage of total revenue declined in 2014 because LDI generates a proportionately higher percentage of its revenue from domestic customers.

Cost of Revenues and Gross Margin

Cost of revenue decreased by $2.3 million, or 9%, to $23.0 million in 2015 from $25.3 million in 2014, and increased by $6.6 million, or 36%, in 2014 from $18.7 million in 2013. The decrease in cost of revenues in 2015 was due to the corresponding sales decrease of 12%, while the increase in cost of revenue in 2014 was due to the corresponding sales increase of 40%. Items included in cost of revenue that fluctuate with the level of sales include materials and components, direct labor and factory overhead costs.

Total gross margin as a percentage of sales was 44% in 2015, 46% in 2014 and 44% in 2013. The decrease in gross margin percentage in 2015 compared to 2014 was attributable to sales price erosion for our 2D AOI and SPI systems, reflecting competitive market conditions, and a slight change in product mix. The increase in gross margin percentage in 2014 compared to 2013 was due to increased revenue from higher margin SMT and 3D OEM sensor products, and more sales of SMT inspection systems in geographic areas where higher gross margins are available. Sales of 3D scanning solutions and services resulting from our acquisition of LDI in March 2014 did not have a significant impact on our overall gross margin percentage.

Our markets are highly price competitive, particularly the electronic assembly market, resulting in continual pressure on our gross margins. We compensate for pricing pressure by introducing new products with more features and improved performance and through manufacturing cost reduction programs. Many products that we have recently introduced or are about to introduce, including our SQ3000 3D AOI system, CyberGage360 scanning system, MRS sensor subsystems and WaferSense and ReticleSense sensors, have more favorable margins than many of our existing

products.

Operating Expenses

Operating expenses decreased by $2.4 million, or 10%, to $20.3 million in 2015 from $22.7 million in 2014, and increased by $1.8 million, or 9%, in 2014, from $20.8 million in 2013.

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Research and development expenses were $7.6 million or 18% of revenue in 2015, $8.8 million or 19% of revenue in 2014, and $7.5 million or 23% of revenue in 2013. Research and development expenses were lower in 2015 due to substantial completion of several critical development programs that required significant investment in 2014, including our new SQ3000 3D AOI system. Current research and development expenditures are focused on continued development of our MRS technology and related products, including 3D sensor subsystems, CyberGage360 scanning system and WaferSense and ReticleSense product lines. The increase in research and development expenses in 2014 resulted from our acquisition of LDI, continued development of our MRS technology, and 3D AOI and post-singulation memory inspection systems, offset in part by cost savings from a workforce reduction in the fourth quarter of 2013.

Selling, general and administrative expenses were $12.6 million, or 31%, of revenue in 2015, $13.8 million, or 30%, of revenue in 2014 and $12.3 million, or 37%, of revenue in 2013. The expense reductions in 2015 were due to lower professional fees, lower incentive compensation costs due to financial results below expectations, and cost savings from selective reductions in SMT system sales and marketing personnel that were implemented in the last six months of 2014. These reductions were offset in part by the impact of the LDI acquisition, which accounted for $600,000 of additional expense in 2015, because our results include LDI for the entire year, as compared to only a partial year in 2014. Expenses for incentive compensation were higher in 2014 due to our improved financial performance. Our acquisition of LDI added $2.3 million to selling, general and administrative expenses in 2014. These cost increases were offset in part by cost efficiencies resulting from a workforce reduction in the fourth quarter of 2013.

Interest Income and Other

Interest income and other includes interest earned on investments and gains and losses associated with foreign currency transactions, including intercompany financing transactions associated with our subsidiaries in the United Kingdom, Singapore and China. Because we maintain our investments in instruments designed to avoid risk of loss of principal, in the current interest rate environment, we have generated very little interest income. We recognized gains from foreign currency transactions, primarily intercompany financing transactions, of $103,000 in 2015 and $130,000 in 2014.

Provision for Income Taxes and Effective Income Tax Rate

We recorded income tax expense of $28,000 in 2015, $133,000 in 2014, and an income tax benefit of $186,000 in 2013. At December 31, 2015, we continue to have a valuation allowance recorded against all of our United States and Singapore based deferred tax assets. The valuation allowances may be reversed once our operations and outlook become materially stronger. Income tax expense in 2015 and 2014 reflects an increase in our valuation allowances, state income tax expense and foreign income tax expense associated with our subsidiaries in the United Kingdom and China. The reduction in income tax expense in 2015 was due to lower current state and foreign tax expenses resulting from our lower level of financial performance, and reduced deferred income tax expense resulting from fluctuations in the level of valuation allowances. Income tax expense was higher in 2014 due to a 2013 reduction in our reserve for income taxes resulting from the expiration of the statute of limitations for various income tax exposures.

We file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. Our federal income tax returns for years after 2011 are still subject to examination by the Internal Revenue Service. We are no longer subject to state and local income tax examinations by tax authorities for years prior to 2011. Our 2012 income tax return for Singapore is currently being audited by the Inland Revenue Authority of Singapore. We do not presently anticipate that the outcome of this audit will have a significant impact on our financial position or results of operations.

Liquidity and Capital Resources

Our cash and cash equivalents decreased by $897,000 in 2015, principally resulting from $2.4 million of cash used by operating activities, purchases of fixed asset and capitalized patent costs totaling $797,000, offset in part by $1.8 million of proceeds from maturities and sales of marketable securities, net of purchases of marketable securities, and $636,000 of proceeds from stock option exercises and share purchases under our employee stock purchase plan. Our cash and cash equivalents fluctuate in part because of maturities of marketable securities, and investment of cash balances in marketable securities, or from other sources of cash. Accordingly, we believe the combined balances of

cash and marketable securities provide a more reliable indication of our available liquidity. Combined balances of cash and marketable securities decreased by $2.7 million to $17.6 million as of December 31, 2015 from $20.3 million as of December 31, 2014.

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Operating activities used $2.4 million of cash in 2015. Cash used by operations included our net loss of $2.1 million, which included non-cash expenses totaling $2.2 million for depreciation and amortization, provision for doubtful accounts, deferred taxes, non-cash gains from foreign currency transactions and stock compensation expenses. Changes in operating assets and liabilities providing cash included an increase in accounts payable of $1.1 million. Changes in operating assets and liabilities using cash included increases in inventories of $2.5 million, accounts receivable of $161,000 and a decrease in accrued expenses of $1.0 million. The increase in inventories and accounts payable was related to the timing of inventory purchases needed for higher customer demand, as reflected in our large year end backlog, and new large orders received subsequent to year end. Accounts receivable increased because it took us slightly longer to collect for products sold in the fourth quarter of 2015 compared to the fourth quarter of 2014. Accrued expenses decreased due to payment of calendar year 2014 incentive compensation accruals and LDI stay bonuses in 2015, and lower warranty accruals resulting from the reduced level of sales.

Operating activities provided $827,000 of cash in 2014. Cash provided by operations included our net loss of $1.5 million, which included non-cash expenses totaling $2.2 million for depreciation and amortization, provision for doubtful accounts, deferred taxes, non-cash gains from foreign currency transactions, realized gains on available-for-sale securities and stock compensation expenses. Changes in operating assets and liabilities providing cash included increases in accounts payable of $1.5 million and accrued expenses of $503,000. Changes in operating assets and liabilities using cash included increases in accounts receivable of $646,000, inventories of $647,000 and a decrease in advance customer payments of $534,000. The increase in accounts payable and inventories was due to the timing of fourth quarter inventory purchases to meet anticipated future demand. Accounts payable was also driven higher by the timing of vendor payments at year end. The increase in accounts receivable was due to higher sales in the fourth quarter of 2014 compared to the fourth quarter of 2013. Accrued expenses increased due to higher warranty and incentive compensation accruals, offset in part by payment of the remaining balance of the 2013 restructuring accrual in 2014. Our warranty accruals increased due to higher sales levels and because we increased the warranty period for some products to three years. Advance customer payments declined due to recognition of revenue for transactions that were previously collected and deferred at December 31, 2013.

Investing activities provided $954,000 of cash in 2015, compared to providing $513,000 of cash in 2014. Changes in the level of investment in marketable securities, resulting from the purchases, sales and maturities of those securities provided $1.8 million of cash in 2015, compared to $5.0 million of cash in 2014. We used $797,000 of cash in 2015 for the purchase of fixed assets and capitalized patent costs, compared to using $1.4 million of cash for these types of purchases in 2014. The higher level of fixed asset purchases in 2014 was for new sales demonstration and services equipment to enhance our 3D scanning solutions and services offerings.

Financing activities from stock option exercises and employee share purchases under our employee stock purchase plan provided $636,000 of cash in 2015, compared to providing $741,000 of cash in 2014.

Our Board of Directors has authorized a $2.0 million share repurchase program. The common stock may be acquired from time to time in open market transactions, block purchases and other transactions complying with the Securities and Exchange Commission’s Rule 10b-18. We adopted a 10b5-1 trading plan to implement the repurchase program. As of December 31, 2015, no shares have been repurchased under this authorization.

At December 31, 2015, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of establishing off-balance sheet arrangements or other contractually narrow or limited purposes.

Except for obligations under facility leases and purchase contracts, we had no material commitments for expenditures as of December 31, 2015. Purchase commitments for inventory can vary based on the volume of revenue and resulting inventory requirements.

Our cash, cash equivalents and marketable securities totaled $17.6 million at December 31, 2015. We believe that on-hand cash, cash equivalents and marketable securities, coupled with anticipated future cash flow from operations, will be adequate to fund our cash flow needs for the foreseeable future, including the contractual obligations discussed above.

Inflation and Foreign Currency Transactions

Changes in our revenues have resulted primarily because of changes in the level of unit shipments due to competitive factors and the relative strength or weakness of the worldwide electronics assembly and semiconductor fabrication capital equipment markets. We believe that inflation has not had a significant effect on our operations.

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Most of our international export sales are negotiated, invoiced and paid in U.S. dollars. We manufacture our SMT inspection system products in Singapore and a portion of our raw material purchases are denominated in Singapore dollars. We also have R&D and sales personnel located in Singapore and sales offices located in other parts of the world. Although currency fluctuations do not significantly affect our revenue, they can impact our costs and influence the price competitiveness of our products and the willingness of existing and potential customers to purchase our products.

We have entered into foreign exchange forward contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies associated with our subsidiary in Singapore. These transactions are designated as cash flow hedges. The effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period during which the hedged transaction affects earnings. The maximum length of time over which we hedge our exposure to the variability in future cash flows is 12 months and, accordingly, at December 31, 2015, all of our open foreign exchange forward contracts had maturities of one year or less. The dollar equivalent gross notional amount of our foreign exchange forward contracts designated as cash flow hedges at December 31, 2015 was approximately $1.8 million. During 2015, we reduced our open Singapore dollar denominated foreign exchange forward contracts due to changes in our supplier base and product mix.

At December 31, 2015, our open foreign exchange forward contracts were in an unrealized loss position totaling $78,000 on a pre-tax basis due to a strengthening of the U.S. dollar in relation to the Singapore dollar during the time from when we first entered into these contracts through December 31, 2015. If the exchange rate between the U.S. dollar and the Singapore dollar were to remain unchanged over the next twelve months, we would realize this pre-tax loss through our consolidated statement of operations. If the U.S. dollar were to further strengthen, the unrealized losses on our open foreign exchange forward contracts would increase. However, if the U.S. dollar strengthens, our costs, when converted from Singapore dollars to U.S. dollars, would decline, and because we do not fully hedge all of our future anticipated cash flows that are denominated in Singapore dollars, the decline in costs would normally exceed the increased loss from hedging. Conversely, if the U.S. dollar were to weaken in future periods in relation to the Singapore dollar, the loss on our open foreign exchange forward contracts would be reduced, but our costs would increase. The increased costs in U.S. dollar terms would normally exceed the reduction in the loss from hedging. The ultimate impact of any fluctuation in the relationship between the U.S. dollar and Singapore dollar is dependent on the level of Singapore denominated cash flows in future periods.

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate these estimates, including estimates related to revenue recognition, bad debts, warranty obligations, inventory valuation, intangible assets, derivatives and hedging and income taxes. We base these estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions. The estimates and judgments that we believe have the most effect on our reported financial position and results of operations are as follows:

Revenue Recognition.

Revenue from all customers, including distributors, is recognized when all significant contractual obligations have been satisfied and collection of the resulting receivable is reasonably assured. Generally, product revenues are recognized upon shipment under FOB shipping point terms, and include shipping and handling costs. Revenue from services is recognized as work is performed. Taxes collected from customers and remitted to governmental authorities are excluded from revenue on the net basis of accounting. Estimated returns and warranty costs are recorded at the time of sale. Sales of some SMT system products may require customer acceptance due to performance or other

acceptance criteria included in the terms of sale. For these SMT product sales, revenue is recognized at the time of customer acceptance. Our multiple deliverable arrangements typically include the sale of an SMT inspection system or 3D scanning solution, related installation and training, and in some cases, an extended warranty. Revenue from installation and training are recognized as the services are provided. Revenue from extended warranties is recognized ratably over the warranty period.

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When a sale involves multiple elements, revenue is allocated to each respective element at inception of an arrangement using the relative selling price method. Selling price is determined based on a selling price hierarchy, consisting of vendor specific objective evidence (VSOE), third party evidence or estimated selling price. Management's best estimate of the selling price of a SMT machine and 3D scanning solution is based on the cost of the product and a reasonable margin based on geographic location and competitive market conditions. We use VSOE to establish fair value for extended warranty, installation and training services. If VSOE is not available to establish fair value for extended warranty, installation and training services, we estimate a selling price based on the cost-build-up for the particular service and a reasonable gross margin. Costs related to products delivered are recognized in the period revenue is recognized. Cost of revenues consists primarily of direct labor, manufacturing overhead, materials and components and excludes amortization of intangible assets.

Allowance for Doubtful Accounts.

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. In making the determination of the appropriate allowance for doubtful accounts, we consider specific accounts, historical write-offs, changes in customer relationships and credit worthiness and concentrations of credit risk. Specific accounts receivable are written-off once a determination is made that the account is uncollectible. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The allowance for doubtful accounts was $521,000 at December 31, 2015 and $561,000 at December 31, 2014.

Allowance for Warranty Expenses.

We provide for the estimated cost of product warranties at the time revenue is recognized. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of component suppliers, warranty obligations are affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required. The allowance for warranties was $645,000 at December 31, 2015 and $839,000 at December 31, 2014.

Inventory Write Downs.

We write down inventory for estimated obsolescence or lack of marketability equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. We formulate our assumptions regarding future demand and market conditions based on order trends and input from customers regarding their future requirements. If actual market conditions are less favorable than those projected, or if in the future we decide to discontinue sales and marketing of any of our products, additional inventory write-downs may be required. Excess and obsolete inventories were written down by $1.0 million at December 31, 2015 and $914,000 at December 31, 2014.

Business Combinations.

We recognize separately from goodwill the fair value of the assets acquired and the liabilities assumed at the acquisition date. Goodwill is measured as the excess of consideration transferred over the acquisition date fair value of the assets acquired and liabilities assumed. Assets acquired include tangible and intangible assets. We determine the value and useful lives of equipment and leasehold improvements and purchased intangible assets with the assistance of an independent third-party valuation firm using certain estimates and assumptions.

While we use estimates and assumptions that we believe are reasonable as a part of the purchase price allocation process to accurately value the assets acquired and the liabilities assumed at the acquisition date, the estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the fair value of the assets acquired and the liabilities assumed based on new information about facts and circumstances that existed as of the acquisition date. Any such adjustments would be recorded as an offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair values, whichever comes first, any subsequent adjustments would be recorded in our consolidated statements of operations.

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During the three months ended June 30, 2014, we completed our valuation work and management review of the assets acquired and liabilities assumed related to our acquisition of LDI on March 14, 2014, and finalized the purchase price adjustment for the net working capital acquired. Adjustments to provisional amounts reflected in our preliminary purchase price allocation as of March 31, 2014 included a $24,000 decrease in intangible assets and a $46,000 increase in goodwill, among other adjustments. These measurement period adjustments required the revision of comparative financial information for the quarter ended March 31, 2014. The adjustment to intangible assets decreased amortization expense in the three months ended March 31, 2014 by less than $300. None of the other adjustments to the provisional amounts had any impact on our results of operations for the first quarter of 2014.

Valuation of Intangible and Long-Lived Assets.

We assess the impairment of identifiable intangible assets, long lived assets and related goodwill whenever events or changes in circumstances indicate the carrying value may not be recoverable. In addition, goodwill is tested for impairment annually. Factors we consider important, which could trigger an impairment review include the following:

- Significant under-performance relative to expected historical or projected future operating results.
- Significant changes in the manner of our use of the acquired assets or the strategy for our overall business.
- Significant negative industry or economic trends.
- Significant decline in our stock price for a sustained period, and the size of our market capitalization relative to our net book value.
- For intangible and long-lived assets, if the carrying value exceeds the un-discounted cash flows from such asset.
- For goodwill, if the carrying value of our net assets (net book value) exceeds fair value.

When we determine that the carrying value of intangibles, long-lived assets and related goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any potential impairment based on a projected discounted cash flow method using a discount rate that we believe is commensurate with the risk inherent in our current business model. Annually, we also test for impairment of goodwill, and utilize the income approach to estimate our fair value. The income approach is a valuation technique under which we estimate future cash flows using financial forecasts. Future estimated cash flows are discounted to their present value to calculate fair value. When considering fair value, we also give consideration to the control premium in excess of our current market capitalization that might be obtained from a third party acquirer. These assumptions require significant judgment and actual results may differ from assumed or estimated amounts.

At December 31, 2015 we had goodwill of $1.4 million. Our recent analysis performed in the fourth quarter of 2015 indicates that our goodwill is not impaired. However, our conclusion could change in the future, if our assumptions about future economic conditions, revenue growth or profitability change. Any resulting impairment charge could have a material effect on our financial position and results of operations in the future.

Income Taxes.

Significant judgment is required in determining worldwide income tax expense based upon tax laws in the various jurisdictions in which we operate. We have established reserves for uncertain tax positions by applying the “more likely than not” threshold (i.e., a likelihood of occurrence greater than fifty percent). The recognition threshold is met when an entity concludes that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard, or are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statute of limitations. De-recognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained. All tax positions are analyzed periodically and adjustments are made as events warrant modification, such as the completion of audits or the expiration of statutes of limitations, which may result in future charges or credits to income tax expense.

As part of the process of preparing consolidated financial statements, management is required to estimate income taxes in each of the jurisdictions in which we operate. This process involves estimating the current tax liability, as well as assessing temporary differences arising from the different treatment of items for financial statement and tax purposes. These differences result in deferred tax assets and liabilities, which are recorded on our consolidated balance

sheet.

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We currently have significant deferred tax assets as a result of temporary differences between taxable income on our tax returns and U.S. GAAP income, research and development tax credit carry forwards and federal, state and foreign net operating loss carry forwards. A deferred tax asset generally represents future tax benefits to be received when temporary differences previously reported in our consolidated financial statements become deductible for income tax purposes, or when net operating loss carry forwards or credits are applied against future taxable income, or when tax credit carry forwards are utilized on our tax returns. We assess the realizability of our deferred tax assets and the need for a valuation allowance based on the guidance provided in current financial accounting standards.

Significant judgment is required in determining the realizability of our deferred tax assets. The assessment of whether valuation allowances are required considers, among other matters, the nature, frequency and severity of any current and cumulative losses, forecasts of future profitability, the duration of statutory carry forward periods, our experience with loss carry forwards not expiring unused and tax planning alternatives.

At December 31, 2015 we concluded that a $10.6 million valuation allowance is needed for all of our United States and Singapore based deferred tax assets due to our recurring losses and financial outlook. In analyzing the need for a valuation allowance, we first considered our history of cumulative operating results for income tax purposes over the past three years in each of the tax jurisdictions where we operate, our financial performance in recent quarters, statutory carry forward periods and tax planning alternatives. Finally, we considered both our near and long-term financial outlook and timing regarding when we might return to profitability. After considering all available evidence both positive and negative, we concluded that the valuation allowance is needed for all of our U.S. and Singapore based deferred tax assets. A similar analysis was performed in 2014, resulting in a $10.5 million valuation allowance at December 31, 2014 for substantially all of our U.S. and Singapore based deferred tax assets.

Deferred tax assets at December 31, 2015, include $58,000 for net operating loss carry forwards incurred in the UK by CyberOptics Ltd., which was acquired in 1999. A valuation allowance has not been recorded against these deferred tax assets. The utilization of these net operating loss carry forwards is dependent on CyberOptics Ltd.’s ability to generate sufficient UK taxable income during the carry forward period.

Derivatives and Hedging.

We enter into foreign exchange forward contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies associated with our subsidiary in Singapore. These transactions are designated as cash flow hedges and are recorded in the accompanying consolidated balance sheet at fair value. The effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. The maximum length of time over which we hedge our exposure to the variability in future cash flows is 12 months. Accordingly, at December 31, 2015 and December 31, 2014, all of our open foreign exchange forward contracts had maturities of one year or less. The dollar equivalent gross notional amount of our foreign exchange forward contracts designated as cash flow hedges was approximately $1.8 million at December 31, 2015 and $7.1 million at December 31, 2014.

We estimate hedge ineffectiveness on a quarterly basis by considering the difference between the prices of a hypothetical forward contract maturing on the last day of a given month, to the prices of a series of hypothetically perfect daily forward contracts. Hedge ineffectiveness and the amounts excluded from effectiveness testing recognized in earnings on cash flow hedges were not material for the years ended December 31, 2015 and 2014. The fair value of our foreign exchange forward contracts representing losses in the amount of $78,000 as of December 31, 2015, and $352,000 as of December 31, 2014 have been recorded in accrued expenses.

The fair value for our foreign exchange forward contracts is based on foreign currency spot and forward rates obtained from reputable financial institutions with resulting valuations periodically validated by obtaining foreign currency spot rates and forward quotes from other industry standard sources or third party or counterparty quotes.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
CONSOLIDATED BALANCE SHEETS
CYBEROPTICS CORPORATION

(In thousands, except share information)	December 31, 2015	December 31, 2014
ASSETS		
Cash and cash equivalents	$4,274	$5,171
Marketable securities	5,249	5,285
Accounts receivable, less allowance for doubtful accounts of $521 at December 31, 2015 and $561 at December 31, 2014	8,150	7,945
Inventories	13,265	11,657
Other current assets	1,190	1,202
Deferred tax assets	—	82
Total current assets	32,128	31,342
Marketable securities, long-term	8,084	9,889
Equipment and leasehold improvements, net	2,368	2,918
Intangibles, net	549	642
Goodwill	1,366	1,366
Other assets	186	188
Deferred tax assets	58	67
Total assets	$44,739	$46,412
LIABILITIES AND STOCKHOLDERS' EQUITY		
Accounts payable	$5,778	$4,713
Advance customer payments	481	490
Accrued expenses	1,959	3,112
Total current liabilities	8,218	8,315
Other liabilities	268	400
Deferred tax liability	69	119
Reserve for income taxes	126	140
Total liabilities	8,681	8,974
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, no par value, 5,000,000 shares authorized, none outstanding	—	—
Common stock, no par value, 25,000,000 shares authorized, 6,771,668 shares issued and outstanding at December 31, 2015 and 6,643,851 shares issued and outstanding at December 31, 2014	31,292	30,145
Accumulated other comprehensive loss	(1,709)	(1,271)
Retained earnings	6,475	8,564
Total stockholders' equity	36,058	37,438
Total liabilities and stockholders' equity	$44,739	$46,412

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE CONSOLIDATED FINANCIAL STATEMENTS.

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CONSOLIDATED STATEMENTS OF OPERATIONS
CYBEROPTICS CORPORATION

	Year Ended December 31,	
(In thousands, except per share amounts)	2015	2014
Revenues	$41,130	$46,483
Cost of revenues	22,989	25,298
Gross margin	18,141	21,185
Research and development expenses	7,602	8,789
Selling, general and administrative expenses	12,635	13,820
Amortization of intangibles	67	53
Loss from operations	(2,163)	(1,477)
Interest income and other	102	123
Loss before income taxes	(2,061)	(1,354)
Income tax provision	28	133
Net loss	$(2,089)	$(1,487)
Net loss per share – Basic	$(0.31)	$(0.23)
Net loss per share – Diluted	$(0.31)	$(0.23)
Weighted average shares outstanding – Basic	6,706	6,576
Weighted average shares outstanding – Diluted	6,706	6,576

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE CONSOLIDATED FINANCIAL STATEMENTS.

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CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
CYBEROPTICS CORPORATION

	Year Ended December 31,	
(In thousands)	2015	2014
Net loss	$(2,089)	$(1,487)
Other comprehensive income (loss), before tax:		
Foreign currency translation adjustments	(625)	(464)
Unrealized gains (losses) on available-for-sale securities:		
Unrealized gains (losses)	(78)	31
Reclassification adjustment for gains included in net loss	—	(2)
Total unrealized gains (losses) on available-for-sales securities	(78)	29
Unrealized gains (losses) on foreign exchange forward contracts:		
Unrealized losses	(298)	(399)
Reclassification adjustment for losses included in net loss	563	103
Total unrealized gains (losses) on foreign exchange forward contracts	265	(296)
Other comprehensive loss, before tax	(438)	(731)
Income tax provision related to items of other comprehensive loss	—	—
Other comprehensive loss, net of tax	(438)	(731)
Total comprehensive loss	$(2,527)	$(2,218)

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE CONSOLIDATED FINANCIAL STATEMENTS.

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CONSOLIDATED STATEMENTS OF CASH FLOWS
CYBEROPTICS CORPORATION

(In thousands)	Year Ended December 31, 2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(2,089)	$(1,487)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,968	1,914
Provision for doubtful accounts	(44)	(75)
Deferred taxes	38	120
Foreign currency transaction gains	(225)	(230)
Realized gains on available-for-sale securities	—	(2)
Stock-based compensation	511	436
Changes in operating assets and liabilities, net of acquisition:		
Accounts receivable	(161)	(646)
Inventories	(2,489)	(647)
Other assets	(24)	(16)
Accounts payable	1,146	1,491
Advance customer payments	(9)	(534)
Accrued expenses	(1,011)	503
Net cash provided by (used in) operating activities	(2,389)	827
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from maturities of available-for-sale marketable securities	5,167	7,080
Proceeds from sales of available-for-sale marketable securities	1,518	5,050
Purchases of available-for-sale marketable securities	(4,934)	(7,147)
Purchase of LDI	—	(3,108)
Additions to equipment and leasehold improvements	(691)	(1,251)
Additions to patents	(106)	(111)
Net cash provided by investing activities	954	513
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of stock options	458	628
Proceeds from issuance of common stock under employee stock purchase plan	178	113
Net cash provided by financing activities	636	741
Effects of exchange rate changes on cash and cash equivalents	(98)	(11)
Net increase (decrease) in cash and cash equivalents	(897)	2,070
Cash and cash equivalents – beginning of period	5,171	3,101
Cash and cash equivalents – end of period	$4,274	$5,171

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE CONSOLIDATED FINANCIAL STATEMENTS.

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CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
CYBEROPTICS CORPORATION

(In thousands)	Common Stock Shares	Common Stock Amount	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Stockholders' Equity
BALANCE, DECEMBER 31, 2013	6,497	$28,968	$ (540)	$10,051	$38,479
Exercise of stock options, vesting of restricted stock units, net of shares exchanged as payment	121	628	—	—	628
Share issuances for compensation purposes	4	32	—	—	32
Stock-based compensation	—	404	—	—	404
Issuance of common stock under Employee Stock Purchase Plan	22	113	—	—	113
Other comprehensive loss, net of tax	—	—	(731)	—	(731)
Net loss	—	—	—	(1,487)	(1,487)
BALANCE, DECEMBER 31, 2014	6,644	30,145	(1,271)	8,564	37,438
Exercise of stock options, vesting of restricted stock units, net of shares exchanged as payment	88	458	—	—	458
Share issuances for compensation purposes	4	41	—	—	41
Stock-based compensation	—	470	—	—	470
Issuance of common stock under Employee Stock Purchase Plan	36	178	—	—	178
Other comprehensive loss, net of tax	—	—	(438)	—	(438)
Net loss	—	—	—	(2,089)	(2,089)
BALANCE, DECEMBER 31, 2015	6,772	$31,292	$ (1,709)	$6,475	$36,058

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THE CONSOLIDATED FINANCIAL STATEMENTS.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
CYBEROPTICS CORPORATION

NOTE 1 – BUSINESS DESCRIPTION AND SIGNIFICANT ACCOUNTING POLICIES

Description of Business

We are a leading global developer and manufacturer of high precision sensing technology solutions. Our sensors are used in surface mount technology (SMT), semiconductor and general purpose metrology and 3D scanning markets to significantly improve yields and productivity.

Principles of Consolidation

The consolidated financial statements include the accounts of CyberOptics Corporation and its wholly-owned subsidiaries. In these notes to the consolidated financial statements, these companies are collectively referred to as “CyberOptics,” “we,” “us,” or “our.” All significant inter-company accounts and transactions have been eliminated in consolidation.

Segment Reporting

We operate in a single reportable segment.

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ significantly from those estimates.

Reclassifications

Certain reclassifications have been made to the previously reported consolidated financial statements in order to conform to the current presentation. These reclassifications had no impact on the consolidated balance sheets, statements of operations, cash flows or statements of stockholders' equity (deficit).

Cash and Cash Equivalents

We consider all highly liquid investments purchased with an original maturity of 90 days or less to be cash equivalents. Cash and cash equivalents consist of funds maintained in demand deposit accounts, money market accounts, corporate debt instruments and U.S. government backed obligations. Cash and cash equivalent balances, at times, may exceed federally insured limits.

Marketable Securities

All marketable securities are classified as available-for-sale and consist of U.S. government and agency backed obligations, certificates of deposit, corporate debt instruments, asset backed securities or equity securities. Marketable securities are classified as short-term or long-term in the consolidated balance sheet based on their maturity date and expectations regarding sales.

Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as a separate component of stockholders’ equity until realized. These fair values are primarily determined using quoted market prices. The carrying amounts of securities, for purposes of computing unrealized gains and losses, are determined by specific identification. The cost of securities sold is also determined by specific identification.

We monitor the carrying value of our investments compared to their fair value to determine whether an other-than-temporary impairment has occurred. If a decline in fair value is determined to be other-than-temporary, an impairment charge related to that specific investment is recorded in current operations.

Cash and marketable securities held by foreign subsidiaries totaled $701,000 at December 31, 2015 and $1,095,000 at December 31, 2014.

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Inventories

Inventories are stated at the lower of cost or market, with cost determined using the first-in, first-out (FIFO) method. Appropriate consideration is given to deterioration, obsolescence, and other factors in evaluating net realizable value. Demonstration inventories are stated at cost less accumulated amortization, generally based on a 36 month useful life. Accumulated amortization for demonstration inventories totaled $1,310,000 at December 31, 2015 and $1,181,000 at December 31, 2014.

Accounts Receivable and Allowance for Doubtful Accounts

We extend unsecured credit to our customers in the normal course of business. Allowances for doubtful accounts are maintained for estimated losses resulting from the inability of our customers to make required payments. In making the determination of the appropriate allowance for doubtful accounts, we consider specific accounts, historical write-offs, changes in customer relationships and credit worthiness and concentrations of credit risk. Specific accounts receivable are written-off once a determination is made that the account is uncollectible.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are stated at cost. Significant additions or improvements extending asset lives are capitalized, while repairs and maintenance are charged to expense as incurred. In-progress costs are capitalized with depreciation beginning when assets are placed in service. Depreciation is recorded using the straight-line method over the estimated useful lives of the equipment, ranging from one to seven years. Leasehold improvements are amortized using the straight-line method over the shorter of the asset useful life or the underlying lease term, ranging from one to eight years. Gains or losses on dispositions are included in current operations.

Business Combinations

We recognize separately from goodwill the fair value of the assets acquired and the liabilities assumed at the acquisition date. Goodwill is measured as the excess of consideration transferred over the acquisition date fair value of the assets acquired and liabilities assumed. Assets acquired include tangible and intangible assets. We determine the value and useful lives of equipment, leasehold improvements and purchased intangible assets with the assistance of an independent third-party valuation firm using certain estimates and assumptions.

While we use estimates and assumptions that we believe are reasonable as a part of the purchase price allocation process to accurately value the assets acquired and the liabilities assumed at the acquisition date, the estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the fair value of the assets acquired and the liabilities assumed based on new information about facts and circumstances that existed as of the acquisition date. Any such adjustments would be recorded as an offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair values, whichever comes first, any subsequent adjustments would be recorded in our consolidated statements of operations.

Goodwill

Goodwill represents the excess of purchase price over the fair value of net assets acquired in a business combination. We evaluate the carrying value of goodwill during the fourth quarter of each year and between annual evaluations if events occur or circumstances change that indicate goodwill might be impaired. We have determined that we have one reporting unit. Goodwill is tested by comparing our fair value, as determined based on our future estimated discounted cash flows, to our net book value.

Patents

Patents consist of legal and patent registration costs for protection of our proprietary technology. We amortize patent costs on a straight-line basis, based upon their estimated life.

Long Lived Assets

Intangible assets subject to amortization and other long lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. An impairment loss would be recognized when future undiscounted cash flows expected to result from use of the asset and eventual disposition are less than the carrying amount.

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Revenue Recognition

Revenue from all customers, including distributors, is recognized when all significant contractual obligations have been satisfied, pricing is fixed and determinable and collection of the resulting receivable is reasonably assured. Generally, product revenues are recognized upon shipment under FOB shipping point terms, and include shipping and handling costs. Revenue from services is recognized as work is performed. Taxes collected from customers and remitted to governmental authorities are excluded from revenue on the net basis of accounting. Estimated returns and warranty costs are recorded at the time of sale. Sales of some surface mount technology (SMT) system products may require customer acceptance due to performance or other acceptance criteria included in the terms of sale. For these SMT product sales, revenue is recognized at the time of customer acceptance. Our multiple deliverable arrangements typically include the sale of an SMT inspection system or 3D scanning solution, related installation and training, and in some cases, an extended warranty. Revenue from installation and training are recognized as the services are provided. Revenue from extended warranties is recognized ratably over the warranty period.

When a sale involves multiple elements, revenue is allocated to each respective element at inception of an arrangement using the relative selling price method. Selling price is determined based on a selling price hierarchy, consisting of vendor specific objective evidence (VSOE), third party evidence or estimated selling price. Management's best estimate of the selling price of an SMT machine and 3D scanning solution is based on the cost of the product and a reasonable margin based on geographic location and competitive market conditions. We use VSOE to establish fair value for extended warranty, installation and training services. If VSOE is not available to establish fair value for extended warranty, installation and training services, we estimate a selling price based on the cost-build-up for the particular service and a reasonable gross margin. Costs related to products delivered are recognized in the period revenue is recognized. Cost of revenues consists primarily of direct labor, manufacturing overhead, materials and components and excludes amortization of intangible assets.

Foreign Currency Translation

Financial position and results of operations of our international subsidiaries are measured using local currency as their functional currency. Assets and liabilities of these operations are translated at the exchange rates in effect at each fiscal year-end. Statements of operations accounts are translated at the average rates of exchange prevailing during the year. Translation adjustments arising from the use of differing exchange rates from period to period are included as a cumulative translation adjustment in stockholders' equity.

Foreign Currency Transactions

Foreign currency transaction gains and losses are included in interest income and other in the statement of operations. We recognized a foreign currency transaction gain of $103,000 in 2015 and $130,000 in 2014.

Research and Development

Research and development (R&D) costs, including software development, are expensed when incurred. Software development costs are required to be expensed until the point that technological feasibility and proven marketability of the product are established; costs otherwise capitalizable after such point also are expensed because they are insignificant. All other R&D costs are expensed as incurred. R&D expenses consist primarily of salaries, project materials, contract labor and other costs associated with ongoing product development and enhancement efforts.

Derivatives and Hedging

We enter into foreign exchange forward contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies associated with our subsidiary in Singapore. These transactions are designated as cash flow hedges and are recorded in the accompanying consolidated balance sheet at fair value. The effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. Cash flows from derivative instruments are classified in the consolidated statement of cash flows in the same category as the cash flows from the items subject to designated hedge relationships.

Advertising Costs

We expense all advertising costs as incurred. Advertising expense incurred was $410,000 in 2015 and $296,000 in 2014.

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Warranty Costs

We provide for the estimated cost of product warranties which cover products for periods ranging from one to three years at the time revenue is recognized. In 2014, the warranty period for certain products was increased to three years from a one year period.

Income Taxes

We evaluate uncertain tax positions using the “more likely than not” threshold (i.e., a likelihood of occurrence greater than fifty percent). The recognition threshold is met when an entity concludes that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are classified as a gross unrecognized tax benefit until the first interim period in which they meet the more likely than not standard, or are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statute of limitations. De-recognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

Only the portion of the unrecognized tax benefit that is expected to be paid within one year is classified as a current liability. As a result, liabilities expected to be resolved without the payment of cash (e.g., resolution due to the expiration of the statute of limitations) or are not expected to be paid within one year are not classified as current. It is our policy to record estimated interest and penalties as income tax expense and tax credits as a reduction in income tax expense.

Deferred income taxes are recorded to reflect the tax consequences in future years of differences between the financial reporting and tax bases of assets and liabilities. Income tax expense is the sum of the tax currently payable and the change in the deferred tax assets and liabilities during the period, excluding changes in deferred tax assets recorded to equity and goodwill. Valuation allowances are established when, in the opinion of management, there is uncertainty that some portion or all of the deferred tax assets will not be realized. We assess the realizability of our deferred tax assets and the need for a valuation allowance based on all positive and negative evidence.

Net Loss Per Share

Net loss per basic and diluted share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Common equivalent shares consist of common shares to be issued upon exercise of stock options, vesting of restricted stock units and from purchases of shares under our employee stock purchase plan, as calculated using the treasury stock method. All common equivalent shares are excluded from the calculation of net loss per diluted share due to their anti-dilutive effect.

Fair Value of Financial Instruments

The carrying amounts of financial instruments such as cash equivalents, accounts receivable, other assets, accounts payable, accrued expenses and other liabilities approximate their related fair values due to the short-term maturities of these instruments.

Stock-Based Compensation

All equity-based payments to employees, including grants of employee stock options, are required to be recognized as an expense in our consolidated statements of operations based on the grant date fair value of the award. We utilize the straight-line method of expense recognition over the award’s service period for our graded vesting options. The fair value of stock options has been determined using the Black-Scholes model. The compensation expense recognized for all equity based awards is net of estimated forfeitures, which is based on historical data. We have classified equity based compensation within our consolidated statement of operations in the same manner as our cash based employee compensation costs. We elected to use the alternative transition guidance known as the “short-cut method” to determine our pool of windfall tax benefits at January 1, 2006.

See Note 7 to the consolidated financial statements for additional information on stock-based compensation.

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Recent Accounting Developments

In May 2014, the Financial Accounting Standards Board (FASB) issued guidance on the recognition of revenue from contracts with customers (Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers). Revenue recognition will depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance also requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application. The FASB has delayed the effective date of the standard by one year to January 1, 2018, with early adoption permitted as of the original effective date of January 1, 2017. The Company is currently evaluating the method of adoption and the impact of the new guidance on the consolidated financial statements.

In February 2016, the FASB issued new lease accounting guidance (ASU No. 2016-02, Leases). Under the new guidance, at the commencement date, lessees will be required to recognize a lease liability, which is a lessee‘s obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term. The new guidance is not applicable for leases with a term of 12 months or less. Lessor accounting is largely unchanged. Public business entities should apply the amendments in ASU 2016-02 for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted upon issuance. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. The Company is currently evaluating the impact of the new guidance on the consolidated financial statements.

In July 2015, the FASB issued guidance on simplifying the measurement of inventory (ASU No. 2015-11, Simplifying the Measurement of Inventory). The guidance requires an entity to measure inventory at the lower of cost or net realizable value, which consists of estimated selling prices in the ordinary course of business, less reasonably predictable cost of completion, disposal, and transportation. The new guidance eliminates unnecessary complexity that exists under current "lower of cost or market" guidance. For public entities, the updated guidance is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The guidance is to be applied prospectively as of the beginning of an interim or annual reporting period, with early adoption permitted. We do not believe the implementation of this standard will have a material impact on our consolidated financial statements.

In November 2015, the FASB issued guidance on simplifying the balance sheet classification of deferred taxes (ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes). To simplify the presentation of deferred income taxes, the new guidance requires that deferred tax liabilities and assets be classified as non-current in a classified statement of financial position. Under prior guidance, an entity was required to separate deferred income tax liabilities and assets into current and non-current amounts. The current requirement that deferred tax liabilities and assets of a tax-paying component of an entity be offset and presented as a single amount is not affected. For public entities, the guidance is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years, with early adoption permitted. The guidance may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. We adopted the new guidance on a prospective basis for our year ending December 31, 2015. Financial statements for prior periods were not retrospectively adjusted. The new guidance was adopted to simplify the balance sheet presentation of deferred taxes, and had no other impact on our consolidated financial statements.

NOTE 2 - ACQUISITION

On March 14, 2014 we acquired substantially all of the assets of Laser Design, Inc. (LDI), a privately held company based in Minneapolis, Minnesota, for aggregate consideration of $2,633,000 in cash plus the assumption of certain

current liabilities of $1,073,000. We also paid aggregate signing bonuses of $475,000 to key executives of LDI which have been accounted for as acquisition consideration. LDI provides scanning systems and services to the global 3D scanner and services metrology market and enables us to enter the growing market for general purpose 3D metrology. We also include our proprietary 3D sensor technology in LDI’s products to enable differentiated product offerings.

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Under the acquisition method of accounting, the total purchase price was allocated to the net tangible and intangible assets acquired, based upon their estimated fair values as of March 14, 2014. During the three months ended June 30, 2014, we completed our valuation work and management review of the assets acquired and liabilities assumed and finalized the purchase price adjustment for the net working capital acquired. Adjustments to provisional amounts reflected in our preliminary purchase price allocation as of March 31, 2014 included a $24,000 decrease in intangible assets and a $46,000 increase in goodwill, among other adjustments. These measurement period adjustments require the revision of comparative financial information for the quarter ended March 31, 2014. The adjustment to intangible assets decreased amortization expense in the three months ended March 31, 2014 by less than $300. None of the other adjustments to the provisional amounts had any impact on our results of operations for the first quarter of 2014.

The purchase price allocation for our acquisition of LDI is as follows:

(In thousands)	
Accounts receivable	$662
Inventories	551
Equipment and leasehold improvements	1,507
Other assets	91
Intangible assets	573
Identifiable assets acquired	3,384
Accounts payable	640
Accrued expenses and advance customer payments	433
Liabilities assumed	1,073
Net identifiable assets acquired	2,311
Goodwill	797
Purchase price	$3,108

The allocation of the purchase price resulted in recognition of the following identified intangible assets:

	(In thousands)	Weighted Average Life-Years
Software	$206	7
Patent	165	7
Marketing assets and customer relationships	101	9
Non-compete agreements	101	4
	$573	7

The fair value of the above identified intangible assets was estimated using an income approach. Under the income approach, an intangible asset’s fair value is equal to the present value of future economic benefits to be derived from ownership of the asset. Indications of value are developed by discounting future net cash flows to their present value at market-based rates of return. The software, patent and marketing intangible assets have been appraised using a relief from royalty income methodology; the non-competes using a “with and without” income methodology; and customer relationships using a multi period excess earnings methodology. The goodwill recognized as a result of the LDI acquisition was primarily attributable to the value of the workforce, as well as unidentifiable intangible assets. We paid a premium over the net tangible and identifiable intangible assets acquired (i.e., goodwill) because owning LDI enables us to have access to the general purpose 3D metrology market and allows us to include our proprietary 3D sensor technology in LDI’s products.

All of the goodwill is expected to be deductible for income tax purposes over a 15 year period. The useful life of the intangible assets was determined based on management’s best estimate of the expected cash flows used to measure the fair value of the intangible assets, adjusted as appropriate for entity-specific factors, including competitive, economic or other factors that may limit the useful life of the intangible assets.

For the year ended December 31, 2015, LDI contributed $6,853,000 to our revenue and $389,000 to our net loss. For the year ended December 31, 2014, since the date of acquisition, LDI contributed $5,306,000 to our revenue and

$537,000 to our net loss.

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The following unaudited pro forma consolidated financial information presents our revenue and net loss as if the acquisition of LDI occurred on January 1, 2014. The unaudited pro forma consolidated financial information has been prepared for illustrative purposes only and does not purport to be indicative of the results that would have been achieved had the acquisition occurred on January 1, 2014, or of future results. The unaudited pro forma consolidated financial information does not reflect any operating efficiencies and cost savings that may be realized from integration of LDI.

(In thousands, except per share amounts)	Year Ended December 31,	
	2015	2014
Revenue	$41,130	$47,904
Net loss	(2,089)	(1,292)
Basic and diluted loss per share	$(0.31)	$(0.20)

We incurred approximately $117,000 in LDI related acquisition costs. Approximately $47,000 of these costs were recorded as selling, general and administrative expenses in the first quarter of 2014, with the remaining balance recorded as selling, general and administrative expense in prior periods. The pro forma consolidated net loss for 2014 reflected in the table above was adjusted to exclude all acquisition related costs and the impact of the fair value adjustment to acquisition date inventories of $222,000.

NOTE 3 – MARKETABLE SECURITIES

Our investments in marketable securities are classified as available-for-sale and consist of the following:

	December 31, 2015			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-Term				
U.S. government and agency obligations	$3,806	$—	$(2)	$3,804
Corporate debt securities and certificates of deposit	1,440	—	(1)	1,439
Asset backed securities	6	—	—	6
Marketable securities – short-term	$5,252	$—	$(3)	$5,249
Long-Term				
U.S. government and agency obligations	$6,681	$1	$(18)	$6,664
Corporate debt securities and certificates of deposit	675	—	(1)	674
Asset backed securities	694	—	(1)	693
Equity security	42	11	—	53
Marketable securities – long-term	$8,092	$12	$(20)	$8,084

	December 31, 2014			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-Term				
U.S. government and agency obligations	$3,378	$2	$—	$3,380
Corporate debt securities and certificates of deposit	1,903	2	—	1,905
Marketable securities – short-term	$5,281	$4	$—	$5,285
Long-Term				
U.S. government and agency obligations	$5,761	$3	$(5)	$5,759
Corporate debt securities and certificates of deposit	1,867	1	(1)	1,867
Asset back securities	2,156	1	(1)	2,156
Equity security	42	65	—	107
Marketable securities – long-term	$9,826	$70	$(7)	$9,889

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Our investments in marketable debt securities all have maturities of less than 5 years. At December 31, 2015, marketable debt securities valued at $2,321,000 were in an unrealized gain position totaling $1,000 and marketable debt securities valued at $10,959,000 were in an unrealized loss position totaling $23,000 (all had been in an unrealized loss position for less than 12 months). At December 31, 2014, marketable debt securities valued at $9,287,000 were in an unrealized gain position totaling $9,000 and marketable debt securities valued at $5,780,000 were in an unrealized loss position totaling $7,000 (all had been in an unrealized loss position for less than 12 months).

We hold an investment in one equity security. At December 31, 2015, our equity security had a fair value of $53,000, and was in an $11,000 unrealized gain position. At December 31, 2014, our equity security had a fair value of $107,000, and was in a $65,000 unrealized gain position.

Net pre-tax unrealized losses for marketable securities of $11,000 at December 31, 2015 and net pre-tax unrealized gains for marketable securities of $67,000 at December 31, 2014 were recorded as a component of accumulated other comprehensive loss in stockholders' equity. We received proceeds from the sale of marketable securities of $1,518,000 in 2015 and $5,050,000 in 2014. No gain or loss was recognized from the sale of marketable securities in 2015. A gain of $2,000 from the sale of marketable securities was recognized in 2014.

Investments in marketable securities classified as cash equivalents of $791,000 at December 31, 2015 and $321,000 at December 31, 2014 consist of the following:

	December 31, 2015			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Recorded Basis
Corporate debt securities and certificates of deposit	$791	$—	$—	$791
	$791	$—	$—	$791

	December 31, 2014			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Recorded Basis
Corporate debt securities and certificates of deposit	$321	$—	$—	$321
	$321	$—	$—	$321

NOTE 4 – DERIVATIVES

We enter into foreign exchange forward contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies associated with our subsidiary in Singapore. These transactions are designated as cash flow hedges and are recorded in the accompanying consolidated balance sheet at fair value. The effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. Hedge ineffectiveness and the amounts excluded from effectiveness testing recognized in earnings on cash flow hedges were not material for the years ended December 31, 2015 and December 31, 2014.

The maximum length of time over which we hedge our exposure to the variability in future cash flows is 12 months. Accordingly, at December 31, 2015 and December 31, 2014, all of our open foreign exchange forward contracts had maturities of one year or less. The dollar equivalent gross notional amount of our foreign exchange forward contracts designated as cash flow hedges was approximately $1,800,000 at December 31, 2015 and $7,100,000 at December 31, 2014.

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Reclassifications of amounts from accumulated other comprehensive loss into earnings include accumulated gains (losses) at the time earnings are impacted by the forecasted transaction. The location in the consolidated statements of operations and consolidated statements of comprehensive loss and amounts of gains and losses related to derivative instruments designated as cash flow hedges are as follows:

	Year Ended December 31, 2015	
(In thousands)	Pretax Loss Recognized in Other Comprehensive Loss on Effective Portion of Derivative	Pretax Loss Recognized in Earnings on Effective Portion of Derivative as a Result of Reclassification from Accumulated Other Comprehensive Loss
Cost of revenues	$(185)	$(352)
Research and development	(71)	(118)
Selling, general and administrative	(42)	(93)
Total	$(298)	$(563)

	Year Ended December 31, 2014	
(In thousands)	Pretax Loss Recognized in Other Comprehensive Loss on Effective Portion of Derivative	Pretax Loss Recognized in Earnings on Effective Portion of Derivative as a Result of Reclassification from Accumulated Other Comprehensive Loss
Cost of revenues	$(252)	$(60)
Research and development	(76)	(21)
Selling, general and administrative	(71)	(22)
Total	$(399)	$(103)

Amounts recorded in accumulated other comprehensive loss for the after tax net unrealized gain or loss associated with cash flow hedging instruments was a loss of $147,000 as of December 31, 2015 and a loss of $412,000 as of December 31, 2014. We expect to reclassify the December 31, 2015 pre-tax net unrealized loss of $90,000 recorded in accumulated other comprehensive loss to earnings over the next 12 months with the impact offset by cash flows from underlying hedged items. The fair value of our foreign exchange forward contracts representing losses in the amount of $78,000 as of December 31, 2015 and $352,000 as of December 31, 2014 have been recorded in accrued expenses. Additional information with respect to the impact of derivative instruments on other comprehensive loss is included in Note 5. Additional information with respect to the fair value of derivative instruments is included in Note 6.

Our foreign exchange forward contracts contain credit risk to the extent that our bank counter-parties may be unable to meet the terms of the agreements. We minimize such risk by limiting our counter-parties to major financial institutions. We do not expect material losses as a result of defaults by other parties.

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NOTE 5 – COMPREHENSIVE LOSS

Reclassification adjustments are made to avoid double counting for items included in comprehensive loss that are also recorded as part of net loss. Reclassifications to earnings related to cash flow hedging instruments are discussed in Note 4. We have recorded a valuation allowance against all of our United States and Singapore based deferred tax assets. Accordingly, we do not expect to record a tax provision for items of other comprehensive loss until such time as the valuation allowance is substantially reduced. The effect of the reclassifications from comprehensive loss to earnings by line items is as follows:

Details about Components of Accumulated Other Comprehensive Loss	Amount Reclassified from Accumulated Other Comprehensive Loss Year Ended		Affected Line Item in the Statements of Operations
(In thousands)	2015	2014	
Unrealized gains on available-for-sale securities	$—	$2	Interest income and other
	—	—	Income tax provision (benefit)
	$—	$2	Net of tax
Unrealized losses on foreign exchange forward contracts	$(352)	$(60)	Cost of revenues
	(118)	(21)	Research and development expenses
	(93)	(22)	Selling, general and administrative expenses
	(563)	(103)	Total before tax
	—	—	Income tax provision (benefit)
	$(563)	$(103)	Net of tax

At December 31, 2015 and December 31, 2014 components of accumulated other comprehensive loss is as follows:

(In thousands)	Foreign Currency Translation Adjustments	Available-for-Sale Securities	Foreign Exchange Forward Contracts	Accumulated Other Comprehensive Loss
Balances at December 31, 2013	$(456)	$32	$(116)	$ (540)
Other comprehensive income (loss) before reclassifications	(464)	31	(399)	(832)
Amounts reclassified from accumulated other comprehensive loss	—	(2)	103	101
Net current period other comprehensive income (loss)	(464)	29	(296)	(731)
Balances at December 31, 2014	$(920)	$61	$(412)	$ (1,271)
Other comprehensive loss before reclassifications	(625)	(78)	(298)	(1,001)
Amounts reclassified from accumulated other comprehensive loss	—	—	563	563
Net current period other comprehensive income (loss)	(625)	(78)	265	(438)
Balances at December 31, 2015	$(1,545)	$(17)	$(147)	$ (1,709)

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NOTE 6 – FAIR VALUE MEASUREMENTS

We determine the fair value of our assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. We use a fair value hierarchy with three levels of inputs, of which the first two are considered observable and the last unobservable, to measure fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1). The next highest priority is based on quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in non-active markets or other observable inputs (Level 2). The lowest priority is given to unobservable inputs (Level 3). The following provides information regarding fair value measurements for our marketable securities and foreign exchange forward contracts as of December 31, 2015 and December 31, 2014 according to the three-level fair value hierarchy.

	Fair Value Measurements at December 31, 2015 Using			
(In thousands)	Balance December 31, 2015	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities:				
U.S. government and agency obligations	$10,468	$—	$10,468	$—
Corporate debt securities and certificates of deposit	2,113	—	2,113	—
Asset backed securities	699	—	699	—
Equity security	53	53	—	—
Total marketable securities	$13,333	$53	$13,280	$—
Derivative instruments-liabilities:				
Foreign exchange forward contracts	$78	$—	$78	$—

	Fair Value Measurements at December 31, 2014 Using			
(In thousands)	Balance December 31, 2014	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities:				
U.S. government and agency obligations	$9,139	$—	$9,139	$—
Corporate debt securities and certificates of deposit	3,772	—	3,772	—
Asset backed securities	2,156	—	2,156	—
Equity security	107	107	—	—
Total marketable securities	$15,174	$107	$15,067	$—
Derivative instruments-liabilities:				
Foreign exchange forward contracts	$352	$—	$352	$—

During the years ended December 31, 2015 and 2014 there were no transfers within the three level hierarchy. A significant transfer is recognized when the inputs used to value a security have been changed which merit a transfer between the disclosed levels of the valuation hierarchy.

The fair value for our U.S. government and agency obligations, corporate debt securities and certificates of deposit and asset backed securities are determined based on valuations provided by external investment managers who obtain them from a variety of industry standard data providers. The fair value for our equity security is based on a quoted market price obtained from an active market.

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The fair value for our foreign exchange forward contracts is based on foreign currency spot and forward rates obtained from reputable financial institutions, with resulting valuations periodically validated by obtaining foreign currency spot rate and forward quotes from other industry standard sources or third party or counterparty quotes. The fair value of our foreign exchange forward contracts representing losses in the amount of $78,000 as of December 31, 2015 and $352,000 as of December 31, 2014 have been recorded in accrued expenses.

The carrying amounts of financial instruments such as cash equivalents, accounts receivable, other assets, accounts payable, accrued expenses and other liabilities approximate their related fair values due to the short-term maturities of these instruments. Non-financial assets such as equipment and leasehold improvements, goodwill and intangible assets are subject to non-recurring fair value measurements if they are deemed impaired. We had no re-measurements of non-financial assets to fair value in 2015 or 2014.

NOTE 7 – STOCK-BASED COMPENSATION

We have four stock-based compensation plans, including two stock incentive plans that are administered under the supervision of the Compensation Committee of the Board of Directors and under which we have granted options and restricted stock units to officers, directors and other employees, an employee stock purchase plan administered by the Committee, and a stock grant plan for directors that provides for automatic grants of shares of our common stock. New shares are issued for all option exercises, upon vesting of restricted stock units, for share issuances to board members and for issuances under our employee stock purchase plan.

Stock Incentive Plans

As of December 31, 2015, there were 778,105 shares of common stock reserved in the aggregate for issuance of awards to employees, officers and others under our two stock incentive plans. Although our Compensation Committee has authority to issue options, restricted stock, restricted stock units, share grants and other share based benefits under these plans, it has only issued restricted stock units and options under the plans during the past ten years. As of December 31, 2015, there were 153,290 shares of common stock available for awards that may be granted under these plans in the future to employees, officers and others. Reserved shares underlying outstanding awards, including options and restricted shares, that are forfeited are available under our active stock incentive plan for future grant.

Stock Options

Options are granted under our plans at an option price per share equal to or greater than the market value of our common stock on the date of grant. Generally, options granted to employees vest over a four-year period and expire seven years after the date of grant. The plans allow for option holders to tender shares of our common stock as consideration for the option price, provided that the tendered shares have been held by the option holder at least six months.

The following is a summary of stock option activity for the year ended December 31, 2015:

	Options Outstanding	Weighted Average Exercise Price Per Share
Outstanding, December 31, 2014	578,901	$8.30
Granted	141,000	7.18
Exercised	(72,651)	6.30
Expired	(61,750)	11.17
Forfeited	(15,000)	7.13
Outstanding, December 31, 2015	570,500	$8.00
Exercisable, December 31, 2015	194,127	$8.51

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The intrinsic value of an option is the amount by which the fair value of the underlying stock exceeds its exercise price. For options outstanding at December 31, 2015, the weighted average remaining contractual term of all outstanding options was 5.01 years and their aggregate intrinsic value was $276,000. At December 31, 2015, the weighted average remaining contractual term of options that were exercisable was 3.29 years and their aggregate intrinsic value was $118,000. The aggregate intrinsic value of stock options exercised was $182,000 in 2015 and $263,000 in 2014. We received proceeds from stock option exercises of $458,000 in 2015 and $628,000 in 2014. No tax benefit was realized from the exercise of these stock options and no amounts were credited to additional paid-in capital. The total fair value of shares that vested in 2015 was $264,000 and the total fair value of shares that vested in 2014 was $209,000.

The fair value of stock options granted to our employees was estimated on the date of grant using the Black-Scholes model. The Black-Scholes valuation model incorporates ranges of assumptions that are disclosed in the table below. The risk-free interest rate is based on the United States Treasury yield curve at the time of grant with a remaining term equal to the expected life of the awards. We estimated the expected term for our graded vesting options, representing the length of time in years that the options are expected to be outstanding, using historical experience. Expected volatility was computed based on historical fluctuations in the daily price of our common stock.

For stock options granted in the two year period ended December 31, 2015, we utilized the fair value of our common stock on the date of grant and employed the following key assumptions in computing fair value using the Black-Scholes option-pricing model:

	2015	2014
Risk-free interest rates	1.56%	1.55% - 1.69%
Expected life in years	5.01 - 5.11	5.12 - 5.48
Expected volatility	40.82%	42.45% - 46.90%
Dividend yield	0.00%	0.00%
Weighted average fair value on grant date	$2.73	$3.55

Restricted Stock Units

Restricted stock units are valued at a price equal to the market value of our common stock on the date of grant, vest over a four year period provided the employee is still working for the company and entitle the holders to one share of our common stock for each restricted stock unit. There were 18,250 restricted stock units granted in 2015 and their weighted average grant date fair value was $7.18 each. There were 35,450 restricted stock units granted in 2014 and their weighted average grant date fair value was $8.12 each. The aggregate fair value of outstanding restricted stock units based on the closing share price of our common stock as of December 31, 2015 was $416,000. The aggregate fair value of restricted stock units that vested, based on the closing share price of our common stock on the vesting date, was $129,000 for the year ended December 31, 2015 and $112,000 for the year ended December 31, 2014.

A summary of activity in non-vested restricted stock units for the year ended December 31, 2015 is as follows:

Non-vested restricted stock units	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2014	53,718	$7.43
Granted	18,250	7.18
Vested	(15,321)	7.36
Forfeited	(2,332)	6.10
Non-vested at December 31, 2015	54,315	$7.43

Employee Stock Purchase Plan

We have an Employee Stock Purchase Plan available to eligible U.S. employees. Under terms of the plan, eligible employees may designate from 1% to 10% of their compensation to be withheld through payroll deductions, up to a maximum of $6,500 in each plan year, for the purchase of common stock at 85% of the lower of the market value of our common stock on the first or last day of the offering period. There were 35,845 shares issued under this plan in the

year ended December 31, 2015 and 22,324 shares issued in the year ended December 31, 2014. As of December 31, 2015, 95,757 shares remain available for future issuance under this plan.

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Stock Grant Plan for Non-Employee Directors

Our stock grant plan for non-employee directors provides for automatic grants of 1,000 shares of our common stock to each of our non-employee directors upon their re-election to the Board of Directors. The plan provides for a total of 60,000 shares of our common stock for issuance to directors and will expire on May 19, 2018. Share issuances under the stock grant plan for non-employee directors were 4,000 shares of common stock in the year ended December 31, 2015 and 4,000 shares in the year ended December 31, 2014. The shares issued in 2015 had a fair market value on the date of grant equal to $41,000 (weighted average grant date fair value of $10.36). The shares issued in 2014 had a fair market value on the date of grant equal to $32,000 (weighted average grant date fair value of $8.05). As of December 31, 2015, 28,000 shares of common stock are reserved in the aggregate for future issuance under this plan.

Stock Based Compensation Information

Pre-tax stock-based compensation expense for 2015 included $398,000 for stock options and restricted stock units, $72,000 for our employee stock purchase plan, and $41,000 for 4,000 shares issued to board members for compensation purposes. Pre-tax stock-based compensation expense for 2014 included $356,000 for stock options and restricted stock units, $48,000 for our employee stock purchase plan, and $32,000 for 4,000 shares issued to board members for compensation purposes.

(In thousands)	2015	2014
Pre-tax stock-based compensation expense	$511	$436
Income tax benefits related to stock-based compensation	$—	$—

We use historical data to estimate pre-vesting forfeitures. At December 31, 2015, the total unrecognized compensation cost related to non-vested stock-based compensation arrangements was $1,413,000 and the related weighted average period over which such cost is expected to be recognized is 2.45 years.

NOTE 8 – NET LOSS PER SHARE

Net loss per basic and diluted share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Common equivalent shares consist of common shares to be issued upon exercise of stock options, vesting of restricted stock units and the purchase of shares under our employee stock purchase plan, as calculated using the treasury stock method. All common equivalent shares are excluded from the calculation of net loss per diluted share due to their anti-dilutive effect. As a result, no common equivalent shares were included in the calculation of net loss per diluted share for the years ended December 31, 2015 or December 31, 2014. The components of net loss per basic and diluted share are as follows:

(In thousands except per share amounts)	Net Loss	Weighted Average Shares Outstanding	Per Share Amount
Year Ended 12/31/2015:			
Basic	$(2,089)	6,706	$(0.31)
Dilutive effect of common equivalent shares	—	—	—
Dilutive	$(2,089)	6,706	$(0.31)

(In thousands except per share amounts)	Net Loss	Weighted Average Shares Outstanding	Per Share Amount
Year Ended 12/31/2014:			
Basic	$(1,487)	6,576	$(0.23)
Dilutive effect of common equivalent shares	—	—	—
Dilutive	$(1,487)	6,576	$(0.23)

The calculation of diluted net loss per common share excludes 587,000 potentially dilutive shares for the year ended December 31, 2015 and 683,000 potentially dilutive shares for the year ended December 31, 2014, because their effect would be anti-dilutive.

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NOTE 9 – OTHER FINANCIAL STATEMENT DATA

Inventories consist of the following:

(In thousands)	December 31, 2015	2014
Raw materials and purchased parts	$6,787	$6,581
Work in process	508	503
Finished goods	5,970	4,573
Total inventories	$13,265	$11,657

Equipment and leasehold improvements consist of the following:

(In thousands)	December 31, 2015	2014
Equipment	$12,500	$12,382
Leasehold improvements	1,588	1,615
	14,088	13,997
Accumulated depreciation and amortization	(11,720)	(11,079)
	$2,368	$2,918

Total depreciation and amortization expense related to equipment and leasehold improvements was $1,177,000 for the year ended December 31, 2015 and $1,081,000 for the year ended December 31, 2014.

Intangible assets consist of the following:

	December 31, 2015			December 31, 2014		
(In thousands)	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Patents	$2,513	$(2,253)	$260	$2,625	$(2,338)	$287
Software	206	(53)	153	206	(23)	183
Marketing assets and customer relationships	101	(21)	80	101	(10)	91
Non-compete agreements	101	(45)	56	101	(20)	81
	$2,921	$(2,372)	$549	$3,033	$(2,391)	$642

Amortization expense for the years ended December 31, 2015 and 2014 is as follows:

	Year Ended December 31,		Weighted Avg. Remaining Life-Years at
(In thousands)	2015	2014	December 31, 2015
Patents	$110	$113	3.0
Software	29	23	5.2
Marketing assets and customer relationships	12	10	6.8
Non-compete agreements	25	20	2.2
	$176	$166	

Amortization of patents has been classified as research and development expense in the accompanying consolidated statement of operations. Estimated aggregate amortization expense based on current intangible assets for the next five years is expected to be as follows: $163,000 in 2016, $138,000 in 2017, $85,000 in 2018, $62,000 in 2019 and $62,000 in 2020.

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Accrued expenses consist of the following:

	December 31,	
(In thousands)	2015	2014
Wages and benefits	$1,014	$1,715
Warranty liability	584	750
Other	361	647
	$1,959	$3,112

Other liabilities consist of the following:

	December 31,	
(In thousands)	2015	2014
Deferred rent	$204	$285
Warranty liability	61	89
Deferred warranty revenue	3	26
	$268	$400

Warranty costs:

We provide for the estimated cost of product warranties, which cover products for periods ranging from one to three years, at the time revenue is recognized. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of component suppliers, warranty obligations are affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required and could be material. Our warranty liability is included as a component of accrued expenses. At the end of each reporting period we revise our estimated warranty liability based on these factors.

A reconciliation of the changes in our estimated warranty liability is as follows:

	Year Ended December 31,	
(In thousands)	2015	2014
Balance at beginning of period	$839	$513
Accrual for warranties	441	1,171
Assumed in acquisition	—	5
Warranty revision	(19)	12
Settlements made during the period	(616)	(862)
Balance at end of period	645	839
Current portion of estimated warranty liability	(584)	(750)
Long-term estimated warranty liability	$61	$89

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Deferred warranty revenue:

The current portion of our deferred warranty revenue is included as a component of advance customer payments. A reconciliation of the changes in our deferred warranty revenue is as follows:

	Year Ended December 31,	
(In thousands)	2015	2014
Balance at beginning of period	$475	$444
Revenue deferrals	353	338
Assumed in acquisition	—	89
Amortization of deferred revenue	(629)	(396)
Total deferred warranty revenue	199	475
Current portion of deferred warranty revenue	(196)	(449)
Long-term deferred warranty revenue	$3	$26

NOTE 10 – GOODWILL

There was no change in our goodwill balance in 2015. Goodwill increased by $797,000 in 2014 due to our acquisition of LDI. Adjustments to provisional amounts reflected in our March 31, 2014 consolidated balance sheet for the LDI acquisition resulted in a $46,000 increase to goodwill in the three months ended June 30, 2014.

We assess our goodwill for impairment in the fourth quarter of each year, and whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

In evaluating whether goodwill was impaired, we compared our fair value to our net book value or carrying value (Step 1 of the impairment test). In calculating fair value, we used the income approach. The income approach is a valuation technique under which we estimate future cash flows using financial forecasts. Future estimated cash flows are discounted to their present value to calculate fair value. When considering fair value, we also gave consideration to the control premium in excess of our current market capitalization that might be obtained from a third party acquirer. In the situation where net book value or carrying value exceeds fair value, the amount of impairment loss must be measured. The measurement of impairment (Step 2 of the impairment test) is calculated by determining the implied fair value of goodwill, which equals the excess of any remaining fair value over the fair values assigned to other assets and liabilities. Goodwill impairment is measured as the excess of the carrying amount of goodwill over its implied fair value.

In determining fair value under the income approach, our expected cash flows are affected by various assumptions. Fair value on a discounted cash flow basis uses our business plan and projections as the basis for expected future cash flow forecasts, with an estimation of residual growth rates thereafter. For our 2015 and 2014 goodwill impairment tests, we utilized a 15% discount rate and our terminal value was based on a multiple equal to 6 times our projected future earnings before interest, taxes, depreciation and amortization. We believe the significant assumptions used in our 2015 and 2014 goodwill impairment tests, including a 15% discount rate, are reflective of the assumptions currently used in the marketplace to evaluate fair value. Our recent analyses indicate that our goodwill at December 31, 2015 and 2014 in the amount of $1,366,000 is not impaired.

NOTE 11 – INCOME TAXES

Loss before income taxes consists of the following:

	Year Ended December 31,	
(In thousands)	2015	2014
Sources of income (loss) before income taxes:		
United States	$(2,994)	$(2,536)
Foreign	933	1,182
Total loss before income taxes	$(2,061)	$(1,354)

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The provision (benefit) for income taxes consists of the following:

	Year Ended December 31,	
(In thousands)	2015	2014
Current:		
Federal	$(14)	$(10)
State	4	13
Foreign	—	10
Total current	$(10)	$13
Deferred:		
Federal	$(4)	$73
State	1	1
Foreign	41	46
Total deferred	$38	$120
Total provision for income taxes	$28	$133

A reconciliation of the statutory rate to the effective income tax rate is as follows:

	Year Ended December 31,	
	2015	2014
Federal statutory rate	34.0 %	34.0 %
State income taxes, net of federal benefit	(0.2)	6.4
U.S. Subpart F income	(1.0)	(2.6)
Dividend - foreign affiliate	(28.9)	—
Stock based compensation	(1.4)	(1.1)
Research and experimentation credit	4.6	7.8
Foreign rate difference	17.8	34.1
Reserve for income taxes	0.7	0.7
Valuation allowance	(26.1)	(86.6)
Other, net	(0.8)	(2.5)
Effective tax rate	(1.3)%	(9.8)%

Our effective tax rate for 2015 and 2014 reflects the impact of having a significant portion of our operations in Singapore where corporate income tax rates are substantially lower than the United States. Lower tax rates in foreign jurisdictions impacted our income tax rate by 17.8% in 2015 and 34.1% in 2014. Receipt of a dividend from our wholly owned subsidiary in Singapore impacted our income tax rate by a negative 28.9% in 2015.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits (“UTB”) is as follows:

	Year Ended December 31,	
(In thousands)	2015	2014
Gross UTB balance at beginning of year	$1,508	$1,408
Additions based on tax positions related to the current year	186	165
Additions for tax positions of prior years	289	—
Reductions for tax positions of prior years	(78)	(48)
Reductions due to lapse of applicable statute of limitations	(18)	(17)
Gross UTB balance at end of year	$1,887	$1,508
Net UTB balance at end of year	$126	$140

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The ending net UTB results from adjusting the gross balance for items such as federal, state, and non-U.S. deferred items, interest and penalties, and deductible taxes. The net UTB is a long-term income tax reserve within our consolidated balance sheets. We recognize interest and penalties related to unrecognized tax benefits in tax expense. Accrued interest and penalties on a gross basis were $1,000 as of December 31, 2015 and $6,000 as of December 31, 2014.

During the year ended December 31, 2015 we recorded a $14,000 decrease in our liability for uncertain tax positions that was recorded as an income tax benefit. Estimated gross interest and penalties included in this amount were $5,000. During the year ended December 31, 2014 we recorded a $10,000 decrease in our liability for uncertain tax positions that was recorded as an income tax benefit. Estimated gross interest and penalties included in this amount were $6,000.

We file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. Our federal income tax returns for years after 2011 are still subject to examination by the Internal Revenue Service. We are no longer subject to state and local income tax examinations by tax authorities for years prior to 2011. Our 2012 income tax return for Singapore is currently being audited by the Inland Revenue Authority of Singapore. We do not presently anticipate that the outcome of this audit will have any impact on our financial position or results of operations.

Deferred tax assets and liabilities consist of the following:

	December 31, 2015		December 31, 2014	
(In thousands)	Assets	Liabilities	Assets	Liabilities
Equipment, leaseholds and intangible amortization, net	$377	$367	$464	$256
Inventory allowances	797	6	653	—
Accrued expenses	286	—	353	—
Warranty accrual	222	—	289	—
Deferred revenue	686	—	300	—
Accounts receivable allowance	179	—	194	—
Federal and state tax credits	3,319	—	3,175	—
Federal and state net operating loss carry forwards	4,379	—	4,296	—
Foreign net operating loss carry forwards	394	—	419	—
Stock based compensation	331	—	391	—
Unrealized gains and losses - other comprehensive loss	—	35	115	—
Other, net	73	—	137	—
Subtotal	11,043	408	10,786	256
Valuation allowance	(10,644)	—	(10,500)	—
Total deferred tax assets and liabilities	$399	$408	$286	$256

We currently have significant deferred tax assets as a result of temporary differences between taxable income on our tax returns and U.S. GAAP income, research and development tax credit carry forwards and federal, state and foreign net operating loss carry forwards. A deferred tax asset generally represents future tax benefits to be received when temporary differences previously reported in our consolidated financial statements become deductible for income tax purposes, when net operating loss carry forwards are applied against future taxable income, or when tax credit carry forwards are utilized on our tax returns. We assess the realizability of our deferred tax assets and the need for a valuation allowance based on the guidance provided in current financial accounting standards.

Significant judgment is required in determining the realizability of our deferred tax assets. The assessment of whether valuation allowances are required considers, among other matters, the nature, frequency and severity of any current and cumulative losses, forecasts of future profitability, the duration of statutory carry forward periods, our experience with loss carry forwards not expiring unused and tax planning alternatives.

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At December 31, 2015, we concluded that a $10,644,000 valuation allowance is needed for all of our United States and Singapore based deferred tax assets due to our recurring losses and financial outlook. In analyzing the need for a valuation allowance, we first considered our history of cumulative operating results for income tax purposes over the past three years in each of the tax jurisdictions where we operate, our financial performance in recent quarters, statutory carry forward periods and tax planning alternatives. Finally, we considered both our near and long-term financial outlook and timing regarding when we might return to profitability. After considering all available evidence both positive and negative, we concluded that the valuation allowance is needed for all of our U.S. and Singapore based deferred tax assets. A similar analysis was performed in 2014, resulting in a $10,500,000 valuation allowance at December 31, 2014 for substantially all of our United States and Singapore based deferred tax assets. Our valuation allowance increased by $144,000 in 2015 due to the increase in total deferred tax assets. At December 31, 2015, we had federal R&D tax credit carryforwards of $3,498,000 that will begin to expire in 2019 and a federal net operating loss carry forward of $11,875,000 that will begin to expire in 2022, if unused. At December 31, 2015, the amount of tax benefit from the exercise of stock options that will be recorded as a credit to stockholder's equity when realized is insignificant.

Deferred tax assets at December 31, 2015, include $58,000 for net operating loss carryforwards incurred in the UK by CyberOptics Ltd., which was acquired in 1999. A valuation allowance has not been recorded against these deferred tax assets. The utilization of these net operating loss carry forwards is dependent on CyberOptics Ltd.’s ability to generate sufficient UK taxable income during the carry forward period. We reduced our deferred tax asset for UK net operating loss carry forwards by $6,000 in 2015 due to reductions in the future UK income tax rate.

Cash payments for income taxes, net of refunds received, were $16,000 for the year ended December 31, 2015. Cash payments for income taxes, net of refunds received, were $6,000 for the year ended December 31, 2014.

During 2015, our wholly owned Singapore subsidiary repatriated approximately $3,600,000 to our U.S. based parent, of which approximately $1,900,000 had been previously taxed. We were able to accomplish the repatriation without having to pay cash taxes given available U.S. net operating loss carryforwards. For this reason and given our current tax situation, we concluded that a one-time repatriation of funds was appropriate. It is our intention to permanently reinvest the remaining undistributed earnings of our international subsidiaries. Accordingly, we have not recorded the related deferred tax liability of approximately $2,000,000 for U.S. based income taxes on these earnings. If we were to change our position on permanent reinvestment of undistributed earnings of our international subsidiaries, it is anticipated that any such change would not have a significant impact on our financial position or results of operations. This assessment is based on the amount of remaining undistributed earnings of international subsidiaries and the size of our available U.S. net operating loss carryforwards.

NOTE 12 – OPERATING LEASES

We lease a 50,724 square foot mixed office and warehouse facility in Golden Valley, Minnesota. The lease has a term of 90 months and expires on December 31, 2018. The lease contains an escalation clause and two renewal options of three years each. Rental expense, including the effects of lease incentives, is recognized on a straight-line basis over the term of the lease. We are also required to pay insurance, property taxes and other operating expenses related to the leased facility.

We lease a 10,165 square foot mixed office and warehouse facility in Bloomington, Minnesota. The lease was assumed on March 14, 2014 in connection with our purchase of LDI and expires on April 30, 2018. Rental expense, including the effects of lease incentives, is recognized on a straight-line basis over the term of the lease. We are also required to pay insurance, property taxes and other operating expenses related to the leased facility.

We lease a 19,805 square foot mixed office and warehouse facility in Singapore. The current lease contains an escalation clause and expires in July 2016. Rental expense is recognized on a straight-line basis over the three year lease term. We recently extended the lease for a period of one year expiring in July 2017. The new lease contains one three year renewal option. In addition, we lease facilities for the operations of our other subsidiaries under operating leases that expire at various times through June 2018.

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Total rent expense was $1,218,000 for the year ended December 31, 2015 and $1,299,000 for the year ended December 31, 2014. At December 31, 2015, the future minimum lease payments required under non-cancelable operating lease agreements are as follows:

Year ending December 31,	(In thousands)
2016	$777
2017	587
2018	529
Total	$1,893

NOTE 13 – 401(K) AND OTHER DEFINED CONTRIBUTION PLANS

We have a retirement savings plan pursuant to Section 401(k) of the Internal Revenue Code (the Code), whereby eligible employees may contribute a portion of their earnings, not to exceed annual amounts allowed under the Code. In addition, we may also make contributions at the discretion of the Board of Directors. We provided matching contributions to employees totaling $300,000 in 2015 and $227,000 in 2014.

We also contribute to defined contribution retirement savings plans on behalf of our employees in the United Kingdom. We made contributions to these plans totaling $33,000 in 2015 and $35,000 in 2014.

NOTE 14 – REVENUE CONCENTRATIONS, SIGNIFICANT CUSTOMERS, AND GEOGRAPHIC AREAS

The following summarizes our revenue by product line:

(In thousands)	2015	2014
SMT and High Precision 3D OEM Sensors	$13,022	$15,493
Semiconductor Sensors	7,677	7,595
SMT Inspection Systems	13,578	18,089
3D Scanning Solutions and Services	6,853	5,306
Total	$41,130	$46,483

The following summarizes certain significant customer information:

(In thousands)	Significant Customer	Percentage of Revenues	
Year ended December 31, 2015	A	10	%
	B	11	%
Year ended December 31, 2014	A	17	%
	B	8	%

Our LaserAlign® sensor family has historically accounted for a significant portion of our revenues and profitability. Revenue from product shipments of LaserAlign sensors accounted for 14% of our total revenue in 2015 and 20% in 2014. Our revenue, results of operations and cash flows would be negatively impacted if our LaserAlign customers are unsuccessful selling the products into which our sensors are incorporated, design their products to function without our sensors, purchase sensors from other suppliers, or otherwise terminate their relationships with us.

Export sales as a percentage of total sales were 72% for the year ended December 31, 2015 and 73% for the year ended December 31, 2014. Export sales are attributed to the country where the product is shipped. Substantially all of our export sales are negotiated, invoiced and paid in U.S. dollars.

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Revenue by geographic area is summarized as follows:

	Year Ended December 31,	
(In thousands)	2015	2014
United States	$11,452	$12,339
Americas	1,424	1,233
Netherlands	4,533	3,813
Other Europe	7,462	7,978
China	2,581	3,665
Japan	4,802	8,460
Other Asia	8,531	8,182
Other	345	813
Total revenues	$41,130	$46,483

Long-lived assets include equipment and leasehold improvements and intangible and other assets attributable to each geographic area’s operations. Long-lived assets at December 31, 2015 and 2014 are as follows:

(In thousands)	2015	2014
Long-lived assets:		
United States	$2,782	$3,245
Europe	2	8
Asia and other	133	307
Total long-lived assets	$2,917	$3,560

NOTE 15 – CONTINGENCIES

We are periodically a defendant in miscellaneous claims and disputes in the ordinary course of business. While the outcome of these matters cannot be predicted with certainty, management presently believes the disposition of these matters will not have a material effect on our financial position, results of operations or cash flows.

In the normal course of business to facilitate sales of our products and services, we at times indemnify other parties, including customers, with respect to certain matters. In these instances, we have agreed to hold the other parties harmless against losses arising out of intellectual property infringement or other types of claims. These agreements may limit the time within which an indemnification claim can be made, and almost always limit the amount of the claim. It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Historically, payments made, if any, under these agreements have not had a material impact on our operating results, financial position or cash flows.

NOTE 16 – SHARE REPURCHASE

In August 2015 our Board of Directors authorized a $2,000,000 share repurchase program. The common stock may be acquired from time to time in open market transactions, block purchases and other transactions complying with the Securities and Exchange Commission's Rule 10b-18. We adopted a 10b5-1 trading plan to implement the repurchase program. We did not repurchase any of our common stock in 2015.

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NOTE 17 – QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

(In thousands, except per share amounts)

2015	March 31	June 30	September 30	December 31
Revenues	$9,545	$10,254	$9,937	$11,394
Gross margin	4,561	4,569	4,239	4,772
Income (loss) from operations	(826)	(655)	(721)	39
Net loss	(781)	(761)	(514)	(33)
Net loss per share - Basic (1)	(0.12)	(0.11)	(0.08)	(0.00)
Net loss per share - Diluted (1)	(0.12)	(0.11)	(0.08)	(0.00)
2014	March 31	June 30	September 30	December 31
Revenues	$9,835	$13,263	$11,657	$11,728
Gross margin	4,568	5,867	5,296	5,454
Income (loss) from operations	(722)	(275)	(514)	34
Net income (loss)	(809)	(315)	(448)	85
Net income (loss) per share - Basic (1)	(0.12)	(0.05)	(0.07)	0.01
Net income (loss) per share - Diluted (1)	(0.12)	(0.05)	(0.07)	0.01

(1) The summation of quarterly per share amounts may not equal the calculation for the full year, as each quarterly calculation is performed discretely.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders

CyberOptics Corporation

We have audited the accompanying consolidated balance sheets of CyberOptics Corporation (a Minnesota corporation) and subsidiaries (the "Company") as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the two years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CyberOptics Corporation and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America.

/s/GRANT THORNTON LLP

Minneapolis, Minnesota

March 9, 2016

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

NONE.

ITEM 9A. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, in a manner that allows timely decisions regarding required disclosure.

(i). MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in the Exchange Act Rule 13a-15(f), and for performing an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2015. Internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by our board of directors, management, and other personnel 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 (GAAP) and 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 our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Management performed an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2015 based upon criteria in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, management determined that our internal control over financial reporting was effective as of December 31, 2015 based on the criteria in Internal Control-Integrated Framework (2013) issued by the COSO.

Because CyberOptics is a smaller reporting company, this annual report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting.

(ii). During the quarter ended December 31, 2015, there has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

NONE.

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PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information contained under the headings “Proposal I–Election of Directors,” “Information About our Board of Directors and its Committees and Other Corporate Governance Matters” and “Section 16(a) Beneficial Ownership Reporting Compliance” of the Company’s definitive proxy statement for its annual meeting of shareholders to be held May 20, 2016 (the Proxy Statement), is hereby incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information under the headings “Information About our Board of Directors and its Committees and Other Corporate Governance Matters–Compensation of Independent Directors,” and “Executive Compensation” of the Proxy Statement is hereby incorporated by reference.

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

The information contained under the headings “Shares Outstanding” and "Equity Compensation Plan Information" of the Proxy Statement is hereby incorporated by reference.

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

The information under the headings “Information About our Board of Directors and its Committees and Other Corporate Governance Matters –Committees of Our Board–Audit Committee” and "Related Person Transactions" of the Proxy Statement is hereby incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information under the heading “Independent Accountants and Payment of Fees” and “Information About our Board of Directors and its Committees and Other Corporate Governance Matters –Committees of Our Board–Audit Committee” of the Proxy Statement is hereby incorporated by reference.

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PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements: The Consolidated Financial Statements included in Item 8 to this Form 10-K consist of the following:

Consolidated Balance Sheets as of December 31, 2015 and 2014.
Consolidated Statements of Operations for the years ended December 31, 2015 and 2014.
Consolidated Statements of Comprehensive Loss for the years ended December 31, 2015 and 2014.
Consolidated Statements of Cash Flows for the years ended December 31, 2015 and 2014.
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2015 and 2014.
Notes to the Consolidated Financial Statements.

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(b) LIST OF EXHIBITS

Exhibit Number	Description
2.0	Asset purchase agreement by and among LDI Acquisition Corp., Laser Design Inc., GKS Services Corp., Innovative Design Group, Inc. 3D Scanning Technologies, Ltd., and certain shareholders of Laser Design, Inc. dated as of January 14, 2014 (incorporated by reference to Exhibit 2.0 to the Company's annual report on Form 10-K for the year ended December 31, 2013).
3.1	Articles of Incorporation of the Company, as amended (incorporated by reference to Exhibit 3.1 to the Company’s Annual Report on Form 10-K for the year ended December 31, 1997).
3.2	Bylaws of the Company (incorporated by reference to Exhibit 3.1 to the current report on Form 8-K dated September 8, 2008).
*4.1	CyberOptics Corporation Stock Option Plan for Non-Employee Directors, as amended (incorporated by reference to Exhibit 4.2 of the Company’s Registration Statement on Form S-8 filed August 10, 2006 (file no 333-136500)).
*4.2	CyberOptics Corporation 1998 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.1 to the Company’s Registration Statement on Form S-8 filed August 14, 2012 (file no. 333-183296)).
*4.3	CyberOptics Corporation Employee Stock Purchase Plan (incorporated by reference to Exhibit 4.1 of the Company’s Registration Statement on Form S-8 filed August 10, 2011 (file no 333-176196)).
*4.4	CyberOptics Corporation Stock Grant Plan for Non-Employee Directors (incorporated by reference to the Company's Registration Statement on Form S-8 filed August 13, 2014 (file no 333-198100) and Exhibit 4.1 of the Company’s Registration Statement on Form S-8 filed August 14, 2008 (file no 333-153015)).
10.1	Lease Agreement between FirstCal Industrial 2 Acquisitions LLC and the Company dated March 27, 2006 (incorporated by reference to Exhibit 10.1 to the Company’s quarterly report on Form 10-Q for the quarter ended March 31, 2006).
10.2	First Amendment to Lease effective as of March 14, 2011, by and between Hines REIT Minneapolis Industrial, LLC and CyberOptics Corporation (incorporated by reference to Exhibit 10.1 to the Company’s quarterly report on Form 10-Q for the quarter ended March 31, 2011).
*10.3	Severance Pay Agreement with Jeffrey A. Bertelsen (incorporated by reference to Exhibit 10.3 to the current report on Form 8-K dated May 19, 2008).
*10.4	Amendment to Severance Pay Agreement with Jeffrey A. Bertelsen (incorporated by reference to Exhibit 10.1 to the current report on Form 8-K dated May 18, 2009).
*10.5	Clarification to Severance Pay Agreement with Jeffrey A. Bertelsen (incorporated by reference to Exhibit 10.9 to the Company’s annual report on Form 10-K for the year ended December 31, 2011).
*10.6	Employment agreement with Subodh Kulkarni dated January 13, 2014 (incorporated by reference to Exhibit 10.12 to the Company's annual report on Form 10-K for the year ended December 31, 2013)
10.8	Tenancy agreement between RBC Investor Services Trust Singapore Limited and CyberOptics Singapore Private Limited dated April 4, 2013 (incorporated by reference to Exhibit 10 to the Company’s quarterly report on Form 10-Q for the quarter ended March 31, 2013).
10.9	Tenancy agreement between RBC Investor Services Trust Singapore Limited and CyberOptics Singapore Private Limited dated January 27, 2016.
*10.10	Form of stock option agreement used for option grants to employees (incorporated by reference to Exhibit 10.9 to the Company's annual report on Form 10-K for the year ended December 31, 2014).
*10.11	Form of restricted stock award agreement used for awards to employees (incorporated by reference to Exhibit 10.10 to the Company's annual report on Form 10-K for the year ended December 31, 2014).
21.0	Subsidiaries of the Company.
23.1	Consent of Independent Registered Public Accounting Firm.

31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.0	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.0	Financial statements formatted in Extensible Business Reporting Language: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statement of Operations, (iii) the Consolidated Statements of Comprehensive Loss, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Stockholders' Equity, and (vi) the Notes to the Consolidated Financial Statements.

* Management Contract or Compensatory Plan or Arrangement

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SIGNATURES

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

CYBEROPTICS CORPORATION

/s/ SUBODH KULKARNI
By Subodh Kulkarni, President and CEO

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

Name	Title	Date
/s/ SUBODH KULKARNI Subodh Kulkarni	President and CEO (Principal Executive Officer)	March 7, 2016
/s/ ALEX B. CIMOCHOWSKI Alex B. Cimochowski	Director	March 7, 2016
/s/ MICHAEL M. SELZER JR. Michael M. Selzer, Jr.	Chairman, Director	March 7, 2016
/s/ IRENE M. QUALTERS Irene M. Qualters	Director	March 7, 2016
/s/ CRAIG D. GATES Craig D. Gates	Director	March 7, 2016
/s/ JEFFREY A. BERTELSEN Jeffrey A. Bertelsen	Vice President, CFO, and COO (Principal Financial Officer and Principal Accounting Officer)	March 7, 2016