

CYBEROPTICS CORP  
Form 10-K  
March 10, 2011

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**SECURITIES AND EXCHANGE COMMISSION**  
WASHINGTON, D.C. 20549

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**FORM 10-K**

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ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) of the Securities Exchange Act of 1934 for the Year Ended December 31, 2010.

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)

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**CYBEROPTICS CORPORATION**

(Exact name of registrant as specified in its charter)

**Minnesota**

(State or other jurisdiction of incorporation or organization)

**41-1472057**

(I.R.S. Employer Identification No.)

**5900 Golden Hills Drive**

**MINNEAPOLIS, MINNESOTA**

(Address of principal executive offices)

**55416**

(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**

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

YES  NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

YES  NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company

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

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

YES  NO

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: \$65,698,809.

As of February 28, 2011, there were 6,891,350 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 23, 2011.

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**CYBEROPTICS CORPORATION**  
**FORM 10-K**  
**For the Fiscal Year Ended December 31, 2010**

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**PART I.**

**ITEM 1. DESCRIPTION OF BUSINESS**

**Background**

CyberOptics® Corporation was founded in 1984 to commercialize technology for non-contact three-dimensional sensing. Our headquarters are located at 5900 Golden Hills Drive in Golden Valley, Minnesota. Our website address is [www.cyberoptics.com](http://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](http://www.sec.gov). Proxy materials for our upcoming 2011 annual shareholders meeting to be held on May 23, 2011 may be accessed electronically via the internet at the following address: <http://www.idelivercommunications.com/proxy/cybe>.

We are a leading global supplier of optical process control sensors and inspection systems that are used to control the manufacturing process and to ensure the quality of electronic circuit boards manufactured by our customers using surface mount technology (SMT). We also manufacture and sell sensors that assist with yield improvement during semiconductor and photovoltaic (solar) cell fabrication. Our products assist the global SMT industry in meeting the rigorous quality demands for printed circuit board assembly and the global photovoltaic cell and semiconductor fabrication industries with their rigorous quality requirements. Using a variety of proprietary technologies such as lasers, optics and machine vision, combined with software, electronics and mechanical design, our products enable manufacturers to increase production volume, product yields and quality by measuring the characteristics and placement of components and other properties both during and after the manufacturing process.

Our business is organized into two operating segments. Our Electronic Assembly segment designs, manufactures and sells alignment and embedded inspection sensors and stand-alone inspection systems for the electronic assembly and photovoltaic cell equipment markets. Our Semiconductor segment designs, manufactures and sells optical and other process control sensors and related equipment for the semiconductor capital equipment market.

Most of our products (89% of revenue in 2010) are developed and sold for use in SMT electronic circuit board assembly or with equipment used in SMT electronic circuit board assembly or photovoltaic cell manufacturing as part of our Electronic Assembly segment. 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 and photovoltaic cell manufacturing companies, and as complete stand-alone systems that are sold directly to circuit board assembly companies.

Our 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 solder paste screen printer companies to align stencils with circuit boards. We also sell alignment sensors to a manufacturer of photovoltaic cell equipment to perform accurate high-speed wafer alignment measurements within the wafer print nest.

Our stand-alone inspection system products are sold to original design manufacturers and other companies with surface mount assembly lines, to control quality as in-line systems. These stand-alone system products are used by manufacturers of circuit boards 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. Our embedded inspection sensors are sold to manufacturers of pick-and-place machines and solder paste screen printers for integration into their equipment and offer some, but not all, of the inspection functionality of our stand-alone inspection systems. Manufacturers of DRAM and Flash memory also use our stand alone system products to inspect assembly of their memory modules.

Our Semiconductor segment develops and sells products that assist with yield improvement in semiconductor fabrication, and for use with the robotic equipment that handles semiconductor wafers during the semiconductor fabrication process. In addition, we sell frame grabber products for general industrial applications. Semiconductor products were 11% of total revenues in 2010.

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**Market Conditions Recent Developments of the Business**

Our operations are heavily influenced by market conditions in worldwide electronics markets, and particularly in the SMT electronic assembly segment of these markets. Historically, these markets have been very cyclical, with periods of strong growth followed by periods of excess capacity and reduced levels of capital spending.

Our results were favorably impacted in 2006 and 2007 as the worldwide demand for cell phones, smart phones, laptops and other consumer electronics remained strong, driving the need for increased production of printed circuit boards and memory modules, and thereby increasing demand for our electronic assembly and semiconductor products. After peaking in the third quarter of 2007, our revenue declined sequentially each quarter through the first quarter of 2009, as our results were negatively impacted by reduced levels of capital spending for electronics manufacturing capacity brought about by the deepening weakness in the global economy. New orders dropped off sharply late in the fourth quarter of 2008 as the global economy fell into a severe recession, and our results for 2009 were adversely affected by the ongoing weakness in the global electronics market.

Even before the recession, we worked to improve the efficiencies of our operations. In February 2008, we commenced plans to move a significant portion of our systems-related product development and final assembly and integration to Singapore. The transition of these functions to Singapore was substantially complete by the end of the first quarter of 2009 and has resulted in lower costs and a more focused R&D effort. Further, we consolidated manufacturing operations for our semiconductor products into our Minneapolis, Minnesota headquarters facility. Implementation of these actions to improve the efficiency of our operations has not impacted any of our strategic growth programs.

We believe that continued and timely development of new products and enhancements to existing products is essential to growing our position in the market. We commit substantial resources to research and development efforts, which play a critical role in maintaining and advancing our position as a leading provider of optical sensors and systems. During the past several years, research and development efforts have been focused on a number of development activities that are critical to our future growth and success, including the following:

Our stand-alone next generation SE500 solder paste inspection system and our new next generation QX500 automated optical inspection (AOI) system.

A new mid-range SE350 solder paste inspection system based on the 3D inspection technology used in the SE500. The SE350 is a lower cost system for customers that do not require the full inspection functionality of the SE500.

Our common hardware platforms and sensor technology utilized in both our new QX500 automated optical inspection (AOI) system and a new embedded inspection solution we have developed for DEK offering 100% 2D solder paste inspection with no cycle time penalty.

Our Embedded Process Verification (EPV®) technology.

A new solar wafer alignment camera capable of performing accurate high-speed alignment measurements within the wafer print nest, including traditional wafer edge alignment of both monocrystalline and polycrystalline wafer materials.

Continued investment in our highly profitable WaferSense line of products.

The global electronics market strengthened significantly in 2010. We experienced particularly strong demand in the second quarter of 2010, as pent-up demand and an improving economy led to significantly increased sales of alignment sensors and our stand-alone solder paste inspection and AOI systems. Sales of sensors continued at these strong levels throughout the remainder of 2010, while systems sales moderated to more normal levels.

We believe that improving market conditions, the efficiencies in operations we have implemented, and the new products we have introduced and anticipate introducing in the next year, will generate significant sales and improved margins, and will allow us to address the various price points desired by our customers within the electronic assembly market. We also believe the greater efficiencies we are realizing through our strategic repositioning in Asia, will lead to improved operating results in 2011 and future periods. For the year ending December 31, 2011, we are forecasting net income of \$.60-\$.70 per share on revenue of \$60-\$65 million. Nevertheless, 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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**Objective**

Our objective is to develop monitoring and process control solutions that improve the quality and efficiency of our customers manufacturing operations. We intend to build upon our innovative products in systems for solder paste inspection, automated optical inspection and component alignment, with new sensing products that will be embedded inside SMT production equipment. We eventually intend to tie these products together as a full-line process control solution. We believe our new embedded process verification (EPV) sensor and strobe inspection module (SIM) will eventually gain acceptance among manufacturers of pick-and-place machines and solder paste screen printers as a further enhancement to inspection and control. Our research and development efforts are creating new inspection technologies for both OEM and end user markets which we believe will lower the cost of inspection and provide faster production through-put speeds, better ease of use, and improved resolution for inspecting progressively smaller electronic components. In addition, we expect that our research and development efforts will have applicability to new markets, including photovoltaic (solar) cell manufacturing and printed electronics, among others.

During the last several years, our Semiconductor segment continued to invest in our WaferSense product line, a family of wireless, wafer-like precision measurement tools for in-situ setup, calibration and process optimization in semiconductor processing equipment. Our first WaferSense product, the Automatic Leveling Sensor (ALS) was introduced late in 2004. Since that time, we have introduced several new additions to the WaferSense family of products, including gapping, teaching and vibration sensors that improve up-time and yield for semiconductor manufacturers. Currently we are working on the newest addition to the product line, a particle sensor.

**OPERATIONS AND PRODUCTS**

We develop, manufacture and sell intelligent, non-contact sensors and systems for process control and inspection. Our products are used primarily in the SMT electronic assembly, semiconductor and photovoltaic cell fabrication industries and enable manufacturers to increase operating efficiencies, product yields and 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 product offerings are sold both to original equipment manufacturers that supply the SMT and photovoltaic cell fabrication industries and to end-user customers who use our SMT systems and WaferSense products directly for process and quality control in the circuit board manufacturing and semiconductor fabrication processes.

**SMT Electronic Assembly Alignment Sensors**

Our SMT electronic assembly alignment sensors product line, which has generated the largest component of our sales during the past ten years, 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 original equipment manufacturer customers to integrate sensors into their equipment.

Sales of these products, including service repairs, to Juki Corporation accounted for approximately 21% of our revenue in 2010 and 8% of our revenue in 2009. Sales of these products, including service repairs, to Assembleon B.V. accounted for approximately 14% of our revenue in 2010 and 16% of our revenue in 2009. Accordingly, revenues and operations are currently heavily influenced by the level of purchases from these two customers and by the cyclical nature of the SMT production industry.

**LaserAlign.** Our LaserAlign sensor family has accounted for the vast majority of sales in the SMT electronic assembly alignment sensors product line. These sensors are sold for incorporation into component placement machines used in the SMT production lines that are manufactured by a number of different OEM customers.

The LaserAlign family of products aligns extremely small surface mount components, known as chip capacitors and resistors, during transport on a pick-and-place machine prior to placement on a circuit board. LaserAlign sensors are incorporated into the placement heads of component placement machines to ensure accurate component placement at high production speeds. Various high-speed component placement 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 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.

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The LaserAlign sensor is offered in several different configurations to satisfy the requirements of the different machines on which it is used. The latest version of the LaserAlign sensor technology was introduced in 2006 in a 5<sup>th</sup> generation sensor for Juki Corporation. Revenue from new product shipments of LaserAlign sensors has been a principal contributor to revenue during the past five years and accounted for 27% of our revenue in 2010 and 13% in 2009.

**BoardAlign Camera (BA Camera).** The BA Camera, which is incorporated directly into the placement head of component placement machines, identifies fiducial markings on a circuit board and aligns the board in the component placement machine prior to component placement. The BA Camera was introduced in a sensor for Assembleon B.V. during 2003 and is incorporated into the latest version of Assembleon's component placement machine. Revenue from shipments of BA Camera sensors to Assembleon B.V. accounted for 7% of our revenue in 2010 and 6% in 2009.

**InPrinter Inspection Camera.** The InPrinter Inspection Camera, which is mounted directly in screen printers manufactured by DEK International GmbH, identifies 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 International GmbH during the third quarter of 2005. Revenue from shipments of the InPrinter Inspection Camera accounted for 5% of our revenue in 2010 and 5% in 2009.

#### **Photovoltaic Cell Alignment Sensors**

**Solar Wafer Alignment Camera.** The Solar Wafer Alignment Camera performs accurate high-speed alignment measurements within the wafer print nest and can align a broad range of wafer technologies, including selective emitter, metal wrap-through, and print-on-print. This camera also has the ability to perform traditional wafer edge alignment of both monocrystalline and polycrystalline wafer materials. The Solar Wafer Alignment Camera was introduced for DEK International GmbH during the first quarter of 2010. Revenue from shipments of the Solar Wafer Alignment Camera accounted for 3% of our revenue in 2010.

#### **Embedded Inspection Solutions**

**Embedded Process Verification.** Juki Corporation, our largest LaserAlign customer, has incorporated our embedded process verification, or EPV, inspection technology into its KE-2070 robotic assembly platform. Equipped with our EPV inspection technology, the KE-2070 is the industry's first robotic assembly machine capable of inspecting for the presence or absence of electronic components on SMT circuit boards immediately following their placement. With EPV inspection technology, Juki's KE-2070 platform is the only system in the world that can visualize feeder action during the electronic component placement process with images of both component pick and placement and movie mode. EPV technology also provides line engineers with a tool for root cause failure analysis during the assembly process to improve circuit board yields and minimize costly rework or scrap. Our EPV technology is comprised of six ultra small cameras mounted on a placement head for on-the-fly imaging with no cycle time penalty for the inspection process. The resulting inspection for missing components on the SMT circuit board operates at the full placement speed of the KE-2070. The JUKI KE-2070 platform also will continue to deploy CyberOptics' LaserAlign® component placement sensors to ensure that electronic components placed on the circuit board are properly aligned and positioned. We anticipate that a new version of EPV for the KE-2080 Juki platform will be introduced in the first half of 2011.

**2D Embedded Solder Paste Inspection.** We are completing integration of our strobe inspection module or (SIM) into DEK's solder paste screen printer. Equipped with this module, which will be offered as an option, DEK systems will be able to improve yields and productivity by allowing solder paste screen printing concurrently with high-speed, 100% two dimensional inspection that does not decrease line or printer speed. Initial shipments of DEK screen printers with embedded inspection are anticipated later in 2011.

**3D Embedded Solder Paste Inspection.** We have integrated our industry leading SE500 3D solder paste inspection technology directly into a solder paste screen printer manufactured by Milara Corporation. Milara systems equipped with our SE500 inspection technology, which will be offered as an option, will be able to improve yields and productivity by allowing solder paste screen printing concurrently with high-speed, 100% three dimensional inspection that does not decrease line or printer speed.



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**SMT Stand-alone Inspection Systems Products**

Our SMT inspection systems product line consists of stand-alone measurement and inspection systems 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 proprietary sensors as well as substantial, off the shelf, translation or robotics hardware and complete computer systems or processors with internally developed software.

***Solder Paste Inspection (SPI) Products***

We began selling in-line solder paste measurement machines with the introduction of the SE300 in March 2000. During 2005, we introduced the SE 300 Ultra, an enhanced version of our SE 300 product that offered faster inspection speeds, a conveyor that can accommodate a greater range of board sizes than the earlier generation SE 300, flexible conveyor options and additional defect review options in run-time software. More recently, we have introduced next generation machines that we believe are not only extremely competitive, but improve our margins.

**SE500.** In 2009, we introduced our next-generation SE500 solder paste inspection system. Based on a new cost-reduced platform, we believe the SE500 offers the best combination of inspection speed and accuracy available in the market. The SE500 is an in-line system that measures in three dimensions (3D) the amount of solder paste applied to the circuit board after the first step of the SMT 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 SE500 inspects the height, area and volume of 100% of a circuit board at production line speeds and with resolution that allows it to measure the smallest chip scale packages and micro ball array component sites. The SE500 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. We have also recently introduced versions of the SE500 capable of accommodating large board sizes and dual lane production lines.

**SE350.** In 2010, we introduced a new lower-cost SPI system, based on our industry leading 3D inspection technology, at a lower price point for a different segment of the inspection market; those customers requiring a solder paste inspection capability, but not the full functionality and superior measurement performance of our SE500 product. As our first mid-range offering, we see significant potential for the SE350 as a vehicle for expanding our served market. We also see potential for the SE350 to expand our market through sales to those companies who currently deploy no form of solder paste inspection.

**SE500 OEM Sensors.** Late in 2010, we signed an agreement with a new OEM partner under which our industry leading SE500 inspection sensor will be integrated in our partner's solder paste inspection systems. Initial shipments of our OEM partner's solder paste inspection system incorporating our SE500 sensor are expected in 2011.

Revenues from shipments of our SE500, SE350 and SE 300 Ultra products accounted for 29% of our revenue in 2010 and 30% of our revenue in 2009.

***Automated Optical Inspection Products.***

We introduced the Flex series of in-line Automated Optical Inspection (AOI) products in the fourth quarter of 2000. These products inspect circuit boards after component placement to determine whether all components are present and have been placed correctly and can also be used to measure the quality of solder joints after the reflow oven. We introduced the latest version of the Flex series, the Flex Ultra HR, in 2007. The Flex Ultra HR, which we continue to sell, utilizes high-resolution color cameras and is capable of inspecting down to 0105 components with 5.0 megapixel camera technology.

**QX500.** We introduced our next-generation QX500 Automated Optical Inspection (AOI) system in the second quarter of 2010. The QX500 is designed to inspect the placement of the smallest components on circuit boards and features a cost reduced design that uses our strobe inspection module (SIM) sensor technology and next-generation common hardware platform. The QX500 features the fastest AOI inspection times currently available in the market and also utilizes our unique SAM software technology which offers an industry leading level of low false call performance. In 2011 we anticipate introducing additional versions of the QX500 accommodating dual production lanes and capable of inspecting larger circuit board sizes. In 2011, we also anticipate introducing a new tabletop AOI system for off-line inspection based on our SIM sensor technology.

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Revenues from shipments of our QX500 and Flex Ultra AOI products accounted for 13% of our revenue in 2010 and 21% of our revenue in 2009.

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Our principal semiconductor products, the WaferSense family of products, are a series of wireless sensors that provide measurements of critical factors in the semiconductor fabrication process. Other semiconductor products include sensors that inspect the presence and orientation of semiconductor wafers in cassettes and FOUPS during the fabrication process, and frame grabber and machine vision subsystems. We sell our semiconductor products to both original equipment manufacturers and to end-user customers through a network of distributors. Sales of our semiconductor products constituted 11% of our revenue in 2010 and 12% of revenue in 2009.

**WaferSense Sensors.** Our WaferSense family of sensors are intended 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 products, we believe 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 products. As a result, up-time, through-put and process yield for semiconductor fabrication equipment is improved.

We introduced our first WaferSense product in late 2004 and have since continued to add new products to the WaferSense family. The automatic leveling sensor (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), to be introduced later in 2011, allows engineers to efficiently detect and classify particles and their exact sources in a process as wafers are transferred, slit valves actuate and chambers are cycled, pumped down and purged. APS is compatible with front-ends, coater/developer tracks, deposition and etch equipment.

**Wafer Mapping and Alignment Sensors.** We manufacture and sell laser based reflective sensors that improve the performance of robotic wafer handling equipment. During the fabrication process, semiconductor wafers are stored in slotted cassettes during transport to various fabrication tools. Robotic equipment removes the wafers from the cassettes and inserts them into a fabrication tool. Our wafer mapping sensors inspect for the presence of wafers in the cassettes and determine if the wafer is properly present and located in the cassette.

**Frame Grabber Products and Machine Vision Subsystems.** Frame grabber products are a machine vision component that captures, digitizes, and stores video images. These products are currently sold into a broad array of applications in a number of different industries, with an emphasis on semiconductor customers. We offer both digital and analog versions of frame grabbers under the Imagenation brand.

**Markets and Customers**

We sell the vast majority of our products into the electronics and photovoltaic cell manufacturing markets (89% of total revenue in 2010 came from our Electronic Assembly segment). 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 such as achieved using non-contact optical sensors. Customers in these industries also employ knowledgeable engineers who are competent with computer-related equipment. Our alignment sensors and embedded inspection products are sold to OEMs serving the SMT circuit board assembly market and our stand-alone solder paste and automated optical inspection (AOI) systems are sold to end-user electronic assembly manufacturers in this market. Our Solar Wafer Alignment camera is sold to DEK on an OEM basis for use in their photovoltaic cell manufacturing equipment.

We sell our semiconductor products into the semiconductor capital equipment market for use in the fabrication of semiconductor devices. 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 family of precision measurement tools for process optimization in semiconductor processing equipment is sold directly to semiconductor fabrication facilities for use by process and equipment engineers during the production of semiconductor wafers. We sell our wafer mapping and alignment sensors to manufacturers of equipment that transport wafers during the semiconductor manufacturing (front-end fabrication) process.



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A large proportion of our stand-alone inspection system sales are originating in the low cost geographies of Asia where a significant portion of the new worldwide production capacity for circuit board assembly has been added. In order to bring our development and final assembly and integration for our stand-alone inspection systems products closer to the markets in Asia where the majority of our sales occur, to reduce cost, and to free development personnel at our home office in Minneapolis to focus on sensor technology development, we initiated a plan in 2008 to transition a portion of our development, and all final assembly and integration operations for our stand-alone systems products, to Singapore. This transition was substantially complete by the end of the first quarter of 2009. We previously established sales offices in Singapore in 2001 and China in 2004 to serve the growing market for manufacturing production equipment in Asia and to increase the percentage of worldwide production lines that use inspection in their production process to improve production yields and reduce cost.

We sell our products worldwide to many of the leading manufacturers of electronic circuit board assembly equipment, manufacturers of semiconductor DRAM memory, semiconductor capital equipment manufacturers and end-user electronic assembly manufacturers, including Asian original design manufacturers (ODM s) and electronic manufacturing service providers (EMS s), who manufacture cell phones, smart phones, notebook computers and server boards, among other electronic devices. We manufacture our alignment sensors, embedded inspection solutions, the sensors used in our stand-alone inspection systems and all of our semiconductor products in our Minneapolis, Minnesota headquarters facility. All final assembly and integration for our stand-alone system products takes place in our Singapore facility.

Export sales represent a large percentage of our total sales because the majority of new worldwide electronics and semiconductor capacity is being added outside the United States. In addition, a significant portion of our export sales to Europe are electronic assembly alignment sensors that ultimately are sold by our OEM customer into 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,	
	2010	2009
Asia	55%	37%
Europe	27%	33%
Other export sales (1)	4%	8%

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

See Note 12 to our Consolidated Financial Statements contained in item 8 of this Form 10-K. Virtually all export sales are negotiated, invoiced and paid in U.S. dollars. Accordingly, although changes in exchange rates do not affect revenue and income per unit, they can influence the willingness of customers to purchase units.

### Sales and Marketing

Our electronic assembly and photovoltaic cell alignment sensors are sold to large OEM customers by direct sales staff located in Minnesota. Our stand-alone system products are primarily sold through independent representatives and distributors managed by direct sales personnel located in Singapore, as well as in the UK, U.S. and China. We have agreements with 46 independent representatives and distributors who focus on sales and service of our stand-alone system products to end-user customers. These agreements cover North and South America (17), Europe (15) and China and the rest of Asia (14).

We have established a worldwide sales representative organization for our WaferSense 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 (7). Our wafer mapping semiconductor products are sold to large OEM customers by a direct sales staff located in Oregon. We sell our semiconductor frame grabber products through direct sales staff located in Portland, Oregon, and through 13 sales representatives located throughout the world. These representatives are not under contract, but are authorized to sell frame grabber products and in many cases act as system integrators for our 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**

Our products are typically shipped two weeks to two months after the receipt of an order. Product backlog was \$7.2 million on December 31, 2010, compared to \$7.1 million on December 31, 2009. Backlog at December 31, 2010 totaling \$6.4 million is deliverable in the first quarter of 2011. Sales of some stand-alone surface mount technology (SMT) inspection systems 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 electronics, photovoltaic cell manufacturing and semiconductor industries. For example, production capacity expansion 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. 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 clever and proprietary technology and on our ability to combine several different technical disciplines to address industry and customer needs. CyberOptics was founded by research scientists and has retained relationships with academic institutions to ensure that the most current information on technological developments is obtained. In addition, we actively seek ongoing strategic customer relationships with leading product innovators in our served markets and actively investigate the needs of, and seek input from, these customers to identify opportunities to improve manufacturing processes. Our engineers have frequent interactions with our customers to ensure adoption of current technologies. In some instances, we receive funding from these customers through development contracts that provide the customer with an exclusive selling period but allow us to retain technology and distribution rights.

We believe that continued and timely development of new products and enhancements to existing products is essential to maintaining our position in the market. As a technology based company, we commit substantial resources to research and development efforts, which play a critical role in maintaining and advancing our position as a leading provider of optical sensors and systems. During the past several years, research and development efforts have been focused on a number of development activities critical to our future growth and success, including the following:

Our stand-alone next generation SE500 solder paste inspection system and our new next generation QX500 automated optical inspection (AOI) system.

A new mid-range SE350 solder paste inspection system based on the 3D inspection technology used in the SE500. The SE350 is a lower cost system for customers that do not require the full inspection functionality of the SE500.

Our common hardware platforms and sensor technology utilized in both our new QX500 automated optical inspection (AOI) system and a new embedded inspection solution we have developed for DEK offering 100% 2D solder paste inspection with no cycle time penalty.

Our Embedded Process Verification (EPV®) technology.

A new solar wafer alignment camera capable of performing accurate high-speed alignment measurements within the wafer print nest, including traditional wafer edge alignment of both monocrystalline and polycrystalline wafer materials.

Continued investment in our highly profitable WaferSense line of products.

Research and development expenses were \$7.4 million in 2010 and \$7.1 million in 2009. These amounts represented 13% of revenues in 2010 and 26% of revenues in 2009. 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. We expect research and development expenses to increase in 2011 as we continue to focus on new products, including new stand-alone inspection offerings based on our industry leading 3D solder paste inspection technology and 2D inspection technology based on our strobe inspection module (SIM), new embedded inspection solutions for both solder paste and automated optical inspection and new WaferSense products.





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**Manufacturing**

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.

Our electronic assembly and photovoltaic cell alignment sensor products and our semiconductor products are assembled at our Minneapolis, Minnesota headquarters facility. Our stand-alone SMT inspection systems products are assembled in Singapore. Prior to the second quarter of 2009, all of our stand-alone SMT system products had been assembled at our Minneapolis, Minnesota headquarters facility and prior to the third quarter of 2009, all of our semiconductor products had been assembled at our Portland, Oregon facility.

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 subassemblies. 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, what we believe to be a sufficient amount of certain components based on forecasted demand (forecast extends a minimum of 6 months).

**Competition**

Although we believe that our products offer unique capabilities, competitors offer technologies and systems that perform some of the visual inspection and alignment functions performed by our products. 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 electronic assembly sensor products face competition in the market for alignment and inspection on component placement machines primarily from manufacturers of vision (camera and software based) systems. Potential competitors in these markets include Cognex Corporation and Electro Scientific Industries, Inc. We compete in this market based on our ability to custom design products with stringent physical form requirements, speed, flexibility, cost and ease of control. In addition, our products compete with systems developed by OEMs using their own design staff for incorporation into their products. Our electronic assembly alignment sensor products have historically competed favorably on the basis of these factors, and particularly on the basis of speed and product cost. We believe our sensor products are also better suited to align the smaller electronic component sizes currently available in the market. Nevertheless, advances in terms of speed by vision systems have reduced some of the advantages of our products in some configurations. We have introduced newer configurations that we believe allow our alignment sensors, and the component placement machines in which they are incorporated, to compete favorably based on the speed and accuracy of their performance, as well as their price.

The primary competition for sales of our next generation SE500 and SE350 solder paste inspection systems has been from Asian based companies such as KohYoung Technology (Korea), Parmi (Korea) and Test Research, Inc. (Taiwan). We believe the SE500 and SE350 compete favorably against these competitive products on the basis of performance, reliability and price. The SE500 offers the best combination of speed and inspection accuracy currently available on the market. The SE350 is a lower cost mid-range 3D inspection system for customers that do not require the full inspection functionality of the SE500.

Our automated optical inspection (AOI) system products (Flex Ultra HR and QX500 ) face competition from a large number of AOI companies, the most significant being MirTec, Ltd. (Korea), Viscom (Germany), Saki Corporation (Japan) and Omron, Ltd. (Japan). We believe that the technology used in the Flex Ultra and QX500 is differentiated from the competition and that these products compete effectively in this market based on measurement accuracy, cost, ease of use at rapid production line speeds and the low rate of false calls.

The electronics manufacturing market has become increasingly competitive and concentrated in large Asian based original design manufacturers and global electronic manufacturing service contract manufacturers, resulting in the ability on their part to drive more competition into the market and command more favorable terms when purchasing from suppliers, including capital equipment suppliers like CyberOptics. Due to the increased level of competition, we have been required to decrease the price of our solder paste and automated optical inspection (AOI) systems in some markets. These same pricing pressures also impact our OEM customers for our alignment sensors, who in turn ask us to design newer products at a lower price point to allow them to remain competitive in the marketplace. We respond to these pricing pressures through continuous investment in research and development of cost reduced products with new features and enhancements that command better

pricing in the market.

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We believe our WaferSense 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 products will save significant time and increase measurement accuracy over the manual techniques currently used by customers and will improve equipment up-time, through-put and process yield.

Our other semiconductor products face competition in the wafer mapping and alignment market primarily from manufacturers of through-beam sensors developed by our customers using inexpensive sensors from general industrial market suppliers like Banner Engineering Corporation, Omron, Ltd (Japan) and Keyence, Ltd (Japan). We believe that our sensors compete favorably in this market based on performance and the unique advantages of the reflective mode of operations.

Although we believe our current products offer several advantages in terms of price and suitability for specific applications and 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 market.

**Employees**

As of December 31, 2010, we had 181 full-time employees worldwide, including 38 in sales, marketing and customer support, 62 in manufacturing, purchasing and production engineering, 57 in research and development and 24 in finance, administration and information services. Of these employees, 98 are located at our corporate headquarters in Minneapolis and 83 are located in other offices (7 in the UK, 12 in Oregon, 55 in Singapore, 8 in China and 1 in Japan). All of our employees located in Oregon work in our Semiconductor business. 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 85 patents (58 U.S. and 27 foreign) on a number of technologies, including those used in LaserAlign, our embedded inspection technology including our strobe inspection module (SIM), our stand-alone inspection systems 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 79 pending patents (21 U.S. and 58 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 11 registered trademarks (6 U.S. and 5 foreign) and have 2 trademark registrations pending. We also have 7 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.

**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.



Table of Contents**ITEM 1A. RISK FACTORS**

Our operations are subject to a number of risks and uncertainties that may affect our financial results, our accounting, and the accuracy of the forward looking statements we make in this 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:

**Our business has been and will continue to be significantly impacted by the global economy, and the current 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. Although the world economy has started to recover, there can be no assurance as to the length and strength of the recovery, that it will continue or that the economy will not slide back into another period of recession. 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. Any tightening of credit in financial markets may lead consumers and businesses to postpone spending, which 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 original equipment manufacturers to which we sell our sensors supply SMT manufacturers, and those manufacturers, as well as the circuit board manufacturers that purchase our SMT systems products directly, are largely dependent on continued demand for consumer and commercial electronics, including cell phones, smart phones and computers. Demand for electronics is a function of the health of the economies in the United States and around the world. Our results would be adversely affected in the future, when or if these economies move into periods of recession, thereby negatively impacting the demand for overall electronics and adversely affecting demand for our products.

**Sales to our two largest customers have historically constituted a significant portion of our revenue and loss of either of these customers, or a decline in the customer s business, would have a materially adverse impact on our results of operation.**

Sales to our two largest customers constituted 35% of our total revenue in 2010 and 24% of our total revenue in 2009. We believe our relationships with these customers are good and we continue to pursue joint development projects with them. However, like most suppliers to the electronics manufacturing markets, their businesses were adversely impacted by the global economic downturn, and would most likely again be impacted in the future when or if the global economy moves into a recessionary period. If the order rates of these customers are negatively impacted by global economic events beyond their control or if they are unsuccessful in selling the products into which our sensors are incorporated, or if they design their products to function without our sensors, purchase sensors from other suppliers, or otherwise terminate their relationship with us, our long-term results of operations would be significantly adversely affected.

**Our forecasts for sales and net income are dependent, in part, on sales of our Solar Wafer Alignment camera.** Sales of this product are dependent upon the ability of DEK to sell the photovoltaic cell equipment on which it is used, which is in turn dependent upon the solar energy market. Solar energy is currently not as economical as other more conventional energy sources, including those based on fossil fuels and its use is dependent upon significant government subsidies in many markets. Our future revenue from this product may be impacted if government subsidies for solar energy are reduced or eliminated, if DEK s equipment is uncompetitive, or if the technology related to solar energy does not continue to advance and become competitive with other more conventional sources of energy.

**The market for capital equipment for the electronics industry in which we operate is cyclical and we cannot predict with precision when market downturns will occur.** We operate in a very cyclical market the electronics capital equipment market--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, have severely affected our operations and generated several years of unprofitable operations. We often have difficulty determining the duration or severity of any downturn in our markets, the strength of subsequent recovery and the long-term impact that it may have on our business.



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**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 countries, such as China, Singapore and Japan, in which we do business. Natural disasters, such as the SARS outbreak, 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. Further, these countries may be affected by economic forces that are different from the forces that affect the United States and change the amount of business we conduct.

**We are dependent upon a single product line in our systems business for approximately a quarter of our revenue.** During 2010, approximately 29% of our total revenue was generated by sales of stand-alone SE 300 Ultra, SE350 and SE500 SMT solder paste inspection systems. Sales of these products have been subject to increasing competition in world markets, particularly in Asia, negatively impacting sales prices for our products. If we are not successful in continuing to sell and differentiate this product line relative to our competition, our results of operations would be negatively affected.

**We generate more than three quarters of our revenue (approximately 86% in 2010) 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;
- difficulties in staffing and managing international operations;
- reduced protection for intellectual property rights;
- changes in political and economic conditions;
- seasonal reductions in business activity;
- potentially adverse tax assessments; and
- terrorism, disease, or other events that may affect local economies and access.

**We conduct product development and final assembly and integration for our stand-alone systems products in Singapore where we have less immediate control over operations.** Our Singapore development and manufacturing operations present a number of risks related to the retention of personnel, management of development and final assembly and integration control over administrative, final assembly and integration 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 at attractive rates. Although most components for our systems products are more readily available in Singapore, some of the hardware components used in our systems products necessary for manufacture in Singapore may be difficult to import at efficient rates. Our financial performance, ability to serve our customers and manufacture products could be negatively impacted if we are unable to retain our Singapore based employees, or if it costs more than expected to retain these employees or hire experienced employees in a timely manner, or if we are unable to locate suitable sources of supply for our products manufactured in Asia.

**We price our products in US dollars, and as a result, our products may have difficulty competing in periods of increasing strength of the dollar.** Virtually all 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 goods, 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

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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, when the U.S. dollar weakens relative to the currencies of these countries.



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**Our products could become obsolete.** Our current products, as well as the products we have under development, are designed to operate with the technology we believe currently exists or may exist for electronic components, printed circuit boards and memory modules. The technology for these components changes rapidly and, because it takes considerable time to develop new products, we must anticipate 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 and devote our resources to technology that is less successful. If we incorrectly anticipate technology developments, or have inadequate resources to develop our products to deal with changes in technology, our products could become obsolete.

**We compete in the electronics assembly alignment sensor market with larger companies.** Our electronic assembly alignment sensor products compete with products made by larger machine vision companies, other optical sensor companies, and by solutions internally developed by our customers. Advances in machine vision technology in recent years have eliminated some, but not all, of the features 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 very price competitive.** The electronics capital equipment market for surface mount technologies is becoming more mature, resulting in increased price pressure on suppliers of equipment. Consequently, our electronic assembly stand-alone system 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.

**Our stand-alone system products carry lower margins.** We use a different distribution network to sell our stand-alone end-user systems products, and generate lower margins from these products, than the distribution system and margins from our electronic assembly alignment sensors and semiconductor products. Our profit margins may be negatively affected to the extent our stand-alone end-user systems products constitute a larger portion of our business.

**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 three key OEM customers, and usually have significant credit exposure with respect to these customers. In addition, we sell our stand-alone inspection systems products through a network of international distributors. These distributors tend to be smaller in size with 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.

**Competitors in Asia may be able to compete favorably with us based on lower production and employee costs.** We compete with large multinational systems companies in sales of stand-alone end-user systems 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 of stand-alone end-user systems products, many of which may have lower overall production and employee costs and are willing to offer their products at lower selling prices to customers.

**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 not available. In addition, if these components do not meet stringent quality requirements or become subject to obsolescence, there could be delays in product availability, and we could be required to make significant investments in designing replacement components.

**Our growth has been dependent on technical innovation, some of which was generated by our founder, and our growth could be impacted if we are unable to innovate in the future.** Although our results are cyclical, our longer-term growth has been in the past, and we anticipate will be in the future, dependent upon our ability to introduce new and innovative products. Many of our product innovations were generated by our founder, Dr. Steven K. Case, who died in June 2009. Although we have devoted and continue to devote significant resources to research and development to support this innovation and believe we have talented scientists who have and will continue to develop significant new inventions, if we fail to create significant new product innovations, our market position would be negatively impacted.

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**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 6,891,350 shares of our common stock outstanding as of February 28, 2011. 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 10,000 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 evaluations 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 2. PROPERTIES**

We lease a 60,217 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 our sensor products, including the sensors used in our stand-alone systems products and our semiconductor products. We are close to finalizing a lease amendment for this facility that will become effective upon the June 30, 2011 expiration of the existing lease. The amendment provides that we will lease approximately 50,762 square feet of the current facility, commencing on July 1, 2011 and continuing through December 31, 2018.

We lease a 20,000 square foot mixed office and warehouse facility in Singapore that serves as a sales, development and final assembly and integration facility for our stand-alone systems products. The lease for our facility in Singapore expires in July 2013. As of December 31, 2010, we also have operating leases in Oregon (for our semiconductor products), the United Kingdom, and China, which expire in December 2012, June 2011 and August 2011, 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. REMOVED AND RESERVED**

Table of Contents**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.

Quarter	2010		2009	
	High	Low	High	Low
First	\$ 9.34	\$ 6.32	\$ 6.00	\$ 4.00
Second	\$ 11.96	\$ 8.60	\$ 5.90	\$ 4.23
Third	\$ 10.19	\$ 8.11	\$ 7.06	\$ 4.98
Fourth	\$ 9.80	\$ 6.65	\$ 7.45	\$ 4.95

As of February 28, 2011, there were approximately 200 holders of record of 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.

**Equity Compensation Plan Information**

The following table describes shares of our common stock that are available on December 31, 2010 for purchase under outstanding stock-based awards, or reserved for issuance under stock-based awards or other rights that may be granted in the future, under our equity compensation plans:

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding those reflected in column (a))
<b><u>Equity compensation plans approved by security holders</u></b>			
1998 Stock Incentive Plan (1)	405,782	\$ 8.21	242,385
Stock Option Plan for Non-Employee Directors	108,000	\$ 13.27	
Stock Grant Plan for Non-Employee Directors	N/A	N/A	20,000
Employee Stock Purchase Plan (2)	N/A	N/A	61,344
<b><u>Equity compensation plans not approved by security holders</u></b>			
Options issued to executives and certain other employees upon initial employment (3)	50,000	\$ 11.87	
<b>Total</b>	<b>563,782</b>	<b>\$ 9.50</b>	<b>323,729</b>

- (1) In addition to options, shares may be issued in the form of restricted stock awards, performance awards and other stock-based awards.
- (2) Shares are issued based on employees' elections to participate in the plan.
- (3)

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Represent options received by executives and certain other employees prior to 2003 upon their initial employment and granted on the same terms as those options granted under equity compensation plans approved by security holders. None of these options qualify as incentive stock options.

**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, 2010:**

**General Overview**

Our products are sold primarily into the electronics assembly, photovoltaic (solar) cell manufacturing, semiconductor DRAM and Flash memory, and semiconductor fabrication capital equipment markets, where we sell products both to original equipment manufacturers of production equipment and to end-user customers that produce circuit boards, solar cells and semiconductor wafers and devices. Historically these markets have been very cyclical, with periods of rapid growth as worldwide capacity is added to support increased consumer demand for electronic products, and new capital equipment is purchased as a result of technology changes in electronics components, such as miniaturization, and changing production requirements. These periods of growth have historically been followed by periods of excess capacity and reduced capital spending.

Our results were favorably impacted in 2006 and 2007 as the worldwide demand for cell phones, smart phones, laptops and other consumer electronics remained strong, driving the need for increased production of printed circuit boards and memory modules, and thereby increasing demand for our electronic assembly and semiconductor products. After peaking in the third quarter of 2007, our revenue declined sequentially each quarter through the first quarter of 2009, as our results were negatively impacted by reduced levels of capital spending for electronics manufacturing capacity brought about by the deepening weakness in the global economy. New orders dropped off sharply late in the fourth quarter of 2008 as the global economy fell into a severe recession, and our results for 2009 were adversely affected by the ongoing weakness in the global electronics market.

Even before the recession, we worked to improve the efficiencies of our operations. In February 2008, we commenced plans to move a significant portion of our systems-related product development and final assembly and integration to Singapore. The transition of these functions to Singapore was substantially complete by the end of the first quarter of 2009 and has resulted in lower costs and a more focused R&D effort. Further, we consolidated manufacturing operations for our semiconductor products into our Minneapolis, Minnesota headquarters facility. Implementation of these actions to improve the efficiency of our operations has not impacted any of our strategic growth programs.

We believe that continued and timely development of new products and enhancements to existing products is essential to growing our position in the market. We commit substantial resources to research and development efforts, which play a critical role in maintaining and advancing our position as a leading provider of optical sensors and systems.

The global electronics market strengthened significantly in 2010. We experienced particularly strong demand in the second quarter of 2010, as pent-up demand and an improving economy led to significantly increased sales of alignment sensors and our stand-alone solder paste inspection and AOI systems. Sales of sensors continued at these strong levels throughout the remainder of 2010, while systems sales moderated to more normal levels.

We believe that (i) improving market conditions, (ii) the efficiencies in operations we have implemented, (iii) the new products we have introduced and expect to introduce in the next year, which we anticipate will generate significant sales and improved margins, and will allow us to address the various price points desired by our customers within the electronic assembly market and (iv) the greater efficiencies we are realizing through our strategic repositioning in Asia, will lead to improved operating results in 2011 and future periods.

Table of Contents**Segment Results**

Our business consists of two operating segments, the electronic assembly and semiconductor segments. In the electronic assembly segment we design, manufacture and sell optical process control sensors and inspection systems for the electronic assembly and photovoltaic (solar) cell equipment markets. In the semiconductor segment we design, manufacture and sell optical and other process control sensors and related equipment for the semiconductor capital equipment market. Segment information follows:

(In thousands)	Year Ended December 31,		
	2010	2009	2008
<b>Revenue:</b>			
Electronic assembly	\$ 50,967	\$ 23,736	\$ 40,193
Semiconductor	5,984	3,330	5,259
Total	\$ 56,951	\$ 27,066	\$ 45,452
<b>Gross margin:</b>			
Electronic assembly	\$ 20,757	\$ 7,061	\$ 15,867
Semiconductor	4,205	2,144	3,198
Total	\$ 24,962	\$ 9,205	\$ 19,065
<b>Operating expense:</b>			
Electronic assembly	\$ 18,643	\$ 17,772	\$ 26,206
Semiconductor	2,658	2,668	3,322
Total	\$ 21,301	\$ 20,440	\$ 29,528
<b>Income (loss) from operations:</b>			
Electronic assembly	\$ 2,114	\$ (10,711)	\$ (10,339)
Semiconductor	1,547	(524)	(124)
Total income (loss) from operations	\$ 3,661	\$ (11,235)	\$ (10,463)
Interest income and other	268	539	1,193
Income (loss) before income taxes	\$ 3,929	\$ (10,696)	\$ (9,270)

**Revenues**

Our revenues increased by 110% to \$57.0 million in 2010 from \$27.1 million in 2009 and decreased by 40% in 2009 from \$45.5 million in 2008. The following table sets forth, for the years indicated, revenues by product line (in thousands):

	2010	2009	2008
<b>Electronic Assembly</b>			
Alignment Sensors	\$ 25,537	\$ 8,428	\$ 20,250
SMT Inspection Systems	25,430	15,308	19,943
Total Electronic Assembly	50,967	23,736	40,193
Semiconductor	5,984	3,330	5,259
Total	\$ 56,951	\$ 27,066	\$ 45,452

***Electronic Assembly***

Revenue from sales of our alignment sensors increased by 203% to \$25.5 million in 2010, up from \$8.4 million in 2009. Revenue from sales of our stand-alone SMT inspection systems products increased by 66% or \$10.1 million to \$25.4 million in 2010, up from \$15.3 million in 2009. Revenue from sales of alignment sensors decreased by \$11.8 million or 58% in 2009, down from \$20.2 million in 2008. Revenue from sales of our SMT inspection systems products decreased by \$4.6 million or 23% in 2009, down from \$19.9 million in 2008.

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The global recession caused severe weakness and disruption in our electronics markets starting late in 2008 and throughout all of 2009, resulting in very low levels of revenue in 2009 from both our alignment sensors and stand-alone SMT inspection systems products. The global electronics market strengthened in 2010, returning to more normalized levels of equipment purchases and production capacity additions. We believe that improved market conditions, combined with favorable market acceptance of the new products we have recently introduced, resulted in the higher revenue levels in 2010 compared to the same periods of 2009. Our revenue in 2010 benefited from initial shipment of solar wafer alignment cameras to DEK, an equipment manufacturer for the photovoltaic cell market.

In addition to continued sales of our SE500 solder paste inspection (SPI) system, we recorded solid sales of our new SE350 SPI system that was introduced in the first quarter of 2010, and our new QX500 automated optical inspection (AOI) system that was introduced in the second quarter of 2010. Sales of our SE500, SE350 and SE 300 Ultra solder paste inspection systems increased by over 100% to \$16.4 million in 2010 from \$8.1 million in 2009. Our sales of QX500 and Flex Ultra AOI system products increased by 26% to \$7.2 million in 2010, up from \$5.7 million in 2009. Sales of our inspection system products were negatively impacted in 2009 by the severe global economic recession. Sales of our SE 300 Ultra and SE500 solder paste inspection systems decreased by \$3.0 million or 27% in 2009 to \$8.1 million, while sales of our Flex AOI systems decreased by \$1.2 million or 17% in 2009 to \$5.7 million.

We believe that ongoing introduction of new system products, including those accommodating dual production lanes, bigger circuit boards and addressing different tiers of the market, will strengthen our competitive position in the inspection market. Unlike revenue from our alignment sensors, which is closely tied to the need for added production capacity for printed circuit boards, a portion of our stand-alone SMT systems revenue is derived from the retro-fit of existing production lines as companies seek to improve their production yields, thereby reducing manufacturing costs.

We believe that these new products, and technology trends toward smaller components and increased production speeds, will contribute to increased demand and higher revenue in 2011.

Export revenue from alignment sensors and SMT inspection systems totaled \$46.7 million or 92% of electronic assembly revenue in 2010, compared to \$20.2 million or 85% of electronic assembly revenue in 2009. Sales to international customers continue to be significant, as manufacturing of electronic components has migrated offshore, particularly to China and other areas of Asia.

***Semiconductor***

Revenues from sales of our semiconductor products increased by 80% to \$6.0 million in 2010, up from \$3.3 million in 2009. The increase in revenue in 2010 was due to improving conditions in the market for semiconductor fabrication equipment resulting from the better economic environment, coupled with favorable market acceptance of our new WaferSense products. Revenues from sales of our semiconductor products decreased by 37% or \$1.9 million in 2009 to \$3.3 million, down from \$5.3 million in 2008. The decrease in revenue in 2009 was due to the recession, difficult conditions in the market for semiconductor fabrication equipment and declining revenue from our older wafer mapper and frame grabber products.

We anticipate that future growth in our semiconductor revenues, exclusive of changes related to capital procurement cycles will come from our new WaferSense products, a family of wireless, wafer-like precision measurement tools for in-situ setup, calibration and process optimization in semiconductor processing equipment. We have introduced a number of new WaferSense products in recent years, including various leveling, gapping, teaching and vibration sensors. We anticipate formal introduction of our new particle sensor in the first half of 2011. WaferSense revenue increased by over 100% to \$3.4 million in 2010 from \$1.6 million in 2009, after remaining virtually unchanged in 2009 compared to 2008.

Export revenue from semiconductor products totaled \$2.1 million or 35% of revenue in 2010, compared to \$1.0 million or 30% of revenue in 2009 and \$2.4 million or 46% of semiconductor revenue in 2008. The increase in the percentage of sales coming from exports for our semiconductor products in 2010 reflects proportionately higher WaferSense revenue, as these products tend to have a higher concentration of international sales. The percentage of sales coming from international markets decreased in 2009 due to a large proportional decrease in sales of frame grabber products, which tend to generate significant international sales.

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**Cost of Revenue and Gross Margin**

*Electronic Assembly*

Cost of revenue for our electronic assembly segment increased by 81% to \$30.2 million in 2010, after decreasing 31% to \$16.7 million in 2009, from \$24.3 million in 2008. The increase in cost of revenue in 2010 was due to the significantly higher sales in 2010, while the decrease in cost of revenue in 2009 was due to the significantly lower sales in 2009 compared to 2008. Cost of revenue items fluctuating with the level of sales include raw materials, direct labor and some factory overhead costs.

Gross margin as a percentage of electronic assembly sales was 41% in 2010, compared to 30% in 2009 and 39% in 2008. The improvement in gross margin percentage in 2010 was due to significantly increased sales of higher margin alignment sensors, better manufacturing leverage resulting from substantially higher production volumes over which to spread fixed manufacturing overhead costs, the favorable impact of cost reduction programs and our new cost reduced SMT inspection system products. Our next generation SE500 and new mid-range SE350 solder paste inspection systems, and our new QX500 automated optical inspection (AOI) system are significantly cost reduced when compared to our earlier generation inspection system products.

The electronic assembly market is highly price competitive, 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. For example, we believe our next-generation SE500 and SE350 solder paste inspection systems and QX500 automated optical inspection (AOI) system combines a reduction in cost with enhanced performance. Other recently introduced products including our solar wafer alignment camera, embedded process verification (EPV) technology and the embedded solder paste inspection solution we developed for DEK, have more favorable margins than our existing products.

The reduction in gross margin percentage in 2009 compared to 2008 was due to significantly lower sales of higher margin alignment sensors, substantially lower production volumes over which to spread fixed manufacturing overhead costs, continued competitive pricing pressure for our products, particularly older generation versions that are being replaced, and the overall impact of the global recession.

*Semiconductor*

Cost of revenue for our semiconductor segment increased by 50% to \$1.8 million in 2010, after decreasing by 43% to \$1.2 million in 2009, from \$2.1 million in 2008. The increase in cost of revenue in 2010 was due to the significantly higher sales in 2010, while the decrease in cost of revenue in 2009 was due to the significantly lower sales in 2009 compared to 2008.

Gross margin as a percentage of semiconductor sales was 70% in 2010, compared to 64% in 2009 and 61% in 2008. Gross margin as a percentage of semiconductor sales improved in 2010 and 2009 due to the cost benefit from consolidation of manufacturing for our semiconductor products into our Minneapolis, Minnesota headquarters, increased sales of higher margin WaferSense products and from improved manufacturing leverage, resulting from higher production volumes over which to spread fixed manufacturing overhead costs.

**Operating Expenses**

We believe continued investment in research and development of new products, coupled with continued investment in and development of our sales channel is critical to future growth and profitability. We historically have maintained research and development and sales and marketing expenses at relatively high levels, even during periods of recession and downturn in our electronic assembly and semiconductor capital equipment markets, as we continue to fund development of important new products, and continue to invest in our sales channels and develop new sales territories.

In February 2008, we announced plans to move to Singapore a significant portion of our systems-related product development and final assembly and integration. The transition of systems-related product development to Singapore was substantially complete by the end of the fourth quarter of 2008 and the transition of final assembly and integration for our system products was substantially complete by the end of the first quarter of 2009. The realignment of our systems-related product development and final assembly and integration to Singapore has resulted in lower costs and a more focused development effort.

In response to the significant weakness in our markets and the global economy we reduced our research and development, selling, general and administrative workforce by approximately 20 employees from the start of the fourth quarter of 2008 through the end of the second quarter of 2009. Other cost saving measures implemented in 2009 include salary reductions and reduced spending for non-labor costs such as travel,



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supplies and the like. These cost saving measures, combined with savings from our transition to Singapore, provided significant annual expense savings. Implementation of the cost reduction actions discussed above had no impact on any of our strategic growth programs; work on our common hardware platforms for inspection, next generation inspection technologies, or pursuit of new OEM contracts.

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Due to the improving economy, we elected to restore salary levels for our employees to pre-reduction levels in 2010. We have also added headcount, including temporary labor, since January 1, 2010 and anticipate that there will be other headcount additions, and costs will increase as business activity picks up and revenue returns to pre-recession levels. However, many of the cost savings measures that were put in place during 2008 and 2009 will continue to provide meaningful savings for the foreseeable future.

***Electronic Assembly***

Research and development expenses for our electronic assembly segment were \$6.3 million or 12% of revenue in 2010, \$6.0 million or 25% of revenue in 2009 and \$8.8 million or 22% of revenue in 2008. The 5% increase in research and development expenses in 2010 compared to 2009 was due to the restoration of pay for our employees to levels prior to the pay cut in 2009, higher costs for proto-type materials related to new product development and the addition of several new employees to assist with ongoing development efforts. The 31% decrease in research and development expenses in 2009 compared to 2008 resulted from a more focused and efficient research and development effort due to transition of systems related research and development to Singapore, as well as transition costs incurred in 2008. Throughout most of 2008, we maintained our Minneapolis-based systems development team while we trained our new Singapore based team, resulting in extra costs for wages, training, travel, and other costs, during the initial start-up and training period. Singapore transition costs classified as research and development expense in 2008 were \$879,000. No transition costs were incurred in 2009. In addition, the cost reduction actions implemented in November 2008 and February 2009 contributed to the lower level of spending in 2009. We expect research and development expenses to increase in 2011 as we continue to focus on new products, including new stand-alone inspection offerings based on our industry leading 3D solder paste inspection technology, 2D inspection technology based on our strobe inspection module (SIM), and new embedded inspection solutions for both solder paste and automated optical inspection.

Selling, general and administrative expenses for our electronic assembly segment were \$12.3 million or 24% of revenue in 2010, compared to \$11.4 million or 48% of revenue in 2009 and \$12.7 million or 32% of revenue in 2008. The increase in selling, general and administrative expenses in 2010 reflect higher sales and marketing costs, including commissions for third party sales representatives resulting from higher levels of SMT inspection system sales, higher incentive compensation costs due, in part, to our improved financial performance, partially offset by lower expense for doubtful accounts. Selling, general and administrative expenses for 2009 include an \$800,000 provision for doubtful accounts related to a key distributor of our SMT inspection systems products. The distributor remains in business, and is committed to paying us the amount owed. The increase in the provision for doubtful accounts in 2009 was more than offset by reductions in expense from our cost savings measures, reductions in travel costs, lower commissions for third party sales representatives resulting from the lower level of SMT inspection systems sales in 2009 compared to 2008 and lower foreign sales office expenses resulting from favorable foreign exchange rates.

***Semiconductor***

Research and development expenses for our semiconductor segment were \$1.1 million or 18% of revenue in 2010, \$1.1 million or 33% of revenue in 2009, and \$1.7 million or 31% of revenue in 2008. The decline in research and development expenses in 2009 resulted from the cost reduction actions that were implemented in November 2008 and February 2009, offset in part by a small increase in expense for abandoned patents. Research and development for our semiconductor products remain focused on our WaferSense family of precision measurement tools, including new automated leveling, gapping, teaching, vibration and particle sensors to assist with process optimization and yield improvement in the semiconductor fabrication process.

Selling, general and administrative expenses for our semiconductor segment were \$1.5 million or 25% of revenue in 2010, \$1.4 million or 41% of revenue in 2009 and \$1.5 million or 29% of revenue in 2008. The increase in 2010 reflects higher third party commission payments attributable to the higher level of sales. The decrease in selling, general and administrative expense in 2009 compared to 2008 was due to lower salary and consulting costs, and lower sales commissions resulting from the reduced level of revenue.

**Severance, Recruitment and Singapore Transition**

The transition of a significant portion of development and final assembly and integration for our systems products to Singapore was substantially complete by the end of the first quarter of 2009. Severance costs incurred in connection with the February 2008 decision to move our systems related product development and final assembly and integration to Singapore related entirely to our electronic assembly segment and totaled \$48,000 in 2009.

In February 2009, we further reduced our workforce by 24 positions in response to the weakening global economy, our transition to Singapore and our decision to consolidate manufacturing for our semiconductor products in our Minneapolis facility. Severance costs incurred in connection with the February 2009 workforce reduction totaled \$315,000 in 2009, of which \$201,000 related to our electronic assembly segment

and \$114,000 related to our semiconductor segment.

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All of the severance costs related to the Singapore transition, and the February 2009 workforce reduction have been classified as severance in our statement of operations. All of the aforementioned severance costs incurred in 2009 were paid prior to December 31, 2009. No severance costs were incurred 2010.

**Interest Income and Other**

Interest income and other includes interest earned on investments, realized gains and losses from sales of investments and gains and losses associated with foreign currency transactions.

Interest income and other decreased in 2010 and 2009 due to lower rates of interest earned on invested funds and lower invested balances of cash and marketable securities resulting from significant repurchases of our common stock in 2008 totaling \$20.9 million. We incurred foreign currency transaction gains, net of underlying currency hedges of \$106,000 in 2010, compared to foreign currency transaction losses, net of underlying currency hedges, of \$92,000 in 2009 and \$176,000 in 2008.

**Income Taxes**

We recorded income tax expense of \$794,000 in 2010, reflecting an effective tax rate of 20%, compared to an income tax benefit of \$3.9 million in 2009, reflecting an effective income tax benefit rate of 36%.

Our effective tax rate for 2010 reflects the benefit 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 favorably impacted our 2010 income tax rate by 11.5%. Other items favorably impacting our income tax rate in 2010 include small benefits from federal and state research and experimentation (R&D) tax credits.

Our effective tax rate for 2009 was favorably impacted by 5.2% or \$551,000 from settlement of Internal Revenue Service audits of our 2006 and 2007 federal income tax returns, including both the impact of settlement payments and reversal of a portion of our reserve for income taxes. Other items impacting our effective rate in 2009 include a small benefit from the research and experimentation (R&D) tax credit, offset by higher tax expense in foreign tax jurisdictions with tax rates differing from the U.S federal statutory rate.

We file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. During 2009, the Internal Revenue Service completed audits of our 2006 and 2007 federal income tax returns. Our settlement with the Internal Revenue Service did not have a material impact on our financial condition. We are no longer subject to state and local income tax examinations by tax authorities for years before 2007.

Due to the carryback of our 2009 federal taxable loss to taxable years 2004 - 2006, the Internal Revenue Service could potentially examine our federal income tax returns for those years. The statute of limitations for examination of these returns had previously expired. We received federal income tax refunds in 2010 of approximately \$2.4 million from carry-back of our 2009 federal taxable loss.

**Liquidity and Capital Resources**

Our cash and cash equivalents increased by \$4.3 million during 2010 due to proceeds from maturities and sales of marketable securities, net of purchases of \$3.6 million, cash provided by operating activities of \$1.8 million, proceeds from exercise of stock options and issuance of common stock under our employee stock purchase plan of \$207,000, offset in part by capital expenditures of \$1.3 million. 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, in addition to marketable securities. 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 increased slightly to \$22.1 million as of December 31, 2010, up from \$21.9 million as of December 31, 2009.

Operating activities generated \$1.8 million of cash in 2010. Cash provided by operations included net income of \$3.1 million, which included non-cash expenses totaling \$2.8 million for depreciation and amortization, provision for doubtful accounts, deferred taxes, non-cash gains and losses from foreign currency transactions and stock compensation costs.

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Changes in operating assets and liabilities using cash included increases in accounts receivable of \$2.9 million and inventories of \$6.6 million. Changes in operating assets and liabilities providing cash included increases in accounts payable of \$1.5 million, accrued expenses and other liabilities of \$1.1 million, advance customer payments of \$495,000 and decreases in income tax refunds receivable of \$2.1 million. The increase in accounts receivable and advance customer payments was due to higher sales levels in the fourth quarter of 2010, compared to the fourth quarter of 2009. Inventories were higher due to increased material purchases to support the higher level of sales expected in the second half of 2010 and early in 2011. The increase in accounts payable resulted from increased material purchases and a conscious effort on our part to extend the timing of vendor payments. Accrued expenses and other liabilities increased due to higher warranty, commission and incentive compensation accruals, resulting from higher sales levels and improved operating results. Income tax refunds receivable decreased due to receipt of our anticipated tax refund resulting from carryback of our 2009 net operating loss to prior periods.

We used \$6.5 million of cash for operating activities in 2009. Cash used for operations included our net loss of \$6.8 million, which included non-cash expenses totaling \$3.0 million for depreciation and amortization, provision for doubtful accounts, deferred taxes, non-cash gains and losses from foreign currency transactions, gain and loss activity from marketable securities and stock compensation expenses. Changes in operating assets and liabilities using cash included increases in accounts receivable of \$2.3 million and income tax refunds receivable of \$901,000 and decreases in accrued expenses of \$2.2 million. Changes in operating assets and liabilities providing cash included decreases in inventories of \$1.7 million and increases in accounts payable of \$857,000. The increase in accounts receivable was due to higher sales levels in the fourth quarter of 2009, compared to the fourth quarter of 2008. Income tax refunds receivable were higher due to anticipated income tax refunds resulting from carry-back of our 2009 taxable loss to earlier periods. The decrease in accrued expenses resulted from lower levels of income tax reserves resulting from settlement of Internal Revenue Service audits of our 2006 and 2007 federal income tax returns, lower warranty accruals resulting from the lower level of sales in 2009 and payment of accrued severance. Inventories were lower due to reduced material purchases in response to sharply lower sales levels early in 2009 and the increase in sales in the latter half of the year. Accounts payable were higher due to the timing of inventory purchases and a conscious effort on our part to extend the timing of vendor payments.

Investing activities provided \$2.3 million of cash in 2010 compared to providing \$6.0 million of cash in 2009. Changes in the level of investment in marketable securities, resulting from the purchases, sales and maturities of those securities generated \$3.6 million of cash in 2010 and \$7.0 million of cash in 2009. We used \$1.3 million of cash in 2010 and \$1.0 million of cash in 2009 for the purchase of fixed assets and capitalized patent costs.

Financing activities provided \$207,000 of cash in 2010 compared to providing \$167,000 of cash in 2009, all from the exercise of employee stock options and issuance of common stock under our Employee Stock Purchase Plan.

At December 31, 2010, 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. We do not believe we are exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

Except for our obligations under facilities leases and purchase contracts, we had no material commitments for expenditures as of December 31, 2010. Purchase commitments for inventory can vary based on the volume of revenue and resulting inventory requirements. While there were no material commitments, we evaluate investment opportunities that come to our attention and could make a significant commitment in the future.

The following summarizes our contractual obligations at December 31, 2010, and the effect such obligations are expected to have on our liquidity and cash flow in future periods.

December 31, 2010 (in 000 s)	Total	Less Than 1 Year	1 4 Years	After 4 Years
<b>Contractual Obligations:</b>				
Non-cancelable operating lease obligations	\$ 1,638	\$ 982	\$ 656	\$
Purchase obligations	12,791	12,791		
Reserve for income taxes	686		686	
<b>Total contractual cash obligations</b>	<b>\$ 15,115</b>	<b>\$ 13,773</b>	<b>\$ 1,342</b>	<b>\$</b>

We lease a 60,217 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 our sensor products, including the sensors used in our stand-alone systems products and our semiconductor products. We are close to finalizing a lease amendment for this facility that will become effective upon

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the June 30, 2011 expiration of the existing lease. The amendment provides that we will lease approximately 50,762 square feet of the current facility, commencing on July 1, 2011 and continuing through December 31, 2018. Future minimum lease payments due under the lease amendment from July 1, 2011 through December 31, 2018 are approximately \$5.1 million.

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Purchase obligations are defined as agreements to purchase goods or services that are enforceable and legally binding. Included in the purchase obligations category above are obligations related to purchase orders for inventory purchases under our standard terms and conditions and under negotiated agreements with vendors and utilities. We expect to receive consideration (products or services) for these purchase obligations. The purchase obligation amounts do not represent all anticipated purchases in the future, but represent only those items for which we are contractually obligated. The majority of our products and services are purchased as needed, with no contractual commitment. Consequently, these amounts will not provide a reliable indicator of our expected future cash outflows on a stand-alone basis.

Our cash, cash equivalents and marketable securities totaled \$22.1 million at December 31, 2010. 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 contractual obligations discussed above.

**Related Party Transactions**

We did not engage in any related party transactions during the three year period ended December 31, 2010.

**Inflation and Foreign Currency Transactions**

Changes in our revenues have resulted primarily because of changes in the level of unit shipments and the relative strength of the worldwide electronics and semiconductor fabrication capital equipment markets. We believe that inflation has not had a significant effect on our operations. Virtually all of our international export sales are negotiated, invoiced and paid in U.S. dollars. Accordingly, although currency fluctuations do not significantly affect our revenue per unit, they can influence the price competitiveness of our products and the willingness of existing and potential customers to purchase units.

A significant portion of our cost of goods, research and development and sales and marketing costs are denominated in Singapore dollars. 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, when the U.S. dollar weakens relative to the currencies of the foreign countries where we have operations. Our costs in U.S. dollar terms will decrease and our results will be favorably impacted in future periods when the U.S. dollar strengthens relative to the currencies of those countries where we have operations.

We enter into foreign currency swap agreements to hedge short-term inter-company financing transactions with our subsidiaries in the United Kingdom and Singapore. These currency swap agreements are structured to mature near the last day of each quarter, and are designated as cash flow hedges. At December 31, 2010, we had two open swap agreements that were purchased on that day.

**Recent Accounting Developments**

In October 2009, the Financial Accounting Standards Board (FASB) amended guidance in *FASB Accounting Standards Codification*<sup>TM</sup> (ASC) 605, *Revenue Recognition*, 25, Multiple-Element Arrangements, to (1) modify the separation criteria by eliminating the criterion that requires objective and reliable evidence of fair value for the undelivered item(s), and (2) eliminates the use of the residual method of allocation and instead requires that arrangement consideration be allocated, at the inception of the arrangement, to all deliverables based on their relative selling price. The FASB also issued guidance to amend the scope of ASC 985, *Software*, 605, Revenue Recognition, to exclude arrangements with tangible products containing both software and non-software components that function together to deliver a product's essential functionality.

Under the amended guidance, consideration is allocated to the deliverables at inception of an arrangement using the relative selling price method. Selling price is determined based on a selling price hierarchy, consisting of VSOE, third party evidence or estimated selling price. Under the amended guidance, we determined an estimated selling price for each of the elements in our multiple elements sales based on the selling price hierarchy and allocated consideration to the deliverables using the relative selling price method. We have adopted the amended guidance effective January 1, 2010. The impact of adopting the amended guidance was not material to our recognition of revenue in 2010 and would have been insignificant in 2009.

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In January 2010, the FASB issued ASU No. 2010-06, *Fair Value Measurements and Disclosures (Topic 820) Improving Disclosures about Fair Value Measurements* ( ASU No. 2010-06 ). ASU No. 2010-06 requires new disclosures regarding significant transfers in and out of Levels 1 and 2, as well as information about activity in Level 3 fair value measurements, including presenting information about purchases, sales, issuances and settlements on a gross versus a net basis in the Level 3 activity roll forward. In addition, ASU No. 2010-06 clarifies existing disclosures regarding input and valuation techniques, as well as the level of disaggregation for each class of assets and liabilities. ASU No. 2010-06 is effective for interim and annual periods beginning after December 15, 2009, except for the disclosures pertaining to purchases, sales, issuances and settlements in the roll forward of Level 3 activity; those disclosures are effective for interim and annual periods beginning after December 15, 2010. Our adoption of ASU No. 2010-06 effective January 1, 2010 had no current impact on our consolidated financial position, results of operations or cash flows.

**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 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 those related to revenue recognition, bad debts, warranty obligations, inventory valuation, intangible assets, 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, revenues are recognized upon shipment under FOB shipping point terms, and include shipping and handling costs. Estimated returns and warranty costs are recorded at the time of sale. Sales of some surface mount technology (SMT) systems 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, installation and training, and in some cases, an extended warranty. Revenue from installation and training and extended warranty are recognized as the services are provided.

When a sale involves multiple elements, revenue is allocated to each respective element in accordance with guidance codified in Accounting Standards Codification ( ASC ) Topic 605-25 *Accounting for Revenue Arrangements with Multiple Deliverables*. We determined the estimated selling price for each of the elements in our multiple element sales based on the selling price hierarchy and allocated consideration to the deliverables using the relative selling price method.

Prior to January 1, 2010, we recognized revenue based on multiple element revenue guidance which required the existence of vendor specific objective evidence of fair value (VSOE) for the undelivered elements in an arrangement in order for us to account for the elements separately. We utilized the residual method of allocation to account for delivered elements.

Costs related to products delivered are recognized in the period revenue is recognized. Cost of goods sold consists primarily of direct labor, allocated manufacturing overhead, raw 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 is \$1,005,000 as of December 31, 2010 and \$1,049,000 as of December 31, 2009.



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***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 \$702,000 at December 31, 2010 and \$488,000 at December 31, 2009.

***Reserve for Inventory Obsolescence.***

We write down inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. 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. At December 31, 2010, We had a reserve for obsolete and excess inventory of \$487,000 at December 31, 2010 and \$580,000 at December 31, 2009

***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 our market capitalization relative to net book value.

For intangible assets and long-lived assets, if the carrying value of the asset exceeds the undiscounted cash flows from such asset.

For goodwill, if the carrying value of the asset exceeds the fair value of the reporting unit.

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 for each of our reporting units by estimating their fair value, utilizing a discounted cash flow methodology to determine a reasonable valuation. The evaluation of asset impairment requires us to make assumptions about future cash flows over the life of the asset being evaluated. These assumptions require significant judgment and actual results may differ from assumed or estimated amounts.

Our remaining goodwill at December 31, 2010 and 2009 in the amount of \$569,000 relates to our semiconductor reporting unit. Our recent analyses performed in the fourth quarters of 2010 and 2009 indicate that this 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 criteria codified in ASC Topic 740 *Accounting for Income Taxes*, under which 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 tax authority. All tax positions are analyzed periodically and adjustments are made as events occur that 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.

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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 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 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 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.

In analyzing the need for valuation allowances, we first considered our history of cumulative losses for U.S. income tax purposes over the past three years and also gave significant consideration to our results for U.S. income tax purposes over the past five years, as the economic cycles in our industry have tended to average five years in length (from peak to trough). We also considered our forecasts of future profitability, the duration of statutory carry forward periods and tax planning alternatives. Finally, we considered the length and severity of the recent global economic crisis, the impact that it had on our operating results and our expectation for rebound given recent signs of recovery in the global economy and more specifically in our markets. After considering all of these factors, and after considering other significant positive evidence, we concluded that a valuation allowance with respect to substantially all of our U.S. based deferred tax assets was not required at December 31, 2010.

Our results in both 2008 and 2009 were negatively impacted by the recent global economic slowdown, and we incurred a loss in the United States in both 2008 and 2009, where most of our net deferred tax assets are recorded. We recorded a profit in 2010. Achievement of ongoing profitability in the United States will be a significant factor in determining our continuing ability to carry these deferred tax assets without recording a valuation allowance. The global electronics market has significantly strengthened. We are seeing significant demand from manufacturers of SMT assembly equipment who purchase our alignment sensor products, and for our stand-alone solder paste inspection and AOI systems. We believe that these improving market conditions, the efficiencies in operations we have implemented, and the new products we have introduced and anticipate introducing in the next year, will lead to improved operating results and continued profitability in future periods. If future results from our operations are less than projected, a valuation allowance may be required against virtually all of our deferred tax assets, which could have a material impact on our results of operations in the period in which it is recorded.

Deferred tax assets at December 31, 2010, include net operating loss carry forwards incurred in the UK by CyberOptics Ltd., which was acquired in 1999. 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.

Table of Contents**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA****CONSOLIDATED BALANCE SHEETS  
CYBEROPTICS CORPORATION**

(In thousands, except share information)	As of December 31,	
	2010	2009
<b>ASSETS</b>		
Cash and cash equivalents	\$ 8,427	\$ 4,177
Marketable securities	6,384	14,557
Accounts receivable, less allowance for doubtful accounts of \$1,005 at December 31, 2010 and \$1,049 at December 31, 2009	11,296	8,389
Inventories	14,215	7,745
Income tax refunds receivable	380	2,499
Other current assets	1,232	1,130
Deferred tax assets, net	2,317	2,040
Total current assets	44,251	40,537
Marketable securities, long-term	7,289	3,145
Equipment and leasehold improvements, net	1,896	1,921
Intangible and other assets, net	435	642
Goodwill	569	569
Other assets	173	163
Deferred tax assets, net	3,621	4,160
Total assets	\$ 58,234	\$ 51,137
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Accounts payable	\$ 5,206	\$ 3,652
Advance customer payments	1,152	657
Accrued expenses	2,873	1,880
Total current liabilities	9,231	6,189
Reserve for income taxes	686	546
Total liabilities	9,917	6,735
Commitments and contingencies (notes 9 and 14)		
Stockholders' equity:		
Preferred stock, no par value, 5,000,000 shares authorized, none outstanding		
Common stock, no par value, 25,000,000 shares authorized, 6,891,262 shares issued and outstanding at December 31, 2010 and 6,828,616 shares issued and outstanding at December 31, 2009	30,330	29,732
Accumulated other comprehensive loss	(586)	(768)
Retained earnings	18,573	15,438
Total stockholders' equity	48,317	44,402
Total liabilities and stockholders' equity	\$ 58,234	\$ 51,137

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

Table of Contents**CONSOLIDATED STATEMENTS OF OPERATIONS  
CYBEROPTICS CORPORATION**

(In thousands, except per share amounts)	Year ended December 31,	
	2010	2009
Revenues	\$ 56,951	\$ 27,066
Cost of revenues	31,989	17,861
Gross margin	24,962	9,205
Research and development expenses	7,354	7,130
Selling, general and administrative expenses	13,766	12,766
Amortization of intangibles	181	181
Severance	363	363
Income (loss) from operations	3,661	(11,235)
Interest income and other	268	539
Income (loss) before income taxes	3,929	(10,696)
Income tax provision (benefit)	794	(3,880)
Net income (loss)	\$ 3,135	\$ (6,816)
Net income (loss) per share Basic	\$ .46	\$ (1.00)
Net income (loss) per share Diluted	\$ .45	\$ (1.00)
Weighted average shares outstanding Basic	6,861	6,793
Weighted average and common equivalent shares outstanding Diluted	6,907	6,793

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

Table of Contents**CONSOLIDATED STATEMENTS OF CASH FLOWS  
CYBEROPTICS CORPORATION**

(In thousands)	Year ended December 31,	
	2010	2009
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net income (loss)	\$ 3,135	\$ (6,816)
Adjustments to reconcile net income (loss) to net cash provided (used) by operating activities:		
Depreciation and amortization	2,263	2,544
Provision for doubtful accounts	(27)	827
Deferred income tax provision (benefit)	331	(684)
Foreign currency transaction gains	(129)	(137)
Excess tax benefits from equity compensation plans	(6)	(11)
Stock compensation expense	391	449
Realized gains on available-for-sale debt securities		(27)
Changes in operating assets and liabilities:		
Accounts receivable	(2,875)	(2,265)
Inventories	(6,624)	1,700
Income tax refunds receivable	2,105	(901)
Other assets	147	173
Accounts payable	1,456	857
Advance customer payments	495	(27)
Accrued expenses and other liabilities	1,100	(2,191)
<b>Net cash provided (used) by operating activities</b>	<b>1,762</b>	<b>(6,509)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Proceeds from maturities of available-for-sale marketable securities	16,965	12,683
Proceeds from sales of available-for-sale marketable securities	3,241	3,363
Purchases of available-for-sale marketable securities	(16,572)	(9,095)
Additions to equipment and leasehold improvements	(1,109)	(729)
Additions to patents	(202)	(272)
<b>Net cash provided by investing activities</b>	<b>2,323</b>	<b>5,950</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from exercise of stock options	26	38
Excess tax benefits from equity compensation plans	6	11
Proceeds from issuance of common stock under Employee Stock Purchase Plan	175	118
<b>Net cash provided by financing activities</b>	<b>207</b>	<b>167</b>
Effects of exchange rate changes on cash and cash equivalents	(42)	53
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>4,250</b>	<b>(339)</b>
Cash and cash equivalents beginning of year	4,177	4,516
<b>Cash and cash equivalents end of year</b>	<b>\$ 8,427</b>	<b>\$ 4,177</b>

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

Table of Contents**CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME  
CYBEROPTICS CORPORATION**

(In thousands)	Common Stock		Accumulated Other Comprehensive	Retained	Total
	Shares	Amount	Income (Loss)	Earnings	Stockholders Equity
BALANCE, DECEMBER 31, 2008	6,769	\$ 29,156	\$ (530)	\$ 22,254	\$ 50,880
Excess tax benefit from exercise of stock options, net of deferred tax shortfall related to stock options and restricted stock units		(29)			(29)
Exercise of stock options, vesting of restricted stock units, net of shares exchanged as payment	25	38			38
Share issuances for compensation purposes	14	64			64
Stock compensation		385			385
Issuance of common stock under Employee Stock Purchase Plan	21	118			118
Comprehensive loss:					
Market value adjustments of marketable securities, net of reclassification adjustment			(257)		(257)
Cumulative translation adjustment			19		19
Net loss				(6,816)	(6,816)
Total comprehensive loss					(7,054)
BALANCE, DECEMBER 31, 2009	6,829	\$ 29,732	\$ (768)	\$ 15,438	\$ 44,402
Excess tax benefit from exercise of stock options, net of deferred tax shortfall related to stock options and restricted stock units		6			6
Exercise of stock options, vesting of restricted stock units, net of shares exchanged as payment	28	26			26
Share issuances for compensation purposes	4	38			38
Stock compensation		353			353
Issuance of common stock under Employee Stock Purchase Plan	30	175			175
Comprehensive income:					
Market value adjustments of marketable securities, net of reclassification adjustment			(121)		(121)
Cumulative translation adjustment			303		303
Net income				3,135	3,135
Total comprehensive income					3,317
BALANCE, DECEMBER 31, 2010	6,891	\$ 30,330	\$ (586)	\$ 18,573	\$ 48,317

**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 supplier of optical process control sensors and inspection systems that are used to control the manufacturing process and to ensure the quality of electronic circuit boards manufactured by our customers using surface mount technology (SMT). We also manufacture and sell sensors that assist with yield improvement in the photovoltaic cell manufacturing and semiconductor wafer fabrication process.

**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.

**Subsequent Events**

We evaluated subsequent events through the issuance date of our consolidated financial statements for the period ended December 31, 2010.

**Use of Estimates**

The preparation of 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ significantly from those estimates.

**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. Some cash and cash equivalent balances may exceed federally insured limits.

**Marketable Securities**

All marketable securities are classified as available-for-sale and consist of U.S. government 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 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, or an other-than temporary impairment is recognized in current operations. 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.

**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.

**Allowance for Doubtful Accounts**

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



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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 three to ten years. Leasehold improvements are depreciated using the straight-line method over the shorter of the asset useful life or the underlying lease term. Gains or losses on dispositions are included in current operations.

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**Intangible Assets**

Identified intangible assets (excluding goodwill), consisting primarily of developed technology and trademarks, are being amortized on a straight-line basis over periods ranging from four to ten years, based upon their estimated life. The straight-line method of amortization reflects an appropriate allocation of the cost of intangible assets to earnings in proportion to the economic benefits obtained by us in each reporting period.

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.

**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 for our reporting units during the fourth quarter of each year and between annual evaluations if events occur or circumstances change that indicate goodwill might be impaired. Goodwill is tested by comparing the fair value of each reporting unit, as determined based on their future estimated discounted cash flows, to the carrying value for each reporting unit.

**Patents**

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

**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, revenues are recognized upon shipment under FOB shipping point terms, and include shipping and handling costs. Estimated returns and warranty costs are recorded at the time of sale. Sales of some surface mount technology (SMT) systems 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, installation and training, and in some cases, an extended warranty. Revenue from installation and training and extended warranty are recognized as the services are provided, typically within one month of shipment in the case of installation and training. Extended warranties are typically for a second or third year of coverage beyond the basic one year warranty included with all SMT sales.

When a sale involves multiple elements, revenue is allocated to each respective element in accordance with guidance codified in Accounting Standards Codification ( ASC ) Topic 605-25 *Accounting for Revenue Arrangements with Multiple Deliverables*.

Prior to January 1, 2010, we recognized revenue based on multiple element revenue guidance which required the existence of vendor specific objective evidence of fair value (VSOE) for the undelivered elements in an arrangement in order for us to account for the elements separately. We utilized the residual method of allocation to account for delivered elements.

In October 2009, the Financial Accounting Standards Board (FASB) amended guidance in *FASB Accounting Standards Codification*<sup>TM</sup> (ASC) 605, *Revenue Recognition*, 25, Multiple-Element Arrangements, to (1) modify the separation criteria by eliminating the criterion that requires objective and reliable evidence of fair value for the undelivered item(s), and (2) eliminates the use of the residual method of allocation and instead requires that arrangement consideration be allocated, at the inception of the arrangement, to all deliverables based on their relative selling price. The FASB also issued guidance to amend the scope of ASC 985, *Software*, 605, Revenue Recognition, to exclude arrangements with tangible products containing both software and non-software components that function together to deliver a product's essential functionality.

Under the amended guidance, consideration is allocated to the deliverables at inception of an arrangement using the relative selling price method. Selling price is determined based on a selling price hierarchy, consisting of VSOE, third party evidence or estimated selling price. Under the amended guidance, we determined an estimated selling price for each of the elements in our multiple elements sales based on the selling price hierarchy and allocated consideration to the deliverables using the relative selling price method. Management's best estimate of the selling price of an SMT machine is based on the cost buildup of the product and a reasonable margin based on geographic location and market conditions. We have adopted the amended guidance effective January 1, 2010. The impact of adopting the amended guidance was not material to our recognition of revenue in 2010 and would have been insignificant in 2009.

Costs related to products delivered are recognized in the period revenue is recognized. Cost of goods sold consists primarily of direct labor, manufacturing overhead, raw materials and components and excludes amortization of intangible assets.



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**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 transaction gains and losses are included as a component of net income (loss).

**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.

**Advertising Costs**

We expense all advertising costs as incurred, and the amounts were not material for all periods presented.

**Income Taxes**

We account for income taxes in accordance with guidance outlined in ASC Topic 740-10-25 *Accounting for Uncertainty in Income Taxes*, as it relates to income tax liabilities. ASC Topic 740-10-25 establishes a more likely than not (i.e., a likelihood of occurrence greater than fifty percent) minimum threshold a tax position is required to meet before being recognized in the financial statements. Under ASC Topic 740-10-25, 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.

Under ASC Topic 740-10-25, only the portion of the liability 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 guidelines codified in ASC Topic 740 *Accounting for Income Taxes*.

**Net Income (Loss) Per Share**

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Net income (loss) per diluted share is computed by dividing net income (loss) by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares consist of common shares to be issued upon exercise of stock options, restricted stock units and from participation in our employee stock purchase plan, as calculated using the treasury stock method. 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, income tax refunds receivable, other assets, accounts payable, accrued expenses and other current liabilities approximate the related fair values due to the short-term maturities of these instruments.

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**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 statement of operations based on the grant date fair value of the award. Under the modified prospective method, we are required to record equity-based compensation expense for all awards granted after the date of adoption, and for all unvested shares granted prior to the date of adoption. 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, granted before and after adoption 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 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 4 to the Consolidated Financial Statements for additional information on stock-based compensation.

**Recent Accounting Developments**

In October 2009, the FASB amended guidance in *FASB Accounting Standards Codification*<sup>TM</sup> (ASC) 605, *Revenue Recognition*, 25,

Multiple-Element Arrangements, to (1) modify the separation criteria by eliminating the criterion that requires objective and reliable evidence of fair value for the undelivered item(s), and (2) eliminates the use of the residual method of allocation and instead requires that arrangement consideration be allocated, at the inception of the arrangement, to all deliverables based on their relative selling price. The FASB also issued guidance to amend the scope of ASC 985, *Software*, 605, *Revenue Recognition*, to exclude arrangements with tangible products containing both software and non-software components that function together to deliver a product's essential functionality.

Under the amended guidance, consideration is allocated to the deliverables at inception of an arrangement using the relative selling price method. Selling price is determined based on a selling price hierarchy, consisting of VSOE, third party evidence or estimated selling price. Under the amended guidance, we determined an estimated selling price for each of the elements in our multiple elements sales based on the selling price hierarchy and allocated consideration to the deliverables using the relative selling price method. We have adopted the amended guidance effective January 1, 2010. The impact of adopting the amended guidance was not material to our recognition of revenue in 2010 and would have been insignificant in 2009.

In January 2010, the FASB issued ASU No. 2010-06, *Fair Value Measurements and Disclosures (Topic 820) Improving Disclosures about Fair Value Measurements* (ASU No. 2010-06). ASU No. 2010-06 requires new disclosures regarding significant transfers in and out of Levels 1 and 2, as well as information about activity in Level 3 fair value measurements, including presenting information about purchases, sales, issuances and settlements on a gross versus a net basis in the Level 3 activity roll forward. In addition, ASU No. 2010-06 clarifies existing disclosures regarding input and valuation techniques, as well as the level of disaggregation for each class of assets and liabilities. ASU No. 2010-06 is effective for interim and annual periods beginning after December 15, 2009, except for the disclosures pertaining to purchases, sales, issuances and settlements in the roll forward of Level 3 activity; those disclosures are effective for interim and annual periods beginning after December 15, 2010. Our adoption of ASU No. 2010-06 effective January 1, 2010 had no current impact on our consolidated financial position, results of operations or cash flows.

Table of Contents**Comprehensive Income (Loss)**

Components of comprehensive income (loss) include net income (loss), foreign-currency translation adjustments, unrealized gains (losses) on available-for-sale securities and reclassification adjustments. At December 31, 2010 and 2009, components of accumulated other comprehensive income (loss) is as follows:

(In thousands)	Foreign Currency Translation	Net Unrealized Gains (Losses) on Securities	Accumulated Other Comprehensive Loss
Balance December 31, 2008	\$ (906)	\$ 376	\$ (530)
Unrealized losses on investments, net of tax of \$132		(240)	(240)
Reclassification adjustment for realized gains and impairment losses on investments, net of tax of \$10		(17)	(17)
Translation adjustments	19		19
Other comprehensive income (loss)	19	(257)	(238)
Balance December 31, 2009	\$ (887)	\$ 119	\$ (768)
Unrealized losses on investments, net of tax of \$64		(121)	(121)
Translation adjustments	303		303
Other comprehensive income (loss)	303	(121)	182
Balance December 31, 2010	\$ (584)	\$ (2)	\$ (586)

Net unrealized gains (losses) on available-for-sale securities include deferred tax assets of \$1,000 at December 31, 2010 and deferred tax liabilities of \$63,000 at December 31, 2009.

**NOTE 2 MARKETABLE SECURITIES**

Investments in marketable securities classified as available-for-sale with a carrying amount of \$13,673,000 at December 31, 2010 and \$17,702,000 at December 31, 2009 consist of the following:

(In thousands)	Cost	December 31, 2010		Recorded Basis
		Unrealized Gains	Unrealized Losses	
U.S. government and agency obligations	\$ 3,178	\$ 7	\$	\$ 3,185
Corporate debt securities and certificates of deposit	3,197	2		3,199
Marketable securities short-term	\$ 6,375	\$ 9	\$	\$ 6,384
U.S. government and agency obligations	\$ 4,809	\$ 17	\$ (1)	\$ 4,825
Corporate debt securities and certificates of deposit	2,208	4	(3)	2,209
Asset backed securities	200	3		203
Equity securities	84		(32)	52
Marketable securities long-term	\$ 7,301	\$ 24	\$ (36)	\$ 7,289

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(In thousands)	Cost	December 31, 2009		Recorded Basis
		Unrealized Gains	Unrealized Losses	
U.S. government and agency obligations	\$ 11,199	\$ 158	\$	\$ 11,357
Corporate debt securities and certificates of deposit	3,180	20		3,200
Marketable securities short-term	\$ 14,379	\$ 178	\$	\$ 14,557
U.S. government and agency obligations	\$ 2,757	\$ 47	\$	\$ 2,804
Corporate debt securities	101			101
Asset backed securities	200	10		210
Equity securities	84		(54)	30
Marketable securities long-term	\$ 3,142	\$ 57	\$ (54)	\$ 3,145

Our investment in equity securities was in a \$32,000 unrealized loss position at December 31, 2010 and a \$54,000 unrealized loss position at December 31, 2009, due to weak economic and stock market conditions. We intend to hold this security indefinitely and expect a recovery in value as economic and market conditions continue to improve.

Our investments in long-term marketable debt securities all have maturities of less than five years. At December 31, 2010, marketable debt securities valued at \$10,578,000 were in an unrealized gain position totaling \$33,000. At December 31, 2010, marketable debt securities valued at \$3,043,000 were in an insignificant unrealized loss position totaling \$4,000 (all had been in an unrealized loss position for less than twelve months). At December 31, 2009, marketable debt securities valued at \$16,463,000 were in an unrealized gain position totaling \$235,000. At December 31, 2009, marketable debt securities valued at \$1,209,000 were in an insignificant unrealized loss position totaling several hundred dollars (all had been in an unrealized loss position for less than twelve months).

Net pre-tax unrealized losses for marketable securities of \$3,000 at December 31, 2010 and net pre-tax unrealized gains for marketable securities of \$181,000 at December 31, 2009 were recorded as a component of accumulated other comprehensive income (loss) in stockholders equity. In 2010 we received proceeds of \$3,241,000 from the sale of marketable securities. No gain or loss was recognized on any of the sales in 2010. In 2009, we recognized a gain of \$27,000 from the sale of marketable debt securities and received sale proceeds totaling \$3,363,000.

**NOTE 3 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 cash equivalents and marketable securities as of December 31, 2010 and 2009 according to the three-level fair value hierarchy:

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## Fair Value Measurements at December 31, 2010 Using

(In thousands)	Balance December 31, 2010	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. government and agency obligations	\$ 8,010		\$ 8,010	
Corporate debt securities and certificates of deposit	5,408		5,408	
Asset backed securities	203		203	
Equity securities	52	52		
Total	\$ 13,673	\$ 52	\$ 13,621	\$

## Fair Value Measurements at December 31, 2009 Using

(In thousands)	Balance December 31, 2009	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. government and agency obligations	\$ 14,161		\$ 14,161	
Corporate debt securities and certificates of deposit	3,301		3,301	
Asset backed securities	210		210	
Equity securities	30	30		
Total	\$ 17,702	\$ 30	\$ 17,672	\$

During the years ended December 31, 2010 and 2009 there were no significant transfers to or from the three level hierarchy. A significant transfer is recognized when the inputs used to value a security have 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 securities is based on a quoted market price obtained from an active market.

The carrying amounts of financial instruments such as cash equivalents, accounts receivable, other assets, accounts payable, accrued expenses and other current liabilities approximate the 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 2010 or 2009. Our foreign currency swap agreements are structured to mature on the last day of each quarter. The fair value associated with these agreements is inconsequential and represents a Level 2 measurement.



Table of Contents**NOTE 4 ACCOUNTING FOR STOCK BASED COMPENSATION****Share Based Compensation Information**

The following is a summary of pre-tax equity based compensation expense for the two year period ended December 31, 2010:

(In thousands)	2010	2009
Pre-tax equity compensation expense	\$ 391	\$ 449
Income tax benefits related to equity based compensation	\$ 109	\$ 142

Pre-tax equity compensation expense for 2010 includes \$266,000 for stock options and restricted stock units, \$87,000 for our employee stock purchase plan and \$38,000 for 4,000 shares issued to board members for compensation purposes (weighted average grant date fair value of \$9.45). Pre-tax equity compensation expense for 2009 includes \$323,000 for stock options and restricted stock units, \$62,000 for our employee stock purchase plan and \$64,000 for 13,775 shares issued to board members and officers for compensation purposes (weighted average grant date fair value of \$4.67).

We use historical data to estimate pre-vesting forfeitures. At December 31, 2010, the total unrecognized compensation cost related to non-vested equity based compensation arrangements was \$894,000 and the related weighted average period over which it is expected to be recognized is 2.4 years. The total fair value of shares vested was \$251,000 in 2010 and \$274,000 in 2009.

The fair values of the options granted to our employees were 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 the simplified method as specified in Staff Accounting Bulletin No. 107, Valuation of Share-Based Payment Arrangements for Public Companies. We continued to use the simplified method in 2010 and 2009 because our historical exercise experience is not expected to be representative of exercise patterns in the future, due to our recent restructuring activities and employee turnover. Expected volatility was computed based on historical fluctuations in the daily price of our common stock.

For stock options granted during the two year period ended December 31, 2010, 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:

	2010	2009
Risk-free interest rates	1.98%-2.75%	2.09%-2.29%
Expected life in years	4.75	4.75
Expected volatility	48%-52%	49%-53%
Expected dividends	None	None
Weighted average fair value on grant date	\$4.20	\$2.29

Table of Contents**Stock Options**

We have two stock incentive plans that are administered under the supervision of the Compensation Committee of the Board of Directors which have 756,167 shares of common stock reserved in the aggregate for issuance of options and other stock based benefits, including restricted stock units, to employees, officers and others. Reserved shares underlying canceled options are available for future grant under our active plans. Options are granted at an option price per share equal to or greater than the market value at the date of grant. Generally, options granted to employees vest over a four-year period and expire five, seven or ten 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. As of December 31, 2010, there are 242,385 shares of common stock available for future issuance under these plans. In addition, there are 50,000 shares reserved and included in the plan summaries below that are not part of the two stock incentive plans.

The following is a summary of stock option activity for each of the years in the two year period ended December 31, 2010:

Shares	Year ended December 31,	
	2010	2009
Outstanding, beginning of year	549,095	715,646
Granted	106,167	45,000
Exercised	(66,500)	(16,250)
Expired	(57,625)	(143,576)
Forfeited		(51,725)
Outstanding, end of year	531,137	549,095
Exercisable	336,471	412,328
<b>Weighted average exercise price per share</b>	<b>2010</b>	<b>2009</b>
Outstanding, beginning of year	\$ 10.04	\$ 10.44
Granted	\$ 9.59	\$ 5.13
Exercised	\$ 5.97	\$ 4.30
Expired	\$ 13.47	\$ 12.11
Forfeited	\$	\$ 7.34
Outstanding, end of year	\$ 10.09	\$ 10.04
Exercisable	\$ 11.44	\$ 11.36

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, 2010, the weighted average remaining contractual term was 4.25 years and the aggregate intrinsic value was \$519,000. For options exercisable at December 31, 2010, the weighted average remaining contractual term was 3.27 years and the aggregate intrinsic value was \$223,000. The aggregate intrinsic value of stock options exercised was \$113,000 in 2010 and \$32,000 in 2009. We received proceeds of \$26,000 and realized an income tax benefit of \$6,000 from the exercise of stock options in 2010. New shares are issued for all option exercises, upon vesting of restricted stock units, for share issuances to board members and others or for share issuances under our Employee Stock Purchase Plan.

Table of Contents**Restricted Stock Units**

Our 1998 Stock Incentive Plan also permits our Compensation Committee to grant other stock-based benefits, including restricted stock units. Restricted stock units are valued at a price equal to the fair market value of our common stock on the date of grant, generally vest over a four year period and entitle the holders to one share of our common stock for each restricted unit. The weighted average grant date fair value for each restricted stock unit was \$8.69 in 2010 and \$4.69 in 2009. The aggregate fair value of outstanding restricted stock units based on the closing share price of our common stock as of December 31, 2010 was \$279,000. 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 \$90,000 for the year ended December 31, 2010 and \$80,000 for the year ended December 31, 2009.

A summary of activity in non-vested restricted stock units for the year ended December 31, 2010 follows:

Non vested restricted stock units	Shares	Weighted Average Grant Date Fair Value per Share
Non-vested at December 31, 2009	22,819	\$ 6.79
Granted	19,493	\$ 8.69
Vested	(9,667)	\$ 8.07
Forfeited		\$
Non-vested at December 31, 2010	32,645	\$ 7.55

**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 price on the first or last day of the offering period. Share issuances under the Employee Stock Purchase Plan were 30,658 for the year ended December 31, 2010 and 20,810 for the year ended December 31, 2009. As of December 31, 2010, 61,344 shares remain available for issuance under this plan.

**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 election or re-election to the board of directors. The plan provides for a total of 30,000 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 for the year ended December 31, 2010 and 3,000 for the year ended December 31, 2009. As of December 31, 2010, 20,000 shares remain available for issuance under this plan. The shares issued in 2010 had a fair market value on the date of grant equal to \$38,000. The shares issued in 2009 had a fair market value on the date of grant equal to \$14,000.

Table of Contents**NOTE 5 NET INCOME (LOSS) PER SHARE:**

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Net income (loss) per diluted share is computed by dividing net income (loss) by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares consist of common shares to be issued upon exercise of stock options, restricted stock units and from participation in our employee stock purchase plan, as calculated using the treasury stock method. All potentially dilutive 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 year ended December 31, 2009. The components of net income (loss) per basic and diluted share are as follows:

(In thousands except per share amounts)	Net income (loss)	Weighted Average Shares Outstanding	Per Share Amount
<b>Year Ended December 31, 2010:</b>			
Basic	\$ 3,135	6,861	\$ 0.46
Dilutive effect of common equivalent shares		46	(0.01)
Dilutive	\$ 3,135	6,907	\$ 0.45

(In thousands except per share amounts)	Net income (loss)	Weighted Average Shares Outstanding	Per Share Amount
<b>Year Ended December 31, 2009:</b>			
Basic	\$ (6,816)	6,793	\$ (1.00)
Dilutive effect of common equivalent shares			
Dilutive	\$ (6,816)	6,793	\$ (1.00)

The calculation of diluted net income (loss) per common share excludes 328,000 potentially dilutive shares for the year ended December 31, 2010 and 674,000 potentially dilutive shares for the year ended December 31, 2009, because their effect would be anti-dilutive.

**NOTE 6 OTHER FINANCIAL STATEMENT DATA**

Inventories consist of the following:

(In thousands)	December 31,	
	2010	2009
Raw materials and purchased parts	\$ 6,895	\$ 3,312
Work in process	1,807	637
Finished goods	5,513	3,796
	\$ 14,215	\$ 7,745

Equipment and Leasehold Improvements consist of the following:

(In thousands)	December 31,	
	2010	2009
Equipment	\$ 10,957	\$ 10,881

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Leasehold improvements	1,514	1,347
	12,471	12,228
Accumulated depreciation and amortization	(10,575)	(10,307)
	\$ 1,896	\$ 1,921

Total depreciation expense related to equipment and leasehold improvements was \$1,162,000 for the year ended December 31, 2010 and \$1,283,000 for the year ended December 31, 2009.

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Intangible and Other Assets consist of the following:

(In thousands)	December 31, 2010			December 31, 2009		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Developed technology	\$ 7,775	\$ (7,666)	\$ 109	\$ 7,775	\$ (7,485)	\$ 290
Patents	2,732	(2,406)	326	2,681	(2,329)	352
	\$ 10,507	\$ (10,072)	\$ 435	\$ 10,456	\$ (9,814)	\$ 642

Amortization expense for the two years ended December 31, 2010 and 2009 is as follows:

(In thousands)	Year ended December 31,	
	2010	2009
Developed technology	\$ 181	\$ 181
Patents	227	293
	\$ 408	\$ 474

As of December 31, 2010, the weighted average remaining life of our intangible assets was approximately 0.6 years for developed technology and 2.1 years for patents. Estimated aggregate amortization expense based on current intangibles for the next three years is expected to be as follows: \$289,000 in 2011, \$113,000 in 2012 and \$33,000 in 2013.

Accrued Expenses consist of the following:

(In thousands)	December 31,	
	2010	2009
Wages and benefits	\$ 1,437	\$ 894
Warranty liability	702	488
Income taxes payable	277	98
Other	457	400
	\$ 2,873	\$ 1,880

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, and could be material. 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:

(In thousands)	Year ended December 31,	
	2010	2009
Balance at the beginning of period	\$ 488	\$ 823
Accruals for warranties	1,124	473
Settlements made during the period	(910)	(808)
Balance at the end of period	\$ 702	\$ 488

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Extended warranty:

Our extended warranty liability is included as a component of advance customer payments. A reconciliation of the changes in our extended warranty liability is as follows:

(In thousands)	Year ended December 31,	
	2010	2009
Balance at the beginning of period	\$ 636	\$ 605
Revenue deferrals	589	441
Amortization of deferred revenue	(438)	(410)
Balance at the end of period	\$ 787	\$ 636

**NOTE 7 GOODWILL**

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 the fair value of our reporting units to which goodwill is assigned to their 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 the reporting units' financial forecasts. Future estimated cash flows are discounted to their present value to calculate fair value. The summation of our reporting units' fair values is compared and reconciled to our market capitalization as of the date of our impairment test. In the situation where a reporting unit's carrying amount exceeds its fair value, the amount of the impairment loss must be measured. The measurement of the impairment (Step 2 of the impairment test) is calculated by determining the implied fair value of a reporting unit's goodwill. In calculating the implied fair value of goodwill, the fair value of the reporting unit is allocated to all other assets and liabilities of that unit based on their fair values. The excess of the fair value of a reporting unit over the amount assigned to its other assets and liabilities is the implied fair value of goodwill. The goodwill impairment is measured as the excess of the carrying amount of goodwill over its implied fair value.

In determining the fair value of our reporting units 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. The significant assumptions incorporated in the cash flow forecasts used for our 2010 goodwill impairment tests include a 20% discount rate and a 6% terminal growth rate. We utilized a 20% discount rate and a 7% terminal growth rate for our 2009 goodwill impairment test. Our goodwill at December 31, 2010 and 2009 in the amount of \$569,000, relates entirely to our semiconductor reporting unit. Our recent analyses indicate that this goodwill is not impaired.

Table of Contents**NOTE 8 INCOME TAXES**

Income (loss) before income taxes consists of the following:

(In thousands)	Year ended December 31,	
	2010	2009
Sources of income (loss) before income taxes:		
United States	\$ 1,681	\$ (11,999)
Foreign	2,248	1,303
Total income (loss) before income taxes	\$ 3,929	\$ (10,696)

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

(In thousands)	Year ended December 31,	
	2010	2009
Current:		
Federal	\$ 292	\$ (3,141)
State	(101)	(154)
Foreign	272	99
Total current	\$ 463	\$ (3,196)
Deferred:		
Federal	\$ 301	\$ (958)
State	(9)	203
Foreign	39	71
Total deferred	\$ 331	\$ (684)
Total provision (benefit) for income taxes	\$ 794	\$ (3,880)

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

	Year ended December 31,	
	2010	2009
Federal statutory rate	34.0%	(34.0)%
State income taxes, net of federal benefit	(2.2)	(1.4)
ETI and manufacturing tax incentives	(0.9)	1.0
U.S. Subpart F income	1.8	0.3
Stock based compensation	0.7	0.3
Research and experimentation credit	(1.9)	(0.5)
Foreign rate difference	(11.5)	(2.3)
Reserve for income taxes	1.2	3.2
Settlement of internal revenue service audits		(5.2)
Valuation allowance	0.4	1.8
Other, net	(1.4)	0.5
Effective tax rate	20.2%	(36.3)%

Our effective tax rate for 2010 reflects the benefit 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 favorably impacted our 2010 income tax rate by 11.5%.

Our effective tax rate for 2009 was favorably impacted by 5.2% or \$551,000 from settlement of Internal Revenue Service audits of our 2006 and 2007 federal income tax returns, including both the impact of settlement payments and reversal of a portion of our reserve for income taxes.





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

(In thousands)	2010	2009
Gross UTB balance at beginning of year	\$ 1,446	\$ 1,564
Additions based on tax positions related to the current year	97	510
Additions for tax positions of prior years		
Reductions for tax positions of prior years		
Settlements		(628)
Reductions due to lapse of applicable statute of limitations		
Gross UTB balance at end of year	\$ 1,543	\$ 1,446
Net UTB balance at end of year	\$ 686	\$ 546

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 Sheet. We recognize interest and penalties accrued related to unrecognized tax benefits in tax expense. Accrued interest and penalties on a gross basis were \$159,000 as of December 31, 2010 and \$140,000 as of December 31, 2009.

During the year ended December 31, 2010, we recorded a \$49,000 increase in liabilities, net of deferred tax benefit, for uncertain tax positions that was recorded as income tax expense. Estimated gross interest and penalties included in this amount total \$19,000. During the year ended December 31, 2009, we recorded a \$312,000 decrease in liabilities, net of deferred taxes, for uncertain tax positions that were recorded as an income tax benefit. The estimated gross reduction in interest and penalties included in this amount total \$39,000.

We file income tax returns in the U.S. federal jurisdiction, and various state and foreign jurisdictions. During 2009, the Internal Revenue Service completed audits of our 2006 and 2007 federal income tax returns. Our settlement with the Internal Revenue Service did not have a material impact on our financial condition. We are no longer subject to state and local income tax examinations by tax authorities for years before 2007. Due to the carryback of our 2009 federal taxable loss to the years 2004 -2006, the Internal Revenue Service could potentially examine our federal income tax returns for those years. The statute of limitations for examination of these returns had previously expired. We received a federal income tax refund in 2010 of approximately \$2.4 million from carryback of our 2009 federal taxable loss.

Deferred tax assets consist of the following:

(In thousands)	December 31,	
	2010	2009
Fixed asset and intangible amortization, net	\$ 961	\$ 1,215
Inventory allowances	629	806
Accrued liabilities	193	192
Warranty accrual	246	171
Deferred revenue	612	467
Accounts receivable allowance	353	367
Federal and state tax credits	2,676	2,678
Foreign net operating loss carry forwards	459	574
Stock based compensation	397	333
Other, net	144	114
Sub-total	6,670	6,917
Valuation allowance	(732)	(717)
Total net deferred tax assets	\$ 5,938	\$ 6,200

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At December 31, 2010 and 2009 we had no significant deferred tax liabilities. 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 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 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.

In analyzing the need for valuation allowances, we first considered our history of cumulative losses for U.S. income tax purposes over the past three years and also gave significant consideration to our results for U.S. income tax purposes over the past five years, as the economic cycles in our industry have tended to average five years in length (from peak to trough). We also considered our forecasts of future profitability, the duration of statutory carry forward periods and tax planning alternatives. Finally, we considered the length and severity of the recent global economic crisis, the impact that it had on our operating results and our expectation for rebound given recent signs of recovery in the global economy and more specifically in our markets. After considering all of these factors, and after considering other significant positive evidence, we concluded that a valuation allowance, with respect to substantially all of our U.S. based deferred tax assets, was not required at December 31, 2010.

Our results in both 2008 and 2009 were negatively impacted by the recent global economic slowdown, and we incurred a loss in the United States in both 2008 and 2009, where most of our net deferred tax assets are recorded. We recorded a profit in 2010. Achievement of ongoing profitability in the United States will be a significant factor in determining our continuing ability to carry these deferred tax assets without recording a valuation allowance. If future results from our operations are less than projected, a valuation allowance may be required against virtually all of our deferred tax assets, which could have a material impact on our results of operations in the period in which it is recorded.

Deferred tax assets at December 31, 2010, include \$459,000 of net operating loss carry forwards incurred in the UK by CyberOptics Ltd., which was acquired in 1999. 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 \$16,000 in 2010 due to a reduction in the future UK income tax rate. At December 31, 2010 we had \$2,327,000 of federal R&D tax credits that will begin to expire in 2019 if unused.

The valuation allowances at December 31, 2010 and 2009 are needed for various long-term state tax credit carry forwards, state operating loss carry forwards and capital losses for which recovery is not deemed to be more likely than not. The valuation allowance was increased in 2010 for additional state tax credit and net operating loss carry forwards that failed to satisfy the more likely than not criteria for recovery.

Income tax refunds received, net of cash payments for income taxes, were \$1,951,000 for the year ended December 31, 2010 and \$1,739,000 for the year ended December 31, 2009.

We have been granted a tax holiday with respect to a wholly owned foreign subsidiary allowing us to pay a reduced rate of tax for a period of five years through 2013. The tax holiday decreased income tax expense in 2010 by \$120,000 and increased our recorded income tax benefit in 2009 by \$56,000.

It is the intention of management to permanently reinvest all undistributed earnings of international subsidiaries, and accordingly, we have not provided United States taxes on such earnings. It is not practicable to determine the income tax liability that would be payable if such earnings was not indefinitely reinvested.

Table of Contents**NOTE 9 OPERATING LEASES**

We lease a 60,217 square foot mixed office and warehouse facility in Golden Valley, Minnesota. The lease has a term of 61 months and expires on June 30, 2011. 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 also lease a 20,000 square foot mixed office and warehouse facility in Singapore through July 2013, in addition to facilities for the operations of our other subsidiaries under operating leases that expire at various times through December 2012.

Total rent expense was \$1,442,000 for the year ended December 31, 2010 and \$1,510,000 for the year ended December 31, 2009. At December 31, 2010, the future minimum lease payments required under non-cancelable operating lease agreements are as follows:

Year ending December 31,	(In thousands)
2011	\$ 982
2012	456
2013	200
Total	\$ 1,638

**NOTE 10 DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES**

We enter into foreign currency swap agreements to hedge short-term inter-company financing transactions with our subsidiaries in the United Kingdom and Singapore. These currency swap agreements are structured to mature on or about the last day of each quarter and are designated as cash flow hedges. At December 31, 2010, we had two open swap agreements for \$1 million Singapore dollars and £175,000 British pounds that were purchased on that day. As a result, any unrealized gains or losses as of December 31, 2010 were inconsequential.

We recognized net gains (losses) from settlement of foreign currency swap agreements of \$(23,000) for the year ended December 31, 2010 and \$(229,000) for the year ended December 31, 2009, that offset foreign currency transaction gains (losses) on the underlying inter-company balances of \$129,000 for the year ended December 31, 2010 and \$137,000 for the year ended December 31, 2009. These gains and losses are recognized in interest income and other in our statement of operations.

Our foreign currency swap agreements 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. Management does not expect material losses as a result of defaults by other parties.

**NOTE 11 401(K) PLAN**

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 \$221,000 in 2010 and \$229,000 in 2009.

Table of Contents**NOTE 12 BUSINESS SEGMENTS AND SIGNIFICANT CUSTOMERS**

The guidance codified in ASC Topic 280-10, *Disclosure about Segments of an Enterprise and Related Information* requires the management approach in determining business segments. The management approach designates the internal organization that is used by management for making operating decisions and assessing performance as the source of our reportable segments. We have determined that our business operates as two reportable segments. Balance sheet and income statement information for all periods presented has been allocated to our two segments. The electronic assembly segment is the design, manufacture and sale of optical process control sensors and inspection systems for the electronic assembly and photovoltaic cell equipment markets. The semiconductor segment is the design, manufacture and sale of optical and other process control sensors and related equipment for the semiconductor capital equipment market.

Information regarding our segments is as follows:

(In thousands)	Year Ended December 31,	
	2010	2009
<b>Revenue:</b>		
Electronic assembly		
OEM Sensors	\$ 25,537	\$ 8,428
SMT Systems	25,430	15,308
Total electronic assembly	50,967	23,736
Semiconductor	5,984	3,330
Total	\$ 56,951	\$ 27,066
<b>Income (loss) from operations:</b>		
Electronic assembly	\$ 2,114	\$ (10,711)
Semiconductor	1,547	(524)
Total income (loss) from operations	\$ 3,661	\$ (11,235)
Interest income and other	268	539
Income (loss) before income taxes	\$ 3,929	\$ (10,696)
<b>Depreciation and amortization:</b>		
Electronic assembly	\$ 2,035	\$ 2,192
Semiconductor	228	352
Total	\$ 2,263	\$ 2,544
<b>Expenditures for long-lived assets:</b>		
Electronic assembly	\$ 1,083	\$ 800
Semiconductor	228	201
Total	\$ 1,311	\$ 1,001
<b>Total assets (end of year):</b>		
Electronic assembly	\$ 39,306	\$ 27,509
Semiconductor	3,620	3,606
Corporate	15,308	20,022
Total	\$ 58,234	\$ 51,137

The following summarizes certain significant customer information:

(In thousands)	Significant Customer	Revenues	Percentage of Revenues
Year ended December 31, 2010	A	\$ 12,108	21%
	B	\$ 8,010	14%
Year ended December 31, 2009	A	\$ 2,152	8%
	B	\$ 4,373	16%



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The significant customers listed above are related to our electronic assembly segment. As of December 31, 2010, accounts receivable from significant customer A were \$1,496,000 and accounts receivable from significant customer B were \$1,961,000. As of December 31, 2009, accounts receivable from significant customer A were \$882,000 and accounts receivable from significant customer B were \$1,562,000. Our LaserAlign sensor family has accounted for a significant portion of our electronic assembly sales. Revenue from new product shipments of LaserAlign sensors accounted for 27% of our total revenue in 2010 and 13% of our total revenue in 2009. 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 86% for the year ended December 31, 2010 and 78% for the year ended December 31, 2009. Export sales are attributed to the country where the product is shipped. Virtually all export sales are negotiated, invoiced and paid in U.S. dollars.

Export sales by geographic area are summarized as follows:

(In thousands)	2010	2009
Americas	\$ 1,328	\$ 761
Netherlands	7,833	4,122
Other Europe	7,732	4,816
China	11,714	3,889
Japan	12,529	2,400
Other Asia	7,035	3,611
Other	665	1,558
	\$ 48,836	\$ 21,157

Long-lived assets include equipment and leasehold improvements attributable to each geographic area's operations. Long-lived assets at December 31, 2010 and 2009 are as follows:

(In thousands)	2010	2009
Long-lived assets:		
United States	\$ 1,245	\$ 1,207
Europe	3	3
Asia and other	648	711
Total long-lived assets	\$ 1,896	\$ 1,921

**NOTE 13 SEVERANCE, RECRUITMENT AND SINGAPORE TRANSITION**

The transition of a significant portion of development and final assembly and integration for our systems products to Singapore was substantially complete by the end of the first quarter of 2009. Severance costs incurred in connection with the February 2008 decision to move our systems related product development and final assembly and integration to Singapore related entirely to our electronic assembly segment and totaled \$48,000 in 2009.

In February 2009, we further reduced our workforce by 24 positions in response to the weakening global economy, our transition to Singapore and our decision to consolidate manufacturing for our semiconductor products into our Minneapolis facility. Severance costs incurred in connection with the February 2009 workforce reduction totaled \$315,000 in 2009, of which \$201,000 related to our electronic assembly segment and \$114,000 related to our semiconductor segment.

All of the severance costs related to the Singapore transition and the February 2009 workforce reduction have been classified as severance in our statement of operations. In addition, all of the aforementioned severance costs incurred in 2009 were paid prior to December 31, 2009. No severance costs were incurred in 2010.





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In the ordinary course of business, we are a defendant in miscellaneous claims and disputes. 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 indemnification claims 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 15 QUARTERLY FINANCIAL INFORMATION (UNAUDITED)**

(In thousands, except per share amounts)

<b>2010</b>	<b>March 31</b>	<b>June 30</b>	<b>Sept. 30</b>	<b>Dec. 31</b>
Revenues	\$ 12,341	\$ 16,499	\$ 14,145	\$ 13,966
Gross margin	5,256	6,656	6,663	6,387
Income from operations	257	1,189	1,174	1,041
Net income	247	969	948	971
Net income per share Basic (1)	0.04	0.14	0.14	0.14
Net income per share Diluted (1)	0.04	0.14	0.14	0.14
<b>2009</b>	<b>March 31 (2)</b>	<b>June 30 (2)</b>	<b>Sept. 30 (2)</b>	<b>Dec. 31</b>
Revenues	\$ 4,362	\$ 5,179	\$ 8,550	\$ 8,975
Gross margin	1,378	1,598	2,937	3,292
Income (loss) from operations	(3,981)	(3,970)	(1,724)	(1,560)
Net income (loss)	(2,433)	(1,923)	(841)	(1,619)
Net income (loss) per share Basic (1)	(0.36)	(0.28)	(0.12)	(0.24)
Net income (loss) per share Diluted (1)	(0.36)	(0.28)	(0.12)	(0.24)

- (1) The summation of quarterly per share amounts may not equal the calculation for the full year, as each quarterly calculation is performed discretely.
- (2) Severance costs in 2009 related to our move to Singapore and November 2008 and February 2009 workforce reductions were \$305,000 in the first quarter, \$90,000 in the second quarter and a \$(32,000) expense reduction in the third quarter.

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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) as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity and comprehensive income and cash flows for each of the two years in the period ended December 31, 2010. Our audits of the basic financial statements included the financial statement schedule listed in the index appearing under Item 15(a)(2). These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audit.

We conducted our audit 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. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit 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 audit provides 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 as of December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule when considered in relation to the basic financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

Grant Thornton LLP  
Minneapolis, Minnesota  
March 9, 2011

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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 Securities Exchange Act of 1934 Rule 13a-15(f), and for performing an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2010. Internal control over financial reporting is a process designed by, or under the supervision of, the registrant's principal executive and principal financial officers, or persons performing similar functions, and effected by the registrant's 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 the assets of the registrant; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the registrant are being made only in accordance with authorizations of management and directors of the registrant; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the registrant's assets that could have a material effect on the financial statements.

Management performed an assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2010 based upon criteria in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our assessment, management determined that the Company's internal control over financial reporting was effective as of December 31, 2010 based on the criteria in *Internal Control-Integrated Framework* issued by the COSO.

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

(ii). During the quarter ended December 31, 2010, 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 23, 2011 (hereafter, 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 heading Shares Outstanding 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 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.

**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, 2010 and 2009.
  - Consolidated Statements of Operations for the years ended December 31, 2010 and 2009.
  - Consolidated Statements of Cash Flows for the years ended December 31, 2010 and 2009.
  - Consolidated Statements of Stockholders' Equity and Comprehensive Income for the years ended December 31, 2010 and 2009.
  - Notes to the Consolidated Financial Statements
- (a)(2) Financial Statement Schedule:
- Schedule II, Valuation and Qualifying Accounts for the years ended December 31, 2010 and 2009, is attached as Item 15(c).

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(b) LIST OF EXHIBITS

<b>Exhibit Number</b>	<b>Description</b>
3.1	Articles of Incorporation of 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	Restated Stock Option Plan of the Company, as amended (incorporated by reference to Exhibit 4.1 of the Company's Registration Statement on Form S-8 filed August 18, 1998 (file no 333-61711)).
4.2	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)).
4.3	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 December 4, 2000 (file no. 333-51200)).
4.4	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, 2006 (file no 333-136500)).
4.5	CyberOptics Corporation Stock Grant Plan for Non-Employee Directors (incorporated by reference to 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	Severance Pay Agreement with Kathleen P. Iverson (incorporated by reference to Exhibit 10.2 to the current report on Form 8-K dated June 23, 2008).
*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 June 23, 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	Tenancy Agreement between NIDEC Component Technology Co. LTD and CyberOptics PTE LTD (Singapore) Term 15 May 2011 to 24 July 2013 (incorporated by reference to Exhibit 10.1 to the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2010).
*10.6	Severance Pay Agreement with Daniel Good
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.

\* Management Contract or Compensatory Plan or Arrangement



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(c) FINANCIAL STATEMENT SCHEDULES:

**SCHEDULE II**

**CYBEROPTICS CORPORATION  
VALUATION AND QUALIFYING ACCOUNTS AND RESERVES  
FOR THE YEARS ENDED DECEMBER 31, 2010 AND 2009**

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at end of Period
Allowance for doubtful accounts:				
Year ended December 31, 2010	\$ 1,049,000	\$ 6,000	\$ (50,000)	\$ 1,005,000
Year ended December 31, 2009	\$ 250,000	\$ 827,000	\$ (28,000)	\$ 1,049,000
Description	Balance at Beginning of Period	Charged to Costs and Expenses	Other Increases (Deductions)	Balance at end of Period
Allowance for deferred tax assets:				
Year ended December 31, 2010	\$ 717,000	\$ 15,000	\$	\$ 732,000
Year ended December 31, 2009	\$ 640,000	\$ 187,000	\$ (110,000)	\$ 717,000

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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/ KATHLEEN P. IVERSON*  
By Kathleen P. Iverson, CEO and Chair

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.

<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>/s/ KATHLEEN P. IVERSON</i> <i>Kathleen P. Iverson</i>	<i>Director, CEO and Chair</i> <i>(Principal Executive Officer)</i>	<i>March 8, 2011</i>
<i>/s/ ALEX B. CIMOCHOWSKI</i> <i>Alex B. Cimochofski</i>	<i>Director</i>	<i>March 7, 2011</i>
<i>/s/ MICHAEL M. SELZER, JR.</i> <i>Michael M. Selzer, Jr.</i>	<i>Director</i>	<i>March 8, 2011</i>
<i>/s/ IRENE M. QUALTERS</i> <i>Irene M. Qualters</i>	<i>Director</i>	<i>March 8, 2011</i>
<i>/s/ SUBODH K. KULKARNI</i> <i>Subodh K. Kulkarni</i>	<i>Director</i>	<i>March 8, 2011</i>
<i>/s/ JEFFREY A. BERTELSEN</i> <i>Jeffrey A. Bertelsen</i>	<i>Vice President and CFO</i> <i>(Principal Financial Officer</i> <i>and Principal Accounting Officer)</i>	<i>March 8, 2011</i>