





He is obsessed with proving that faltering laser-scanning systems, which rely on 20-year-old technology and often require human intervention, are as good as Cognex vision. He will lie, cheat, steal and dupe anyone to achieve his twisted ends.

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o a



LITTLE MISS TOKO:

She bends, folds, spindles and mutilates the packaging of consumer products so that medication for erectile dysfunction ends up in birth control pill packs. Now that's a hard pill to swallow!

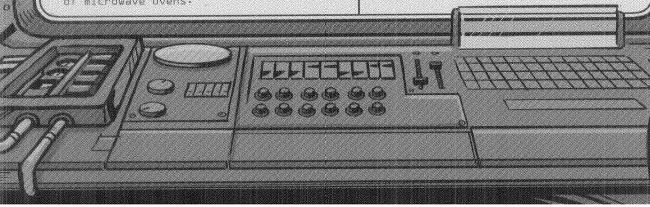


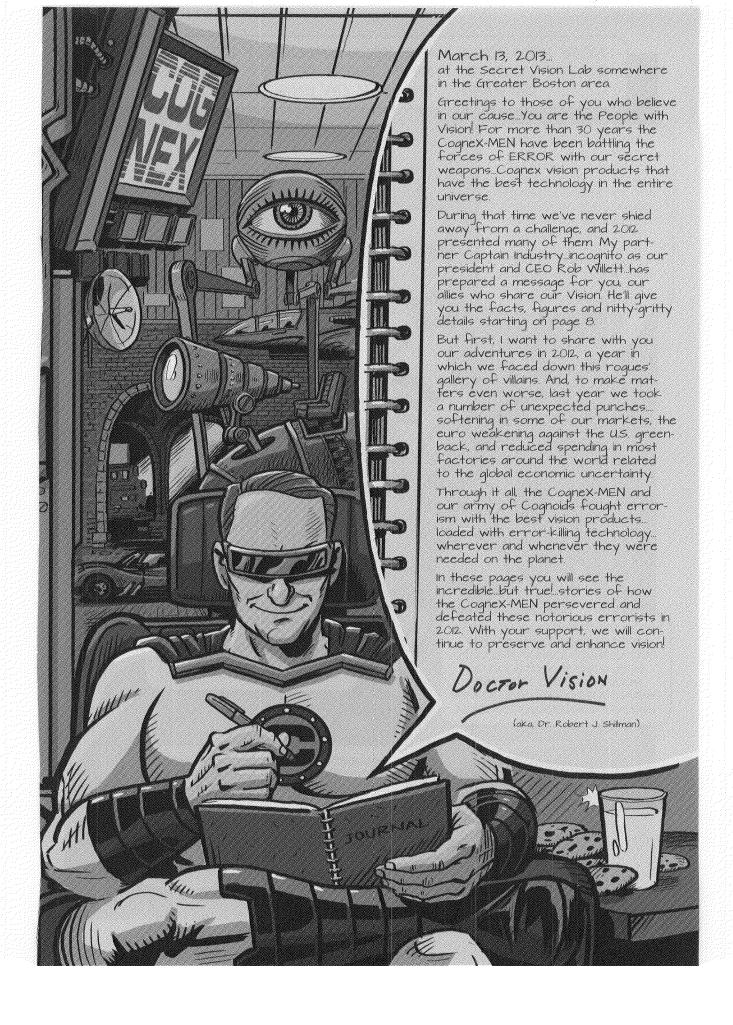
THE MENGLER: Smashing products is his game. When golf balls end up bouncing on the production floor instead of being in their packages, blame The Mangler. And it's also his handiwork when the contents of overfilled potato chip bags are crushed into dust.



PREFECTOR: She is a malevolent jokester whose greatest pleasure is to cause manufacturing defects. To her: any quality control effort is wasted effort. She loves causing the touchscreens on smartphones to be off-kilter and enjoys producing misprints on the touch panels of microwave ovens.

THE FLOW: He's a human magnet for detritus that turns first-quality materials into scrap. His micro-fragmenting armor introduces cracks, tears, bubbles and other imperfections onto the surfaces of plastic, paper and steel, rendering them useless.





THESE WEAPONS HAVE BEEN SPECIALLY DEVELOPED BY THE COGNEX-MEN IN THEIR SECRET VISION LAB TO FIGHT THE WAR ON ERRORISM!



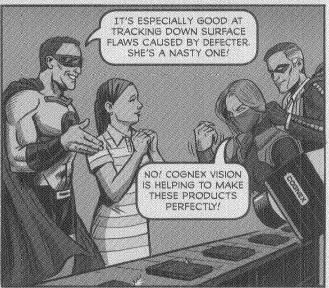


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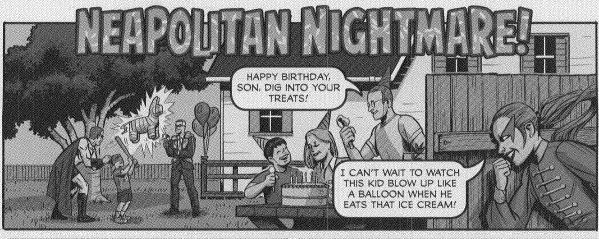






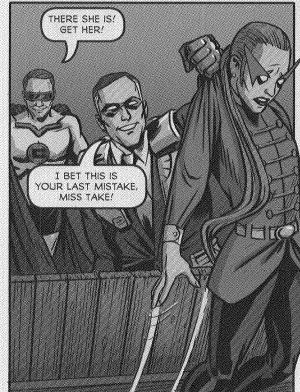










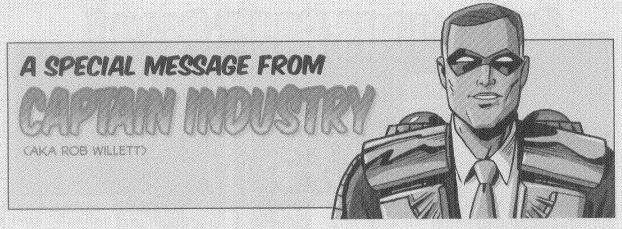






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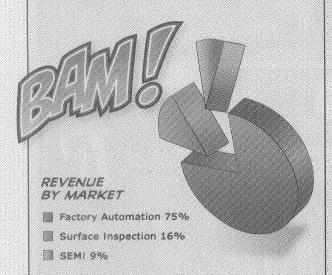


I'M TAKING A FEW MOMENTS AWAY FROM FIGHTING THE AXIS OF ERROR WITH DOCTOR VISION TO ASSUME MY SECRET IDENTITY AS COGNEX CEO AND BROADCAST THIS VERY SPECIAL MESSAGE ABOUT OUR 2012 RESULTS.

DEAR SHAREHOLDERS

Cognex had a good year in 2012. Revenue was a record \$324 million. We also delivered an operating margin of 26% and a net margin of 21%. Importantly, these results were achieved even while we made substantial investments in new products and our sales channel in China.

Most companies would applaud these results, but at Cognex "Good is not good enough." We expect our performance every year to be super! We were disappointed that revenue was only 1% higher than in 2011. Growth was menaced by substantial declines in the struggling semiconductor, electronics and solar industries and was also impacted by unfavorable currency exchange rates.



Despite these challenges, Cognex reported strong results in 2012 largely due to a focus on factory automation, our largest, fastest-growing market. Here, revenue increased 4% over 2011 to a record \$245 million (a 7% increase in constant currency). This is well below our long-term target growth rate, but a strong result given the ongoing macroeconomic conditions we faced.

Our surface vision team pumped-up their efforts to protect manufacturers from the Axis's treachery. Revenue from the surface inspection market increased 5% over 2011 to a record \$51 million. In 2012, Cognex saw continued success in the paper industry where customers benefited from our ability to provide both inspection and monitoring capabilities. Business was also at a high level in metals, particularly to ensure the high quality of aluminum for the automotive industry.

However, evil lurked in the semiconductor and electronics capital equipment market (SEMI), as the downturn that began in mid-2011 continued. As a result, SEMI revenue decreased by 24%, from \$38 million in 2011 to \$29 million.

POWERFUL FOCUS ON INNOVATIVE TECHNOLOGY CONTINUES TO CONQUER NEW FRONTIERS.

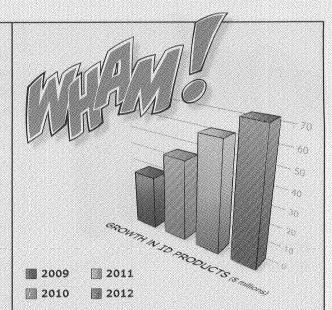
Cognex has always been a leader in new technologies. Indeed, our vision experts' rate of innovation

Growth in factory automation revenue was offset by \$6 million of unfavorable currency exchange rates. is faster now than at any time in our history. As a result, our products are more powerful and easier to use than ever before, which fortifies our customers' fight against ERROR.

Within the factory automation market there is a fast-growing, high-potential segment for reading 1-D barcodes and 2-D DataMatrix codes (we refer to this segment as ID). Cognex vision-based readers are a disruptive force in ID. Our highly advanced barcode readers are replacing the laser-based products of yesterday to identify and track items throughout the manufacturing and distribution process. Revenue from ID products increased to a record \$71 million, growing 19% year-on-year (a 24% increase in constant currency).2 A highlight was our progress in logistics, where Cognex ID readers beat up on entrenched laser-based competitors to win share at large e-retailers, package delivery companies and postal accounts.

With an estimated market share of less than 10%, Cognex is still very early in its penetration of the ID market. But our innovative ID product pipeline

² Growth in 1D products revenue was offset by \$3 million of unfavorable currency exchange rates.



has the potential to drive change for years to come. Cognex's most exciting new product in 2012 was the DataMan 300 industrial ID reader, which uses our groundbreaking HOTBARS image-analysis technology to provide the highest read rates for difficult 1-D barcodes. Sales of the DataMan 300 verged on the heroic, well exceeding expectations.

In 2012, we launched the DataMan 9500 mobile computer, a handheld device that reads challenging 2-D direct part mark codes in automotive, aerospace

HE FORWARD LINES IN OUR FIGHT AGAINST ERRORISM

THE COGNEX-MEN BATTLE THE FORCES OF ERROR SIDE-BY-SIDE WITH CUSTOMERS IN THREE MARKET CATEGORIES:



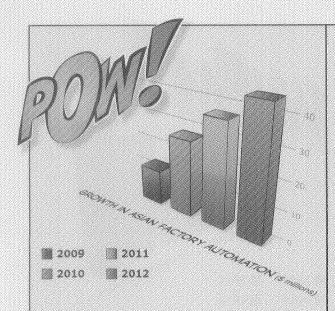
Factory Automation customers install Cognex products on their production lines to ensure that the products they manufacture are made without error. The factory automation market also includes customers who use Cognex products outside of the assembly process, such as using ID products in logistics for package sortation and distribution.



Semiconductor and Electronics Capital Equipment (SEMI) customers integrate Cognex products into machines that they make and then sell to their customers for either semiconductor fabrication or printed circuit board assembly.



Surface Inspection customers make materials at high speeds in a continuous fashion, such as metals, paper, nonwovens, plastics and glass. Cognex products detect, classify, analyze and determine the root cause of defects on the surfaces of those materials as they're being produced.



and other industries concerned with both supply chain management and product counterfeiting (where real villains are at work).

Cognex also introduced the In-Sight 7000 series of vision systems. The In-Sight 7000 boasts the highest first-year sales of any product in our history. Significantly, the series included the In-Sight 7010, a model that targets the lower-priced vision systems market that was previously unaddressed by Cognex.

We also debuted OCRMax, a powerful technology for reading and verifying character strings such as date codes on aspirin bottles or vehicle identification numbers. OCRMax enables manufacturers to track parts under conditions that previously made it extremely difficult for machine vision to perform, such as reading stamped metal or low-resolution ink jet print.

EXPANDING CHANNEL SEEKS TO SUPERCHARGE REVENUE IN REGIONS OF HIGH GROWTH POTENTIAL

From a percentage growth standpoint, the Asia region (which excludes Japan) was our super performer in 2012. Asian factory automation revenue grew 23% over 2011 and represented 13% of overall revenue in 2012, up from 5% five years ago. Market share gains continued in China, where we believe there is the highest potential for growth geographically, as Chinese manufacturers invest heavily in state-of-the-art automation equipment. Our China business today is concen-

trated in consumer electronics, the industry that has typically adopted our technology first. To grow more broadly, we opened new offices in the expanding industrial cities of Qingdao, Nanjing and Guangzhou. We invested in local talent to strengthen our sales team and battle our foes. We also aggressively expanded our partner network; Cognex now has nearly 100 qualified distributors in China, up more than 125% compared to three years ago.

Turning to more established geographical markets, growth moderated during 2012 in the Americas and Europe as manufacturers pulled back on their spending amidst macroeconomic concerns. And, in Japan, growth in our ID business was not strong enough to overcome another difficult year in the automation market there. On the positive side, an expanded sales channel in Brazil drove incremental revenue, especially in the food industry. Another bright spot was Eastern Europe, where a growing automotive manufacturing base increasingly applied machine vision and ID readers.

KEEPING OUR CUSTOMERS SAFE FROM ERROR

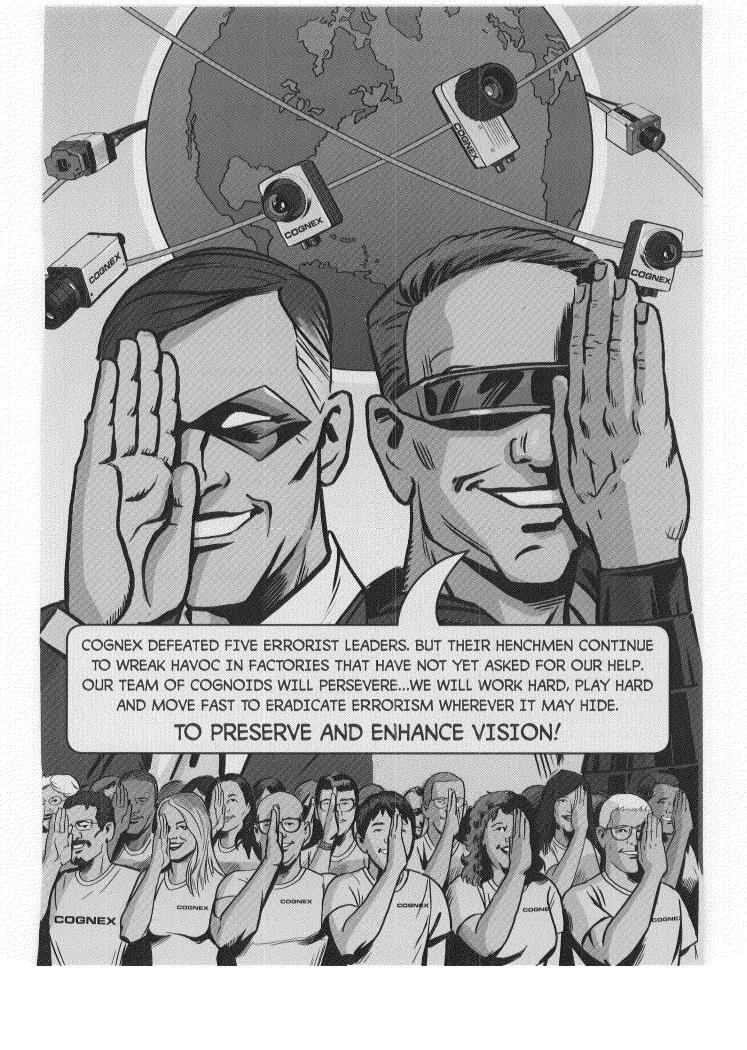
Cognex fought valiantly against the ERRORISTS in 2012. We brought outstanding products to market. We broadened our global footprint in high-potential geographical areas for machine vision. And we leveraged our technical excellence to create an exciting schedule of major product launches for 2013. This forward momentum, supported by a strong financial position and a team united by a unique corporate culture, makes us confident in Cognex's continued success and our ability to achieve results that are not just good, but SUPER!

Now I must put on my Captain Industry jet pack and get back into action. The Axis of ERROR never rests, and neither do the CogneX-MEN!

To Preserve and Enhance Vision!

Robert J. Willett

President and Chief Executive Officer



OARD OF DIRECTORS AND MANAGEMENT

Board of Directors

Robert J. Shillman Chairman and Chief Culture Officer Cognex Corporation

Patrick A. Allas Senior Vice President Cognex Corporation

Jerald G. Fishman Chief Executive Officer Analog Devices, Inc.

Theodor Krantz Vice President Airmar Technology Corporation

Jeffrey B. Miller Former President Markem Corporation

Anthony Sun Former Managing General Partner Venrock Associates

Reuben Wasserman Business Consultant

Robert J. Willett President and Chief Executive Officer Cognex Corporation

Executive Officers

Robert J. Shillman Chairman and Chief Culture Officer

Robert J. Willett
President and Chief Executive Officer

Richard A. Morin Executive Vice President of Finance and Administration, and Chief Financial Officer

Senior Management

Patrick A. Alias Senior Vice President

Patrice Denizard

Vice President, MVSD Sales and Service, Asia

Sheila DiPalma Treasurer

Carl Gerst
Vice President and Business Unit Manager,
ID Products

Makoto Inoue President, Cognex K.K.

Todd Keebaugh
Vice President, Legal Services

Joerg Kuechen
Vice President and Business Unit Manager,
Vision Software and Sensors

Didier Lacroix Senior Vice President, MVSD Worldwide Sales and Marketing

Herbert Lade Vice President and Business Unit Manager, Vision Systems

Laura MacDonald Vice President and Corporate Controller

John McGarry Senior Vice President, Research and Development

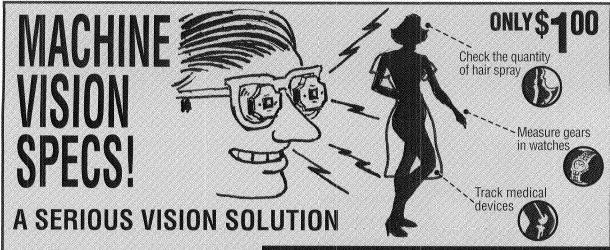
Kris Nelson Senior Vice President, MVSD Sales and Service, Americas

Steven Randazzo
Vice President and General Manager, SISD

Dirk Rathsack Vice President, MVSD Sales and Service, Europe

Hisataka Shitara Senior Vice President, SISD Sales, Cognex K.K.

William Silver Senior Vice President and Senior Fellow



Based on scientific optical principles that really work. With MACHINE VISION SPECS you have the power of COGNEX vision at your command. Read barcodes! Detect manufacturing flaws! Measure with pinpoint precision! Loads of laughs and fun at parties. Send only \$1 plus 25¢ for shipping and handling.

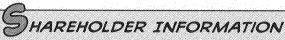
MAIL COUPON TODAY

COGNEX CORP. "Machine Vision Specs" Dept. 16
One Vision Drive, Natick, Massachusetts
I enclose \$1 plus 25¢ for postage and handling (Total \$1.25).
Send me the amazing "Machine Vision Specs"; or \$2 for De Luxe Model.
My money will be refunded in full if I am not 100% Satisfied.

		n									

ADDRESS.....

CITY & STATE



CORPORATE HEADQUARTERS Cognex Corporation

One Vision Drive Natick, Massachusetts 01760 Telephone: (508) 650-3000 Fax: (508) 650-3333 www.cognex.com

TRANSFER AGENT

Computershare Investor Services www.computershare.com/investor

OUTSIDE LEGAL COUNSEL

Goodwin Procter LLP, Boston, Massachusetts

INDEPENDENT AUDITORS

Grant Thornton LLP, Boston, Massachusetts

FORM 10-K

The Cognex Annual Report on Form 10-K is included with and incorporated in this report and has been filed with the Securities and Exchange Commission. Additional copies are available free of charge upon written request to the Director of Investor Relations at the address above, or request one online at www.cognex.com/investor.

This report, including the Chairman's letter and the CEO's letter, may contain "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934, and contains certain non-GAAP financial measures. For further information please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II – Item 7 of the Annual Report on Form 10-K included with this report. In particular, a discussion regarding risks associated with forward-looking statements is included under the heading "Forward-Looking Statements."

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Cognex, DataMan, In-Sight, Laser Killer, VisionPro, Smart View, OCRMax, EasyBuilder and HOTBARS are trademarks of Cognex.

Design: PointOne Marketing & Design www.pointonemarketing.com

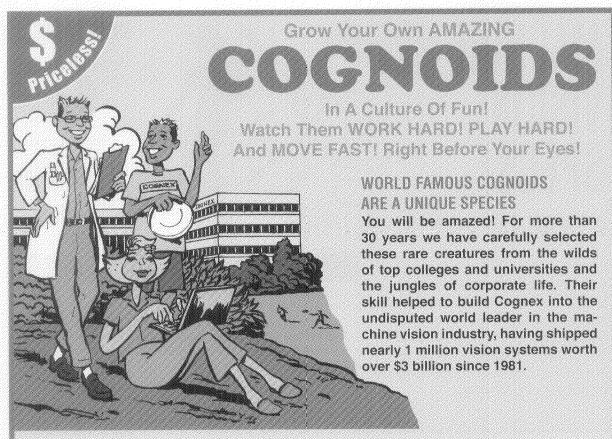
Cover & Comic Illustration: Lance Erlick

www.erlickimages.com

Ad Illustration: Mark Bellerose

Printed in the USA by Kirkwood Printing

www.kirkwoodprinting.com



OUR CULTURE GROWS UNDER SCIENTIFIC SUPERVISION IN A SECRET LAB FROM A MIXTURE OF 10 RARE VALUES

Customer First: Customer satisfaction is our top priority. We listen to our customers, and do whatever they need, whenever and wherever they need it.

Excellence: Good is not good enough; we strive for excellence in everything we do.

Perseverance: We take on the most difficult challenges, and we do not stop until the job is done right.

Enthusiasm: We enjoy what we do; we approach each day's challenges with energy and excitement.

Creativity: We delight in being different from the rest and in taking creative approaches to solving problems.

Pride: We derive great satisfaction through our individual accomplishments and those of our company.

Integrity: We adhere to the highest ethical standards in our relationships with customers, fellow employees, vendors, neighbors and shareholders.

Recognition: Our success is due to the hard work and dedication of our employees and vendors, and we acknowledge their contributions in both tangible and intangible ways.

Sharing: When Cognex wins, we all win. We share our success with everyone who contributes to it. We believe that the biggest reward for success is the chance to succeed again!

Fun: We work hard, play hard and move fast. We celebrate often to recognize our accomplishments and to motivate ourselves to achieve even higher levels of success in the future.

A LIFETIME OF FUN!

COGNOIDS celebrate PERSEVERANCE annually. In December 2012 they gathered for a strange and wonderful ritual to honor 128 of their number who dedicated a combined 980 years of service to the company.

Each COGNOID comes with talent, drive and a love of hard work. When COGNEX CULTURE is added, Cognoids experience social gatherings, movie nights, holiday gifts, game rooms, outings and some outrageous Halloween celebrations (costumes sold separately).

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	poration, Dept. 96-W Drive, Natick, MA
eager to sta starter cell a	Cognoid is valuable beyond description, so I'm art growing one now! A Cognoid kit includes a along with a week's supply of Cognex culture n. I've enclosed \$1.00 plus 50c shipping for
Send	_kits □ Cash □ Check □ Money Order
(No C.O.D.)	s please) Total amount enclosed \$
Name	
Address	
City	State Zip
	RUSH ORDERS (50¢ extra)
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UNITED STATES Section SECURITIES AND EXCHANGE COMMISSION 1 4 2013 Washington, D.C. 20549

FORM 10-K

Washington DC 400

(Mark One)	•••
[X] Annual report pursuant to Section 13 or 15(d) of the Seended December 31, 2012 or	
[] Transition report pursuant to Section 13 or 15(d) of the period from to	•
Commission File Number	er <u>001-34218</u>
COGNEX CORP	ORATION
(Exact name of registrant as spe	
Massachusetts	04-2713778
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Vision Dr Natick, Massachusetts (508) 650-300	01760-2059
(Address, including zip code, and including area code, of principal	
Securities registered pursuant to Section 12(b) of the Act:	,
Title of Each Class	Name of Exchange on Which Registered
Common Stock, par value \$.002 per share	The NASDAQ Stock Market LLC
Preferred Stock Purchase Rights	The NASDAQ Stock Market LLC
Securities registered pursuant to Section 12(g) of the Act: None Indicate by check mark if the registrant is a well-known seasoned is	ssuer, as defined in Rule 405 of the Securities Act.
Yes X	No
Indicate by check mark if the registrant is not required to file reports	
Yes	v
Indicate by check mark whether the registrant (1) has filed all re the Securities Exchange Act of 1934 during the preceding 12 me was required to file such reports), and (2) has been subject to su	ports required to be filed by Section 13 or 15(d) of onths (or for such shorter period that the registrant
Yes X	No
Indicate by check mark whether the registrant has submitted eleany, every Interactive Data File required to be submitted and posthe preceding 12 months (or for such shorter period that the regis	ectronically and posted on its corporate web site, if sted pursuant to Rule 405 of Regulation S-T during
Yes X	No
Indicate by check mark if disclosure of delinquent filers pursua herein, and will not be contained, to the best of the registrant's liments incorporated by reference in Part III of this Form 10-K or a	nt to Item 405 of Regulation S-K is not contained knowledge, in definitive proxy or information state-
Indicate by check mark whether the registrant is a large accele filer, or a smaller reporting company. See the definitions of "large reporting company" in Rule 12b-2 of the Exchange Act. (Check of	e accelerated filer," "accelerated filer" and "smaller
∠ Large accelerated filer	accelerated filer
Indicate by check mark whether the registrant is a shell company	• • • • • • • • • • • • • • • • • • • •
Yes	NoX
Aggregate market value of voting stock held by non-affiliates of \$.002 par value common stock outstanding as of J	the registrant as of July 1, 2012; \$1,256,813,000
DOCUMENTS INCORPORATED BY REFERENCE: The registrant intends to file a Definitive Proxy Statement pursua the fiscal year ended December 31, 2012. Portions of such P Part III of this report.	ant to Regulation 14A within 120 days of the end of Proxy Statement are incorporated by reference in

SEC Mail Processing Secular

MARCHARD PORT

COGNEX CORPORATION ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2012

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PART I

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Federal Securities Laws. Readers can identify these forward-looking statements by our use of the words "expects," "anticipates," "estimates," "believes," "projects," "intends," "plans," "will," "may," "shall," "could," "should," and similar words and other statements of a similar sense. Our future results may differ materially from current results and from those projected in the forward-looking statements as a result of known and unknown risks and uncertainties. Readers should pay particular attention to considerations described in the section captioned "Risk Factors," appearing in Part I – Item 1A of this Annual Report on Form 10-K. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. We disclaim any obligation to subsequently revise forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date such statements are made.

Unless the context otherwise requires, the words "Cognex®," the "Company," "we," "our," "us," and "our company" refer to Cognex Corporation and its consolidated subsidiaries.

ITEM 1: BUSINESS

Corporate Profile

Cognex Corporation was incorporated in Massachusetts in 1981. Our corporate headquarters are located at One Vision Drive, Natick, Massachusetts 01760 and our telephone number is (508) 650-3000.

Cognex is a leading worldwide provider of machine vision products that capture and analyze visual information in order to automate tasks, primarily in manufacturing processes, where vision is required. Machine vision is important for applications in which human vision is inadequate to meet requirements for size, accuracy, or speed, or in instances where substantial cost savings are obtained through the reduction of labor or improved product quality. Today, many types of manufacturing equipment require machine vision because of the increasing demands for speed and accuracy in manufacturing processes, as well as the decreasing size of items being manufactured.

Cognex has two operating divisions: the Modular Vision Systems Division (MVSD), based in Natick, Massachusetts, and the Surface Inspection Systems Division (SISD), based in Hayward, California. MVSD develops, manufactures, and markets modular vision systems and ID products that are used to automate the manufacture and tracking of discrete items, such as cellular phones, aspirin bottles, and automobile wheels, by locating, identifying, inspecting, and measuring them during the manufacturing or distribution process. SISD develops, manufactures, and markets surface inspection vision systems that are used to inspect the surfaces of materials processed in a continuous fashion, such as metal, paper, nonwoven, plastic, and glass, to ensure there are no flaws or defects on the surfaces. Historically, MVSD has been the source of the majority of the Company's revenue, representing approximately 84% of total revenue in 2012. Financial information about these segments may be found in Note 18 to the Consolidated Financial Statements, appearing in Part II – Item 8 of this Annual Report on Form 10-K.

What is Machine Vision?

Since the beginning of the Industrial Revolution, human vision has played an indispensable role in the process of manufacturing products. Human eyes did what no machines could do themselves: locating and positioning work, tracking the flow of parts, and inspecting output for quality and consistency. Today, however, the requirements of many manufacturing processes have surpassed the limits of human eyesight. Manufactured items often are produced too quickly or with tolerances too small to be analyzed by the human eye. In response to manufacturers' needs, "machine vision" technology emerged, providing manufacturing equipment with the gift of sight. Machine vision systems were first widely embraced by manufacturers of electronic components who needed this technology to produce computer chips with decreasing geometries. However, advances in technology and ease-of-use,

combined with the decreasing cost of implementing vision applications, have made machine vision available to a broader range of users.

Machine vision products combine cameras with intelligent software to collect images and then answer questions about these images, such as:

Question	Description	Example
GUIDANCE		
Where is it?	Determining the exact physical location and orientation of an object.	Determining the position of a printed circuit board so that a robot can automatically be guided to place electronic components.
IDENTIFICATION		
What is it?	Identifying an object by analyzing its physical appearance or by reading a serial number or symbol.	Reading a two-dimensional barcode directly marked on an automotive airbag so that it can be tracked and processed correctly through manufacturing.
INSPECTION		
How good is it?	Inspecting an object for flaws or defects.	Inspecting the paper that US currency is printed on.
GAUGING		
What size is it?	Determining the dimensions of an object.	Determining the diameter of a bearing prior to final assembly.

Machine Vision Market

Cognex machine vision is primarily used in the manufacturing sector, where the technology is widely recognized as an important component of automated production and quality assurance. In this sector, Cognex serves three primary markets: factory automation, semiconductor and electronics capital equipment, and surface inspection.

Factory automation customers, who are included in the Company's MVSD segment, purchase Cognex vision products and incorporate them into their manufacturing processes. Virtually every manufacturer can achieve better quality and manufacturing efficiency by using machine vision, and therefore, this market includes a broad base of customers across a variety of industries, including automotive, consumer electronics, food and beverage, health and beauty, pharmaceutical, and medical devices. The factory automation market also includes customers who purchase Cognex vision products for use outside of the assembly process, such as using ID products in logistics automation for package sorting and distribution. Sales to factory automation customers represented approximately 75% of total revenue in 2012, compared to 73% of total revenue in 2011.

Semiconductor and electronics capital equipment manufacturers, who are included in the Company's MVSD segment, purchase Cognex vision products and integrate them into the automation equipment that they manufacture and then sell to their customers to either make semiconductor chips or assemble printed circuit boards. Demand from these capital equipment manufacturers has historically been highly cyclical, with periods of investment followed by downturn. This market, which represented a large portion of our business during the 1990's, changed after the dot-com bubble burst in 2000. Customers shifted away from embedded machine vision systems containing specialized hardware as PC speeds increased. They first migrated to products containing mostly software with significantly less hardware content, and eventually began buying only the software portion of the system from Cognex. Although these software-only products have high gross margins, the average selling price is significantly lower than for a complete vision system. Sales to semiconductor and electronics capital equipment manufacturers represented approximately 9% of total revenue in 2012, compared to 12% of total revenue in 2011.

Surface inspection customers, who comprise the Company's SISD segment, are manufacturers of materials processed in a continuous fashion, such as metal, paper, nonwoven, plastic, and glass. These customers need sophisticated machine vision to detect, classify, and analyze defects on the

surfaces of those materials as they are being processed at high speeds. Surface inspection sales represented approximately 16% of total revenue in 2012, compared to 15% of total revenue in 2011.

No customer accounted for greater than 10% of total revenue in 2012, 2011, or 2010.

Business Strategy

Our goal is to expand our position as a leading worldwide provider of machine vision products. Sales to customers in the factory automation market represent the largest percentage of our total revenue, and we believe that this market provides the greatest potential for long-term, sustained revenue growth.

In order to grow the factory automation market, we have invested in developing new products and functionality that make vision easier to use and more affordable, and therefore, available to a broader base of customers. This investment includes selective expansion into new industrial and commercial vision applications through internal development, as well as the acquisition of businesses and technologies. We have also invested in building a worldwide sales and support infrastructure in order to access more of the potential market for machine vision. This investment includes opening sales offices in emerging markets, such as China, India, Brazil, and Eastern Europe, where we believe many manufacturers can benefit from incorporating machine vision into their production processes, and developing strategic alliances with other leading providers of factory automation products.

Acquisitions and Divestitures

Our business strategy includes selective expansion into new machine vision applications through the acquisition of businesses and technologies. We plan to continue to seek opportunities to expand our product line, customer base, distribution network, and technical talent through acquisitions in the machine vision industry.

In 2008, we sold all of the assets of our lane departure warning business for \$3 million. We entered this business in 2006 with the acquisition of AssistWare Technology, Inc., a small company that had developed a vision system that could provide a warning to drivers when their vehicle was about to inadvertently cross a lane. For two years after the acquisition date, we invested additional funds to commercialize AssistWare's product and to establish a business developing and selling lane departure warning products for driver assistance. This business was included in the MVSD segment, but was never integrated with the other Cognex businesses. During 2008, we determined that this business did not fit the Cognex business model, primarily because car and truck manufacturers wanted to work exclusively with existing Tier One suppliers and, although these suppliers had expressed interest in Cognex's vision technology, they would require access to, and control of, our proprietary software. Accordingly, we accepted an offer from one of these suppliers and sold the lane departure warning business.

In 2009, we acquired the web monitoring business of Monitoring Technology Corporation (MTC), a manufacturer of products for monitoring industrial equipment and processes, for \$5 million. This business is included in the Company's SISD segment. The acquired SmartAdvisor® Web Monitoring System (WMS) is complementary to Cognex's Smart View® Web Inspection System (WIS). When used together, the WIS automatically identifies and classifies defects and the WMS then provides the customer with the ability to determine the root causes of each of those defects so that they can be quickly eliminated. The combination of WMS and WIS allows SISD to provide a fully-integrated system to its surface inspection customers.

Products

Cognex offers a full range of vision and ID products designed to meet customer needs at different performance and price points. Our products range from low-cost vision sensors that are easily integrated, to PC-based systems for users with more experience or more complex requirements. Our products also have a variety of physical forms, depending upon the user's need. For example, customers can purchase vision software to use with their own camera and processor, or they can purchase a standalone unit that combines camera, processor, and software into a single package.

Vision Software

Vision software provides users with the most flexibility by combining the full general-purpose library of Cognex vision tools with the cameras, frame grabbers, and peripheral equipment of their choice. The vision software runs on the customer's PC, which enables easy integration with PC-based data and controls. Applications based upon Cognex vision software perform a wide range of vision tasks, including part location, identification, measurement, assembly verification, and robotic guidance. Cognex's VisionPro® software offers the power and flexibility of advanced programming with the simplicity of a graphical development environment. VisionPro's extensive suite of patented vision tools enables customers to solve challenging machine vision applications.

Vision Systems

Vision systems combine camera, processor, and vision software into a single, rugged package with a simple and flexible user interface for configuring applications. These general-purpose vision systems are designed to be easily programmed to perform a wide range of vision tasks including part location, identification, measurement, assembly verification, and robotic guidance. Cognex offers the In-Sight® product line of vision systems in a wide range of models to meet various price and performance requirements.

Vision Sensors

Unlike general-purpose vision systems that can be programmed to perform a wide variety of vision tasks, vision sensors are designed to deliver very simple, low-cost, reliable solutions for a limited number of common vision applications such as checking the presence and size of parts. Cognex offers the Checker® product line of vision sensors that perform a variety of single-purpose vision tasks.

ID Products

ID products quickly and reliably read codes (e.g., one-dimensional barcodes or two-dimensional data matrix codes) that have been applied or directly marked on discrete items during the manufacturing process. Manufacturers of goods ranging from automotive parts, pharmaceutical items, aircraft components, and medical devices are increasingly using direct part mark (DPM) identification to ensure that the appropriate manufacturing processes are performed in the correct sequence and on the right parts. In addition, DPM is used to track parts from the beginning of their life to the end, and is also used in supply chain management and repair.

Cognex also offers applications in the automatic identification market outside of the manufacturing sector, such as using ID products in logistics automation for package sorting and distribution. As shipping volumes grow, more distribution centers are choosing to upgrade their traditional laser-based scanners to image-based barcode readers, which will cost-effectively increase package sorter efficiency and throughput by improving read rates. Cognex offers the DataMan® product line of ID readers that includes both hand-held and fixed-mount models.

Surface Inspection Systems

Surface inspection systems detect, identify, track, and report visual defects in any continuous material or process, such as metal, paper, nonwoven, plastic, and glass. The Smart View® Web Inspection System is targeted at high-speed applications that require extremely accurate surface defect detection and identification. The SmartAdvisor® Web Monitoring System is a process monitoring system that is used to track defects to their source and determine the root cause. These systems can be delivered as standalone or integrated solutions.

Research, Development, and Engineering

Cognex engages in research, development, and engineering (RD&E) to enhance our existing products and to develop new products and functionality to meet market opportunities. In addition to internal

research and development efforts, we intend to continue our strategy of gaining access to new technology through strategic relationships and acquisitions where appropriate.

As of December 31, 2012, Cognex employed 234 professionals in RD&E, many of whom are software developers. Cognex's RD&E expenses totaled \$41,549,000 in 2012, \$40,946,000 in 2011, and \$33,080,000 in 2010, or approximately 13%, 13%, and 11% of revenue, respectively. We believe that a continued commitment to RD&E activities is essential in order to maintain or achieve product leadership with our existing products and to provide innovative new product offerings. In addition, we consider our ability to accelerate time-to-market for new products to be critical to our revenue growth. Therefore, we expect to continue to make significant RD&E investments in the future. At any point in time, we have numerous research and development projects underway. Although we target our RD&E spending to be between 10% and 15% of total revenue, this percentage is impacted by revenue levels.

Manufacturing and Order Fulfillment

Cognex's MVSD products are manufactured utilizing a turnkey operation whereby the majority of component procurement, system assembly, and initial testing are performed by third-party contract manufacturers. Cognex's primary contract manufacturers are located in Ireland and Southeast Asia. The contract manufacturers use specified components and assembly/test documentation created and controlled by Cognex. Certain components are presently available only from a single source. After the completion of initial testing, a fully-assembled product from the contract manufacturer is routed to our facility in Cork, Ireland or Natick, Massachusetts, USA, where trained Cognex personnel load the software onto the product and perform quality control procedures. Finished product for customers in the Americas is then shipped from our Natick, Massachusetts facility, while finished product for customers in Europe and Southeast Asia is shipped from our Cork, Ireland facility. Our distribution center in Koriyama, Japan purchases finished product from the Cork, Ireland facility and then ships this product to customers in Japan when orders are received.

Cognex's SISD products are manufactured and shipped from its Hayward, California facility. The manufacturing process at the Hayward facility consists of component procurement, system assembly, software loading, quality control, and shipment of product to customers worldwide.

Sales Channels and Support Services

Cognex sells its MVSD products through a worldwide direct sales force that focuses on the development of strategic accounts that generate or are expected to generate significant sales volume, as well as through a global network of integration and distribution partners. Our integration partners are experts in vision and complementary technologies that can provide turnkey solutions for complex automation projects using vision, and our distribution partners provide sales and local support to help Cognex reach the many prospects for our products in factories around the world. Cognex's SISD products are primarily sold through a worldwide direct sales force since there are fewer customers in a more concentrated group of industries.

As of December 31, 2012, Cognex's sales force consisted of 361 professionals, and our partner network consisted of approximately 175 active integrators and 288 authorized distributors. Sales engineers call directly on targeted accounts and manage the activities of our partners within their territories in order to implement the most advantageous sales model for our products. The majority of our sales force holds engineering or science degrees. Cognex has sales and support personnel located throughout the Americas, Japan, Europe, and Southeast Asia. In recent years, the Company has expanded its sales force in emerging markets, such as China and India (which the Company currently includes in its Southeast Asia region), Brazil (which the Company currently includes in its Americas region), and Eastern Europe, where we believe many manufacturers can benefit from incorporating machine vision into their production processes. In 2010, the Company established a Wholly Foreign Owned Enterprise (WFOE) in Shanghai, China and we began to sell to our Chinese customers through this new entity in 2011. The WFOE is able to accept payment from Chinese customers in Yuan, also known as Renminbi, which we believe will allow us to reach more of the potential market for machine vision throughout Mainland China.

During 2008, Cognex announced a partnership with Mitsubishi Electric Corporation, a leading world-wide provider of factory automation products (i.e., programmable controllers, motion controls, and industrial robots) based in Japan. Cognex and Mitsubishi have and will continue to jointly develop and market Cognex vision products to Mitsubishi's factory automation customers. The products resulting from this collaboration have improved connectivity with Mitsubishi factory automation products and enabled customers to deploy systems more quickly. Cognex expects this partnership to increase its market presence on the factory floor, first in Japan and eventually in other fast-growing markets throughout Asia.

Sales to customers based outside of the United States represented approximately 69% of total revenue in 2012, compared to approximately 70% of total revenue in 2011. In 2012, approximately 31% of our total revenue came from customers based in Europe, 13% from customers based in Japan, and 25% from customers based in other regions outside the United States. Sales to customers based in Europe are predominantly denominated in Euros, sales to customers based in Japan are predominantly denominated in Yen, and sales to customers based in other regions are denominated in U.S. Dollars and Chinese Yuan for sales within Mainland China. Financial information about geographic areas may be found in Note 18 to the Consolidated Financial Statements, appearing in Part II – Item 8 of this Annual Report on Form 10-K.

Cognex's MVSD service offerings include maintenance and support, training, and consulting services. Maintenance and support programs include hardware support programs that entitle customers to have failed products repaired, as well as software support programs that provide customers with application support and software updates on the latest software releases. Training services include a variety of product courses that are available at Cognex's offices worldwide, at customer facilities, and on computer-based tutorials, video, and the internet. Cognex provides consulting services that range from a specific area of functionality to a completely integrated machine vision application.

Cognex's SISD service offerings include maintenance and support and training services similar to those provided by MVSD, as well as installation services. The installation services group supervises the physical installation of the hardware at the customer location, configures the software application to detect the customer's defects, validates that the entire integrated system with the peripheral components is functioning according to the specifications, and performs operator training.

Intellectual Property

We rely on the technical expertise, creativity, and knowledge of our personnel, and therefore, we utilize patent, trademark, copyright, and trade secret protection to maintain our competitive position and protect our proprietary rights in our products and technology. While our intellectual property rights are important to our success, we believe that our business as a whole is not materially dependent on any particular patent, trademark, copyright, or other intellectual property right.

As of December 31, 2012, Cognex had been granted, or owned by assignment, 343 patents issued worldwide and had another 238 patent applications pending worldwide. Cognex has used, registered, or applied to register a number of trademark registrations in the United States and in other countries. Cognex's trademark and servicemark portfolio includes various registered marks, including, among others, Cognex®, VisionPro®, In-Sight®, Checker®, DataMan®, Smart View®, and SmartAdvisor®, as well as many common-law marks.

Compliance with Environmental Provisions

Cognex's capital expenditures, earnings, and competitive position are not materially affected by compliance with federal, state, and local environmental provisions which have been enacted or adopted to regulate the distribution of materials into the environment.

Competition

The machine vision market is fragmented and Cognex's competitors are typically other vendors of machine vision systems, controllers, and components; manufacturers of image processing systems, sensors, and components; and system integrators. In addition, in the semiconductor and electronics

capital equipment market, and with respect to machine builders in the factory automation market, Cognex competes with the internal engineering departments of current or prospective customers. In the identification and logistics market, Cognex competes with manufacturers of automatic identification systems. Any of these competitors may have greater financial and other resources than Cognex. Although we consider Cognex to be one of the leading machine vision companies in the world, reliable estimates of the machine vision market and the number of competitors are not available.

Cognex's ability to compete depends upon our ability to design, manufacture, and sell high-quality products, as well as our ability to develop new products and functionality that meet evolving customer requirements. The primary competitive factors affecting the choice of a machine vision or ID system include vendor reputation, product functionality and performance, ease of use, price, and post-sales support. The importance of each of these factors varies depending upon the specific customer's needs.

Backlog

As of December 31, 2012, backlog, which includes deferred revenue, totaled \$43,720,000, compared to \$45,861,000 as of December 31, 2011. Backlog reflects customer purchase orders for products scheduled for shipment primarily within 60 days at MVSD and six months at SISD. Although MVSD accepts orders from customers with requested shipment dates that are within 60 days, orders typically ship within one week of order placement. The level of backlog at any particular date is not necessarily indicative of future revenue. Delivery schedules may be extended and orders may be canceled at any time subject to certain cancellation penalties.

Employees

As of December 31, 2012, Cognex employed 984 persons, including 499 in sales, marketing, and service activities; 234 in research, development, and engineering; 112 in manufacturing and quality assurance; and 139 in information technology, finance, and administration. Of the Company's 984 employees, 495 are based outside of the United States. None of our employees are represented by a labor union and we have experienced no work stoppages. We believe that our employee relations are good.

Available Information

Cognex maintains a website on the World Wide Web at www.cognex.com. We make available, free of charge, on our website in the "Company" section under the caption "Investor Information" followed by "Financial Information" and then "SEC Filings," our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including exhibits, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC. Cognex's reports filed with, or furnished to, the SEC are also available at the SEC's website at www.sec.gov. Information contained on our website is not a part of, or incorporated by reference into, this Annual Report on Form 10-K.

ITEM 1A: RISK FACTORS

The risks and uncertainties described below are not the only ones that we face. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect our company in the future. If any of these risks were to occur, our business, financial condition, or results of operations could be materially and adversely affected. This section includes or refers to certain forward-looking statements. We refer you to the explanation of the qualifications and limitations on such forward-looking statements, appearing in Part II — Item 7 of this Annual Report on Form 10-K.

Current and future conditions in the global economy may negatively impact our operating results.

Our revenue is dependent upon the capital spending trends of manufacturers in a number of industries, including, among others, the semiconductor, electronics, automotive, metals, and paper industries.

These spending levels are, in turn, impacted by global economic conditions, as well as industry-specific economic conditions.

In 2009, the credit market crisis and slowing global economies resulted in significantly lower demand for our products, as many of our customers experienced deterioration in their businesses, cash flow issues, difficulty obtaining financing, and declining business confidence. Although order levels have increased since this time, global economic conditions are still unsettled, resulting in a challenging environment to achieve our targeted rate of revenue growth. If global economic conditions remain unsettled or were to deteriorate, our revenue and our ability to generate quarterly operating profits could be materially adversely affected.

As a result, our business is subject to the following risks, among others:

- our customers may not have sufficient cash flow or access to financing to purchase our products.
- our customers may not pay us within agreed upon terms or may default on their payments altogether.
- · our vendors may be unable to fulfill their delivery obligations to us in a timely manner,
- lower demand for our products may result in charges for excess and obsolete inventory if we are unable to sell inventory that is either already on hand or committed to purchase,
- · lower cash flows may result in impairment charges for acquired intangible assets or goodwill,
- a decline in the fair value of our limited partnership interest in a venture capital fund, which is invested primarily in young and emerging companies, may result in an impairment charge,
- a decline in our stock price may make stock options a less attractive form of compensation and a less effective form of retention for our employees, and
- the trading price of our common stock may be volatile.

As of December 31, 2012, the Company had approximately \$385 million in cash, cash equivalents, debt securities, or equity securities that could be converted into cash. In addition, Cognex has no long-term debt and we do not anticipate needing debt financing in the near future. We believe that our strong cash position puts us in a relatively good position to weather another economic downturn. Nevertheless, our operating results have been materially adversely affected in the past, and could be materially adversely affected in the future, as a result of unfavorable economic conditions and reduced capital spending by manufacturers worldwide.

Downturns in the semiconductor and electronics capital equipment market may adversely affect our business.

In 2012, approximately 9% of our revenue was derived from semiconductor and electronics capital equipment manufacturers. This concentration was as high as 61% in 2000 during its revenue peak. The semiconductor and electronics industries are highly cyclical and have historically experienced periodic downturns, which have often had a severe effect on demand for production equipment that incorporates our products. While we have been successful in diversifying our business beyond OEM customers who serve the semiconductor and electronics industries, our business is still impacted by capital expenditures in these industries, which, in turn, are dependent upon the market demand for products containing computer chips. As a result, our operating results in the foreseeable future could be significantly and adversely affected by declining sales in either of these industries. Furthermore, the competitive landscape in this market has changed in recent years, with price and the flexibility of purchasing hardware from other vendors becoming more important factors in the purchasing decisions of these manufacturers. In response to this market change, we have introduced software-only products. Although these products have high gross margins, the average selling price of these offerings is significantly lower than for a complete vision system, and therefore, we expect this trend to have a negative impact on our revenue in this market. In addition, a decline in sales in the semiconductor and electronics capital equipment market, where many of these software-only products are sold, may also have a negative impact on our MVSD gross margins.

A downturn in the automotive industry may adversely affect our business.

As we have diversified away from the semiconductor and electronics capital equipment market over the past several years, we have expanded into other industries that comprise the broad factory automation market. In 2012, the largest industry that we served in factory automation was the automotive industry. Our revenue from this industry is spread across a variety of customers and regions. Our business is impacted by the level of capital spending in the automotive industry. As a result, our operating results could be materially and adversely affected by declining sales in this industry.

Our inability to penetrate new markets outside of the manufacturing sector may impede our revenue growth.

We are pursuing applications in the automatic identification market outside of the manufacturing sector, such as using ID products in logistics automation for package sorting and distribution. As shipping volumes grow, more distribution centers are choosing to upgrade their traditional laser-based scanners to image-based barcode readers, which will cost-effectively increase package sorter efficiency and throughput by improving read rates. Cognex has introduced image-based barcode readers in order to penetrate the ID logistics market and grow our ID Products business beyond the traditional manufacturing sector that we currently serve. Our growth plan is dependent upon successfully penetrating the ID logistics market and we are making significant investments in this area. Therefore, our failure to generate revenue in this new market may have a materially adverse impact on our revenue growth and operating profits.

Economic, political, and other risks associated with international sales and operations could adversely affect our business and operating results.

In 2012, approximately 69% of our revenue was derived from customers located outside of the United States. We anticipate that international sales will continue to account for a significant portion of our revenue. In addition, certain of our products are assembled by third-party contract manufacturers in Ireland and Southeast Asia. We intend to continue to expand our sales and operations outside of the United States and expand our presence in international emerging markets, such as our expansion into China, India, Brazil, and Eastern Europe. In 2010, we established a Wholly Foreign Owned Enterprise (WFOE) in Shanghai, China and we began to sell to our Chinese customers through this new entity in 2011. This new entity has required and will continue to require significant management attention and financial resources. As a result, our business is subject to the risks inherent in international sales and operations, including, among other things:

- · various regulatory and statutory requirements,
- · difficulties in injecting and repatriating cash,
- · export and import restrictions,
- · transportation delays,
- · employment regulations and local labor conditions,
- · difficulties in staffing and managing foreign sales operations,
- · instability in economic or political conditions,
- difficulties protecting intellectual property,
- · business systems connectivity issues, and
- potentially adverse tax consequences.

Any of these factors could have a material adverse effect on our operating results.

Fluctuations in foreign currency exchange rates and the use of derivative instruments to hedge these exposures could adversely affect our reported results, liquidity, and competitive position.

We face exposure to foreign currency exchange rate fluctuations, as a significant portion of our revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of our subsidiaries or the reporting currency of our company, which is the U.S. Dollar. In certain instances, we utilize forward contracts to hedge against foreign currency fluctuations. These

contracts are used to minimize foreign currency gains or losses, as the gains or losses on the derivative are intended to offset the losses or gains on the underlying exposure. We do not engage in foreign currency speculation.

The success of our foreign currency risk management program depends upon forecasts of transaction activity denominated in various currencies. To the extent that these forecasts are overstated or understated during periods of currency volatility, we could experience unanticipated foreign currency gains or losses that could have a material impact on our results of operations. Furthermore, our failure to identify new exposures and hedge them in an effective manner may result in material foreign currency gains or losses.

A significant portion of our revenues and expenses are denominated in the Euro and the Japanese Yen. Our predominant currency of sale is the U.S. Dollar in the Americas, the Euro in Europe, the Yen in Japan, and the U.S. Dollar and Chinese Yuan in Southeast Asia. We estimate that approximately 50% of our sales in 2012 were invoiced in currencies other than the U.S. Dollar, and we expect sales denominated in foreign currencies to continue to represent a significant portion of our total revenue. While we also have expenses denominated in these same foreign currencies, the impact on revenues has historically been, and is expected to continue to be, greater than the offsetting impact on expenses. Therefore, in times when the U.S. Dollar strengthens in relation to these foreign currencies, we would expect to report a net decrease in operating income. Conversely, in times when the U.S. Dollar weakens in relation to these foreign currencies, we would expect to report a net increase in operating income. Thus, changes in the relative strength of the U.S. Dollar may have a material impact on our operating results.

The loss of a large customer could have an adverse effect on our business.

In 2012, our top five customers accounted for approximately 7% of total revenue. Our expansion into the factory automation marketplace has reduced our reliance upon the revenue from any one customer. Nevertheless, the loss of, or significant curtailment of purchases by, any one or more of our larger customers could have a material adverse effect on our operating results.

Our business could suffer if we lose the services of, or fail to attract, key personnel.

We are highly dependent upon the management and leadership of Robert J. Shillman, our Chairman of the Board of Directors and Chief Culture Officer, and Robert J. Willett, our President and Chief Executive Officer, as well as other members of our senior management team. Although we have many experienced and qualified senior managers, the loss of key personnel could have a material adverse effect on our company. Our continued growth and success also depends upon our ability to attract and retain skilled employees and on the ability of our officers and key employees to effectively manage the growth of our business through the implementation of appropriate management information systems and internal controls.

We have historically used stock options as a key component of our employee compensation program in order to align employee interests with the interests of our shareholders, provide competitive compensation and benefits packages, and encourage employee retention. We are limited as to the number of options that we may grant under our stock option plans. Accordingly, we may find it difficult to attract, retain, and motivate employees, and any such difficulties could materially adversely affect our business.

The failure of a key supplier to deliver quality product in a timely manner or our inability to obtain components for our products could adversely affect our operating results.

A significant portion of our MVSD product is manufactured by two third-party contractors. These contractors have agreed to provide Cognex with termination notification periods and last-time-buy rights, if and when that may be applicable. We rely upon these contractors to provide quality product and meet delivery schedules. We engage in extensive product quality programs and processes, including actively monitoring the performance of our third-party manufacturers; however, we may not detect all product quality issues through these programs and processes.

Certain key electronic components that are purchased from strategic suppliers, such as processors or imagers, are fundamental to the design of Cognex products. A disruption in the supply of these key components, such as a last-time-buy announcement, natural disaster, financial bankruptcy, or other event, may require us to purchase a significant amount of inventory at unfavorable prices resulting in lower gross margins and higher risk of carrying excess or obsolete inventory. If we are unable to secure adequate supply from alternative sources, we may have to redesign our products, which may lead to a delay in manufacturing and a possible loss of sales. Although we are taking certain actions to mitigate supply risk, an interruption in, termination of, or material change in the purchase terms of any key components could have a material adverse effect on our operating results.

We manage our inventory levels to meet increases in customer demand, while at the same time minimizing inventory obsolescence exposure. Many of our vendors reduced their inventory levels and manufacturing capacity during the economic downturn that began in late 2008. As a result, if customer demand increases beyond the levels we are forecasting, our vendors may have difficulty meeting our accelerated delivery schedules due to their reduced manufacturing capacities. We may therefore be unable to take delivery of an adequate supply of components and turnkey systems from our vendors in order to meet an increase in demand from our customers. These supply issues could impact our ability to ship product to customers, and therefore, to recognize revenue, which could have a material adverse effect on our operating results.

Our failure to effectively manage product transitions or accurately forecast customer demand could result in excess or obsolete inventory and resulting charges.

Because the market for our products is characterized by rapid technological advances, we frequently introduce new products with improved ease-of-use, improved hardware performance, additional soft-ware features and functionality, or lower cost that may replace existing products. Among the risks associated with the introduction of new products are difficulty predicting customer demand and effectively managing inventory levels to ensure adequate supply of the new product and avoid excess supply of the legacy product. In addition, we may strategically enter into non-cancelable commitments with vendors to purchase materials for our products in advance of demand in order to take advantage of favorable pricing or address concerns about the availability of future supplies or long lead times. Our failure to effectively manage product transitions or accurately forecast customer demand, in terms of both volume and configuration, has led to, and may again in the future lead to, an increased risk of excess or obsolete inventory and resulting charges.

Our products may contain design or manufacturing defects, which could result in reduced demand, significant delays, or substantial costs.

If flaws in either the design or manufacture of our products were to occur, we could experience a rate of failure in our products that could result in significant delays in shipment and material repair or replacement costs. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers and contract manufacturers, these actions may not be sufficient to avoid a product failure rate that results in:

- · substantial delays in shipment,
- significant repair or replacement costs, or
- potential damage to our reputation.

Any of these results could have a material adverse effect on our operating results.

Our failure to introduce new products in a successful and timely manner could result in the loss of our market share and a decrease in our revenues and profits.

The market for our products is characterized by rapidly changing technology. Accordingly, we believe that our future success will depend upon our ability to accelerate time-to-market for new products with improved functionality, ease-of-use, performance, or price. There can be no assurance that we will be able to introduce new products in accordance with scheduled release dates or that new products will

achieve market acceptance. Our ability to keep pace with the rapid rate of technological change in the high-technology marketplace could have a material adverse effect on our operating results.

Product development is often a complex, time-consuming, and costly process involving significant investment in research and development with no assurance of return on investment. Our strong balance sheet allows us to continue to make significant investments in research, development, and marketing for new products and technologies. Research is by its nature speculative and the ultimate commercial success of a product depends upon various factors, many of which are not in our control. We may not achieve significant revenue from new product investments for a number of years, if at all. Moreover, new products may not generate the operating margins that we have experienced historically.

Our failure to properly manage the distribution of our products and services could result in the loss of revenues and profits.

We utilize a direct sales force, as well as a network of integration and distribution partners, to sell our products and services. Successfully managing the interaction of our direct and indirect sales channels to reach various potential customers for our products and services is a complex process. In addition, our reliance upon indirect selling methods may reduce visibility to demand and pricing issues. Cognex expects that its partnership with Mitsubishi Electric Corporation will enable us to grow our factory automation revenue in Japan, as we utilize Mitsubishi's existing distribution network to reach more factory automation customers in this region. Each sales channel has distinct risks and costs, and therefore, our failure to implement the most advantageous balance in the sales model for our products and services could adversely affect our revenue and profitability.

If we fail to successfully protect our intellectual property, our competitive position and operating results could suffer.

We rely on our proprietary software technology and hardware designs, as well as the technical expertise, creativity, and knowledge of our personnel to maintain our position as a leading provider of machine vision products. Software piracy and reverse engineering, specifically from companies in Russia and Asia, may result in counterfeit products that are misrepresented in the market as Cognex products. Although we use a variety of methods to protect our intellectual property, we rely most heavily on patent, trademark, copyright, and trade secret protection, as well as non-disclosure agreements with customers, suppliers, employees, and consultants. We also attempt to protect our intellectual property by restricting access to our proprietary information by a combination of technical and internal security measures. These measures, however, may not be adequate to:

- · protect our proprietary technology,
- protect our patents from challenge, invalidation, or circumvention, or
- ensure that our intellectual property will provide us with competitive advantages.

Any of these adverse circumstances could have a material adverse effect on our operating results.

Our company may be subject to time-consuming and costly litigation.

From time to time, we may be subject to various claims and lawsuits by competitors, customers, or other parties arising in the ordinary course of business, including lawsuits charging patent infringement. We are currently a party to actions that are fully described in the section captioned "Legal Proceedings," appearing in Part I – Item 3 of this Annual Report on Form 10-K. These matters can be time-consuming, divert management's attention and resources, and cause us to incur significant expenses. Furthermore, the results of any of these actions may have a material adverse effect on our operating results.

Increased competition may result in decreased demand or prices for our products and services.

The machine vision market is fragmented and Cognex's competitors are typically other vendors of machine vision systems, controllers, and components; manufacturers of image processing systems,

sensors, and components; and system integrators. Any of these competitors may have greater financial and other resources than we do. Ease-of-use and product price are significant competitive factors in the factory automation marketplace. We may not be able to compete successfully in the future and our investments in research and development, sales and marketing, and support activities may be insufficient to enable us to maintain our competitive advantage. In addition, competitive pressures could lead to price erosion that could have a material adverse effect on our gross margins and operating results. We refer you to the section captioned "Competition," appearing in Part I – Item 1 of this Annual Report on Form 10-K for further information regarding the competition that we face.

Implementation of our acquisition strategy may not be successful, which could affect our ability to increase our revenue or profitability and result in the impairment of acquired intangible assets.

We have in the past acquired, and will in the future consider the acquisition of, businesses and technologies in the machine vision industry. Our business may be negatively impacted by risks related to those acquisitions. These risks include, among others:

- the inability to find or close attractive acquisition opportunities,
- the diversion of management's attention from other operational matters,
- · the inability to realize expected synergies resulting from the acquisition,
- · the failure to retain key customers or employees, and
- the impairment of acquired intangible assets resulting from lower-than-expected cash flows from the acquired assets.

Acquisitions are inherently risky and the inability to effectively manage these risks could have a material adverse effect on our operating results.

We are at risk for impairment charges with respect to our investments or for acquired intangible assets or goodwill, which could have a material adverse effect on our results of operations.

As of December 31, 2012, we had \$343 million of investments, of which \$337 million consisted of debt securities, \$2 million consisted of equity securities, and \$4 million consisted of a limited partnership interest in a venture capital fund.

The debt securities are all denominated in U.S. Dollars and the majority of these securities are debt of U.S. companies. These debt securities are reported at fair value, with unrealized gains and losses, net of tax, recorded in shareholders' equity as other comprehensive income (loss) since these securities are designated as available-for-sale securities. As of December 31, 2012, our portfolio of debt securities had a net unrealized gain of \$683,000. Included in this net gain, however, were gross unrealized losses totaling \$321,000, which were in a loss position for less than twelve months. As of December 31, 2012, these unrealized losses were determined to be temporary. However, if conditions change and future unrealized losses were determined to be other-than-temporary, we would be required to record an impairment charge.

The limited partnership interest is accounted for using the cost method because our investment is less than 5% of the partnership and we have no influence over the partnership's operating and financing policies. Furthermore, this investment does not have a readily determinable market value, and therefore, does not qualify for fair value accounting. As of December 31, 2012, the carrying value of this investment was \$3,740,000 compared to an estimated fair value of \$6,932,000. The limited partnership's investments consist of young and emerging companies. The worldwide economic slowdown and credit market crisis that began in late 2008 made the environment for these startups much less forgiving. As a result, it is possible that some of the younger companies in the portfolio that require capital investments to fund their current operations may not be as well prepared to survive economic uncertainty as would a more mature company. These factors could impact the fair value of the companies in the partnership's portfolio.

Management monitors the carrying value of its investments in debt securities and a limited partnership interest compared to their fair value to determine whether an other-than-temporary impairment has

occurred. In considering whether a decline in fair value is other-than-temporary, we consider many factors, both qualitative and quantitative. In its evaluation of its debt securities, management considers the type of security, the credit rating of the security, the length of time the security has been in a loss position, the size of the loss position, our ability and intent to hold the security to expected recovery of value, and other meaningful information. In its evaluation of its limited partnership interest, management considers the duration and extent of the decline, the length of our commitment to the investment, general economic conditions, and specific communications with the General Partner. If a decline in fair value is determined to be other-than-temporary, an impairment charge would be recorded in current operations to reduce the carrying value of the investment to its fair value. Should the fair value of investments decline in future periods below their carrying value, management will need to determine whether this decline is other-than-temporary and future impairment charges may be required.

As of December 31, 2012, we had \$15 million in acquired intangible assets, of which \$13 million represented acquired distribution networks. These assets are susceptible to changes in fair value due to a decrease in the historical or projected cash flows from the use of the asset, which may be negatively impacted by economic trends. A decline in the cash flows generated by these assets, such as the revenue we are able to generate through our distribution network, may result in future impairment charges.

As of December 31, 2012, we had \$82 million in acquired goodwill, \$78 million of which is assigned to our Modular Vision Systems Division and \$4 million of which is assigned to our Surface Inspection Systems Division. The fair value of goodwill is susceptible to changes in the fair value of the reporting segments in which the goodwill resides, and therefore, a decline in our market capitalization or cash flows relative to the net book value of our segments may result in future impairment charges.

If we determine that any of these investments, acquired intangible assets, or goodwill is impaired, we would be required to take a related charge to earnings that could have a material adverse effect on our results of operations.

We may have additional tax liabilities, which could adversely affect our operating results and financial condition.

We are subject to income taxes in the United States, as well as numerous foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities. Although we believe our tax positions are reasonable, the final determination of tax audits and any related litigation could be materially different than that which is reflected in our financial statements and could have a material adverse effect on our income tax provision, net income, or cash flows in the period in which the determination is made.

Information security breaches or business system disruptions may adversely affect our business.

We rely on our information technology infrastructure and management information systems to effectively run our business. We may be subject to information security breaches caused by illegal hacking, computer viruses, or acts of vandalism or terrorism. Our security measures or those of our third-party service providers may not detect or prevent such breaches. Any such compromise to our information security could result in an interruption in our operations, the unauthorized publication of our confidential business or proprietary information, the unauthorized release of customer, vendor, or employee data, the violation of privacy or other laws, and the exposure to litigation, any of which could harm our business and operating results. Any disruption occurring with our management information systems may cause significant business disruption, including our ability to provide quotes, process orders, ship products, invoice customers, process payments, and otherwise run our business. Any disruption occurring with these systems may have a material adverse effect on our operating results.

ITEM 1B: UNRESOLVED STAFF COMMENTS

There are no unresolved SEC staff comments as of the date of this report.

ITEM 2: PROPERTIES

In 1994, Cognex purchased and renovated a 100,000 square-foot building located in Natick, Massachusetts that serves as our corporate headquarters. In 1997, Cognex completed construction of a 50,000 square-foot addition to this building. In 2009, the Company renovated space in this building to establish a distribution center for its customers in the Americas.

In 1995, Cognex purchased an 83,000 square-foot office building adjacent to our corporate head-quarters. This building is currently occupied by tenants who have lease agreements that expire at various dates through 2017. Cognex also uses a portion of this space for storage, product demonstrations, and Company events. A portion of this space is currently unoccupied.

In 1997, Cognex purchased a three and one-half acre parcel of land adjacent to our corporate head-quarters. This land is being held for future expansion.

In 2007, Cognex purchased a 19,000 square-foot building adjacent to our corporate headquarters. This building is currently occupied by tenants who have lease agreements that expire at various dates through 2017. A portion of this space is currently unoccupied.

Cognex conducts certain of its operations in leased facilities. These lease agreements expire at various dates through 2021. Certain of these leases contain renewal options, retirement obligations, escalation clauses, rent holidays, and leasehold improvement incentives.

ITEM 3: LEGAL PROCEEDINGS

In May 2008, the Company filed a complaint against MvTec Software GmbH, MvTec LLC, and Fuji America Corporation in the United States District Court for the District of Massachusetts alleging infringement of certain patents owned by the Company. In April 2009 and again in June 2009, Defendant MvTec Software GmbH filed re-examination requests of the patents-at-issue with the United States Patent and Trademark Office. This matter is ongoing.

In May 2009, the Company pre-filed a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. §1337, against MvTec Software GmbH, MvTec LLC, Fuji America, and several other respondents alleging unfair methods of competition and unfair acts in the unlawful importation into the United States, sale for importation, or sale within the United States after importation. By this filing, the Company requested the ITC to investigate the Company's contention that certain machine vision software, machine vision systems, and products containing the same infringe, and respondents directly infringe and/or actively induce and/or contribute to the infringement in the United States, of one or more of the Company's U.S. patents. In July 2009, the ITC issued an order that it would institute an investigation based upon the Company's assertions. In September 2009, the Company reached a settlement with two of the respondents, and in December 2009, the Company reached a settlement with five additional respondents. In March 2010, the Company reached a settlement with respondent Fuji Machine Manufacturing Co., Ltd. and its subsidiary Fuji America Corporation. These settlements did not have a material impact on the Company's financial results. An ITC hearing was held in May 2010. In July 2010, the Administrative Law Judge issued an initial determination finding two of the Company's patents invalid and that respondents did not infringe the patents-at-issue. In September 2010, the ITC issued a notice that it would review the initial determination of the Administrative Law Judge. The ITC issued its Final Determination in November 2010 in which it determined to modify-in-part and affirm-inpart the Administrative Law Judge's determination, and terminate the investigation with a finding of no violation of Section 337 of the Tariff Act of 1930 (as amended 19 U.S.C. §1337). The Company has filed an appeal of the decision with the United States Court of Appeals for the Federal Circuit. An oral hearing before the United States Court of Appeals occurred in February 2012. This matter is ongoing.

The Company cannot predict the outcome of the above-referenced pending matters and an adverse resolution of these lawsuits could have a material adverse effect on the Company's financial position, liquidity, results of operations, and/or indemnification obligations. In addition, various other claims and legal proceedings generally incidental to the normal course of business are pending or threatened on

behalf of or against the Company. While we cannot predict the outcome of these incidental matters, we believe that any liability arising from them will not have a material adverse effect on our financial position, liquidity, or results of operations.

ITEM 4: MINE SAFETY DISCLOSURES

Not applicable.

ITEM 4A: EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth the names, ages, and titles of Cognex's executive officers as of December 31, 2012:

Name	<u>Age</u>	<u>Title</u>
Robert J. Shillman	66	Chairman of the Board of Directors and Chief Culture Officer
Robert J. Willett	45	President and Chief Executive Officer
Richard A. Morin	63	Executive Vice President of Finance and Administration and Chief Financial Officer

Executive officers are elected annually by the Board of Directors. There are no family relationships among the directors and executive officers of the Company.

Dr. Shillman and Mr. Morin have been employed by Cognex for no less than the past five years.

Mr. Willett joined the Company in June 2008 as President of the Modular Vision Systems Division (MVSD). In early 2010, Mr. Willett was promoted to President and Chief Operating Officer. In March 2011, upon recommendation from Dr. Shillman, the Board of Directors elected Mr. Willett as Chief Executive Officer of the Company. Dr. Shillman previously held this role. Mr. Willett came to Cognex from Danaher Corporation, a diversified manufacturer of industrial controls and technologies, where he served as Vice President of Business Development and Innovation for the Product Identification Business Group. Prior to that, Mr. Willett was President of Videojet Technologies, a leader in coding and marking products, which is a subsidiary of Danaher. Mr. Willett also served as Chief Executive Officer of Willett International Ltd., a privately-owned coding and marking company which was sold to Danaher in 2003 and merged with Videojet. He holds a Bachelor of Arts degree from Brown University and a Masters in Business Administration from Yale University.

PART II

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

The Company's common stock is traded on The NASDAQ Stock Market LLC, under the symbol CGNX. As of January 27, 2013, there were approximately 630 shareholders of record of the Company's common stock. The Company believes the number of beneficial owners of the Company's common stock on that date was substantially greater.

The high and low sales prices of the Company's common stock as reported by the NASDAQ Stock Market for each quarter in 2012 and 2011 were as follows:

	First	Second	Third	Fourth
2012				
High	\$44.80	\$43.83	\$39.08	\$38.67
Low	35.91	29.66	29.24	32.29
2011				
High	\$34.97	\$36.89	\$37.49	\$37.12
Low	24.61	28.00	26.02	24.91

The Company declared and paid a cash dividend of \$0.08 per share in the first quarter of 2011. The quarterly dividend increased to \$0.09 per share in the second and third quarters of 2011, and to \$0.10 per share in the fourth quarter of 2011 and the first quarter of 2012. The quarterly dividend increased to \$0.11 per share in the second, third, and fourth quarters of 2012. The Company also declared and paid an additional \$0.11 dividend in the fourth quarter of 2012 that would normally be declared in the first quarter of 2013 in conjunction with the 2012 earnings release. A special dividend of \$1.00 was also declared and paid in the fourth quarter of 2012 to replace expected quarterly dividend declarations for the next eight quarters, beginning in 2013. The additional \$0.11 dividend and the \$1.00 dividend were accelerated due to the anticipated increase in the federal tax on dividends paid after December 31, 2012. Future dividends will be declared at the discretion of the Company's Board of Directors and will depend upon such factors as the Board deems relevant, including, among other things, the Company's ability to generate positive cash flow from operations.

In April 2008, the Company's Board of Directors authorized the repurchase of up to \$50,000,000 of the Company's common stock. As of December 31, 2012, the Company had repurchased 1,375,875 shares at a cost of \$30,000,000 under this program, including 337,078 at a cost of \$10,000,000 in 2011. The Company did not purchase any shares under this program in 2012 or 2010. In November 2011, the Company's Board of Directors authorized the repurchase of up to \$80,000,000 of the Company's common stock to help reduce share dilution associated with employee stock options. This new authorization will commence once the Company completes the \$50,000,000 program, of which \$20,000,000 remains available. The Company may repurchase shares under these programs in future periods depending upon a variety of factors, including, among other things, stock price, share availability, and cash reserve requirements.

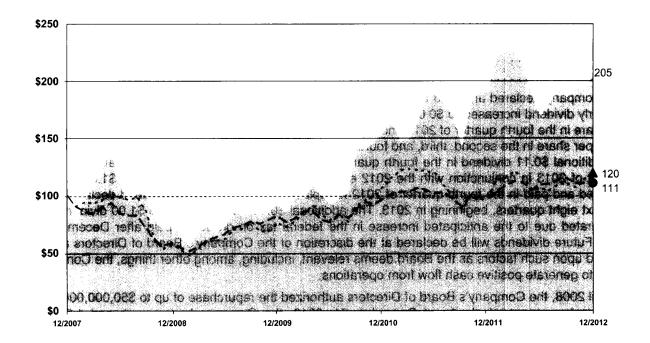
The following table sets forth information with respect to purchases by the Company of shares of its common stock during the periods indicated:

	Total Number of Shares Purchased	Average Price Paid per Share	Shares Purchased as Part of Publicly Announced Plans or Programs	Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 – October 28, 2012	-	-	-	\$100,000,000
October 29 – November 25, 2012	-	-	-	\$100,000,000
November 26 – December 31, 2012	<u>-</u>			\$100,000,000
Total	-	-	-	\$100,000,000

Set forth below is a line graph comparing the annual percentage change in the cumulative total share-holder return on the Company's common stock, based upon the market price of the Company's common stock, with the total return on companies within the Nasdaq Composite Index and the Research Data Group, Inc. Nasdaq Lab Apparatus & Analytical, Optical, Measuring & Controlling Instrument (SIC 3820-3829 US Companies) Index (the "Nasdaq Lab Apparatus Index"). The performance graph assumes an investment of \$100 in each of the Company and the two indices, and the reinvestment of any dividends. The historical information set forth below is not necessarily indicative of future performance. Data for the Nasdaq Composite Index and the Nasdaq Lab Apparatus Index was provided to the Company by Research Data Group, Inc.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Cognex Corporation, The NASDAQ Composite Index
And NASDAQ Stocks (SIC 3820-3829 U.S. Companies) Lab Apparatus & Analyt,Opt, Measuring, and Controlling Instr



Cognex Corporation

- 🛧 - - NASDAQ Stocks (SIC 3820-3829 U.S. Companies) Lab Apparatus & Analyt,Opt, Measuring, and Controlling Instr

— — NASDAQ Composite

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

	12/07	12/08	12/09	12/10	12/11	12/12
Cognex Corporation	100.00	75.45	92.49	155.42	191.19	204.84
NASDAQ Composite	100.00	59.03	82.25	97.32	98.63	110.78
NASDAQ Stocks	100.00	57.59	76.39	107.27	97.97	119.61

(SIC 3820-3829 U.S. Companies) Lab Apparatus & Analyt, Opt, Measuring, and Controlling Instr

ITEM 6: SELECTED FINANCIAL DATA

TILLIO. OLLEGIES I MANGIAL SATA		Very Ended December 04				
	2012	Year Ended December 31, 2011 2010 2009			2008	
			except per s			
Statement of Operations Data:	'	m thousands	, cxcopt por o	naro amounto	· '	
Revenue Cost of revenue (1)	\$324,279 79,495	\$321,914 77,919	\$290,691 77,588	\$175,727 56,387	\$242,680 68,427	
Gross margin Research, development, and engineering	244,784	243,995	213,103	119,340	174,253	
expenses (1) Selling, general, and administrative expenses (1) Restructuring charges	41,549 119,828 -	40,946 117,694	33,080 104,235 75	31,132 96,350 4,526	36,262 112,629 258	
Operating income (loss) Nonoperating income	83,407 3,223	85,355 1,762	75,713 390	(12,668) 2,292	25,104 10,264	
Income (loss) from continuing operations before income tax expense (benefit) Income tax expense (benefit) on continuing	86,630	87,117	76,103	(10,376)		
operations	18,532		14,722	(5,507)		
Income (loss) from continuing operations Loss from operations of discontinued business, net of tax	68,098	69,869	61,381	(4,869)		
Net income (loss)	\$ 68,098	\$ 69,869	\$ 61,381	¢ (4.960)	$\frac{(3,224)}{$27,275}$	
,	5 00,030	т 09,009	5 61,361	Ψ (4,009)	\$ 21,213	
Basic income (loss) per weighted-average common share:	A 450	4 407	.	A (0.40)	A 0.74	
Income (loss) from continuing operations Loss from discontinued operations	\$ 1.59 \$ 0.00		\$ 1.54 \$ 0.00			
Net income (loss)	\$ 1.59	\$ 1.67	\$ 1.54	\$ (0.12)	\$ 0.66	
Diluted income (loss) per weighted-average common and common-equivalent share: Income (loss) from continuing operations	\$ 1.56	\$ 1.63	\$ 1.52	\$ (0.12)	\$ 0.73	
Loss from discontinued operations	\$ 0.00		•			
Net income (loss)	\$ 1.56	·				
Weighted-average common and common- equivalent shares outstanding:	42 922	41.950	20.024	20.650	41 427	
Basic	42,833	41,859	39,924	39,659	41,437	
Diluted	43,640	42,762	40,297	39,659	41,554	
Cash dividends per common share	\$ 1.54	\$ 0.36	\$ 0.25	\$ 0.30	\$ 0.47	
(1) Amounts include stock-based compensation expense, as follows:						
Cost of revenue Research, development, and engineering Selling, general, and administrative	\$ 742 2,149 5,629	\$ 628 2,268 5,172	\$ 278 1,020 1,729	\$ 774 2,163 6,286	\$ 1,116 3,067 6,048	
Total stock-based compensation expense	\$ 8,520				\$ 10,231	
Total block based sompensation expense	<u> </u>	Ψ 0,000	Ψ 0,027	Ψ 0,220		
			December 31	•	9000	
	2012	2011	2010 In thousands	2009	2008	
Balance Sheet Data:		,	iii tilousailus	,		
Working capital Total assets Shareholders' equity	\$189,493 627,605 572,285	\$231,241 611,881 552,980	\$224,573 533,104 473,311	\$210,674 439,869 394,448	\$213,374 474,047 413,075	

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

FORWARD-LOOKING STATEMENTS

Certain statements made in this report, as well as oral statements made by the Company from time to time, constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Readers can identify these forward-looking statements by our use of the words "expects," "anticipates," "estimates," "believes," "projects," "intends," "plans," "will," "may," "shall," "could," "should," and similar words and other statements of a similar sense. These statements are based upon our current estimates and expectations as to prospective events and circumstances, which may or may not be in our control and as to which there can be no firm assurances given. These forward-looking statements, which include statements regarding business and market trends, future financial performance, customer order rates, expected areas of growth, research and development activities, and strategic plans, involve known and unknown risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include: (1) current and future conditions in the global economy; (2) the cyclicality of the semiconductor and electronics industries; (3) the reliance on revenue from the automotive industry; (4) the inability to penetrate new markets; (5) the inability to achieve significant international revenue; (6) fluctuations in foreign currency exchange rates; (7) the loss of a large customer; (8) the inability to attract and retain skilled employees; (9) the reliance upon key suppliers to manufacture and deliver critical components for our products; (10) the failure to effectively manage product transitions or accurately forecast customer demand; (11) the inability to design and manufacture high-quality products; (12) the technological obsolescence of current products and the inability to develop new products; (13) the failure to properly manage the distribution of products and services; (14) the inability to protect our proprietary technology and intellectual property; (15) our involvement in time-consuming and costly litigation; (16) the impact of competitive pressures; (17) the challenges in integrating and achieving expected results from acquired businesses; (18) potential impairment charges with respect to our investments or for acquired intangible assets or goodwill; (19) exposure to additional tax liabilities; and (20) information security breaches or business system disruptions. The foregoing list should not be construed as exhaustive and we encourage readers to refer to the detailed discussion of risk factors included in Part I - Item 1A of this Annual Report on Form 10-K. The Company cautions readers not to place undue reliance upon any such forwardlooking statements, which speak only as of the date made. The Company disclaims any obligation to subsequently revise forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date such statements are made.

EXECUTIVE OVERVIEW

Cognex Corporation is a leading worldwide provider of machine vision products that capture and analyze visual information in order to automate tasks, primarily in manufacturing processes, where vision is required. Our Modular Vision Systems Division (MVSD) specializes in machine vision systems and ID products that are used to automate the manufacture and tracking of discrete items, while our Surface Inspection Systems Division (SISD) specializes in machine vision systems that are used to inspect the surfaces of materials processed in a continuous fashion.

In addition to product revenue derived from the sale of machine vision systems, the Company also generates revenue by providing maintenance and support, training, consulting, and installation services to its customers. Our customers can be classified into three primary markets: factory automation, semiconductor and electronics capital equipment, and surface inspection.

Factory automation customers, who are included in the Company's MVSD segment, purchase
Cognex vision products and incorporate them into their manufacturing processes. Virtually
every manufacturer can achieve better quality and manufacturing efficiency by using machine
vision, and therefore, this market includes a broad base of customers across a variety of
industries, including automotive, consumer electronics, food and beverage, pharmaceutical,

and medical devices. The factory automation market also includes customers who purchase Cognex vision products for use outside of the assembly process, such as using ID products in logistics automation for package sorting and distribution. Sales to factory automation customers represented approximately 75% of total revenue in 2012 compared to 73% of total revenue in 2011.

- Semiconductor and electronics capital equipment manufacturers, who are included in the Company's MVSD segment, purchase Cognex vision products and integrate them into the automation equipment that they manufacture and then sell to their customers to either make semiconductor chips or assemble printed circuit boards. Demand from these capital equipment manufacturers has historically been highly cyclical, with periods of investment followed by downturn. Sales to semiconductor and electronics capital equipment manufacturers represented approximately 9% of total revenue in 2012 compared to 12% of total revenue in 2011.
- Surface inspection customers, who comprise the Company's SISD segment, are manufacturers
 of materials processed in a continuous fashion, such as metals, paper, nonwoven, plastics, and
 glass. These customers need sophisticated machine vision to detect, classify, and analyze
 defects on the surfaces of those materials as they are being processed at high speeds. Surface
 inspection sales represented approximately 16% of total revenue in 2012 compared to 15% of
 total revenue in 2011.

Revenue for the year ended December 31, 2012 totaled \$324,279,000, representing an increase of 1% over the prior year. Although revenue was relatively flat overall, growth in the factory automation and surface inspection markets was partially offset by lower sales in the cyclical semiconductor and electronics capital equipment market. Gross margin was relatively flat at 75.5% of revenue in 2012 compared to 75.8% of revenue in 2011. Operating expenses increased 2% over the prior year due primarily to expenses associated with increased headcount in strategic areas, partially offset by lower company bonus accruals and the favorable impact of changes in foreign currency exchange rates. The Company generated net income of \$68,098,000, or 21% of revenue, in 2012 compared to net income of \$69,869,000, or 22% of revenue, in 2011.

The following table sets forth certain consolidated financial data as a percentage of revenue:

	Year ended December 31,					
	2012	2011	2010			
Revenue	100%	100%	100%			
Cost of revenue	25	_24	_27			
Gross margin	75	76	73			
Research, development, and engineering expenses	13	13	11			
Selling, general, and administrative expenses	<u>36</u>	_36	<u>36</u>			
Operating income	26	27	26			
Nonoperating income	1					
Income before income tax expense	27	27	26			
Income tax expense	6	5	5			
Net income	21%	22%	21%			

RESULTS OF OPERATIONS

As foreign currency exchange rates are a factor in understanding period-to-period comparisons, we believe the presentation of results on a constant-currency basis in addition to reported results helps improve investors' ability to understand our operating results and evaluate our performance in comparison to prior periods. We also use results on a constant-currency basis as one measure to evaluate our performance. Constant-currency information compares results between periods as if exchange rates

had remained constant period-over-period. We generally refer to such amounts calculated on a constant-currency basis as excluding the impact of foreign currency exchange rate changes. Results on a constant-currency basis are not in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and should be considered in addition to, and not as a substitute for, results prepared in accordance with U.S. GAAP.

Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

Revenue

Revenue for the year ended December 31, 2012 increased by \$2,365,000, or 1%, from the prior year. This increase was due to a \$9,220,000, or 4%, increase in sales to factory automation customers and a \$2,342,000, or 5%, increase in sales to surface inspection customers, partially offset by a \$9,197,000, or 24%, decrease in sales to semiconductor and electronics capital equipment customers.

Factory Automation Market

Sales to customers in the factory automation market represented 75% of total revenue in 2012 compared to 73% of total revenue in 2011. Sales to these customers increased by \$9,220,000, or 4%, from the prior year. A weaker Euro, on average, in 2012 compared to the prior year had a negative impact on reported factory automation revenue, as sales denominated in Euros were translated to U.S. Dollars at a lower rate. Excluding the impact of foreign currency exchange rate changes, which decreased factory automation revenue by \$6,297,000, sales to factory automation customers increased by \$15,517,000, or 7%, from 2011.

Geographically, increases from the prior year in factory automation revenue excluding the impact of foreign currency exchange rate changes were reported in the Americas, Europe, and, most notably, in Asia, where the Company has made significant investments, particularly in China, to expand its sales and support infrastructure in order to access more of the machine vision market in this high-potential growth region. Revenue in Japan has declined over the past two years since the natural disasters that hit this region early in 2011. By product, the majority of the growth in factory automation revenue came from sales of the Company's ID products, which are used in manufacturing applications as well as in the logistics industry for package sorting and distribution. The Company expects its China region and ID products to continue to be growth opportunities in 2013.

Sales to factory automation customers increased by \$856,000, or 1%, in the fourth quarter of 2012 from the third quarter of 2012. In the fourth quarter of 2012, revenue trends in Asia, specifically in China, were negatively impacted by a slowdown in the consumer electronics industry, which overshadowed positive forward momentum in the factory automation markets in the Americas and Europe.

Semiconductor and Electronics Capital Equipment Market

Sales to customers who make automation equipment for the semiconductor and electronics industries represented 9% of total revenue in 2012 compared to 12% of total revenue in 2011. Sales to these customers decreased by \$9,197,000, or 24%, from the prior year. The impact of foreign currency exchange rate changes on revenue was not significant in the semiconductor and electronics capital equipment market. Geographically, revenue decreased most significantly in Japan where many of the Company's semiconductor and electronics capital equipment customers are located; however, decreases were noted across all regions in which the Company operates.

Sales to semiconductor and electronics capital equipment customers decreased by \$1,346,000, or 20%, in the fourth quarter of 2012 from the third quarter of 2012. The semiconductor and electronics capital equipment market has historically been highly cyclical and management has limited visibility regarding future order levels from these customers.

Surface Inspection Market

Sales to customers in the surface inspection market represented 16% of total revenue in 2012 compared to 15% of total revenue in 2011. Sales to these customers increased by \$2,342,000, or 5%, from

the prior year. Excluding the impact of foreign currency exchange rate changes, which decreased surface inspection revenue by \$725,000, sales to surface inspection customers increased by \$3,067,000, or 6%, from 2011. This increase was primarily due to higher service revenue derived from spare parts sales, training services, and maintenance and support contracts.

Sales to surface inspection customers increased by \$2,582,000, or 22%, in the fourth quarter of 2012 from the third quarter of 2012. Due to the relatively large average order values at SISD, the revenue reported each quarter can vary significantly depending upon the timing of customer orders, system deliveries, and installations, as well as the impact of revenue deferrals.

Product Revenue

Product revenue decreased by \$1,722,000, or 1%, from the prior year. Although the Company sold a higher volume of modular vision systems than the prior year, the average selling price declined in part due to a shift in revenue mix to ID Products, which have relatively lower average selling prices.

Service Revenue

Service revenue, which is derived from the sale of maintenance and support, training, consulting, and installation services, increased by \$4,087,000, or 17%, from the prior year. This increase was due to higher consulting services at MVSD, as well as higher revenue from SISD spare part sales, training services, and maintenance and support contracts. Service revenue increased as a percentage of total revenue to 9% in 2012 from 8% in 2011.

Gross Margin

Gross margin as a percentage of revenue was relatively flat at 75.5% for 2012 compared to 75.8% for 2011.

MVSD Margin

MVSD gross margin as a percentage of revenue was 80% in both 2012 and 2011. A reduction in product margins due to higher new product introduction costs on a relatively flat product revenue base was offset by improvements in service margins due to higher margins from consulting services.

SISD Margin

SISD gross margin as a percentage of revenue was 54% in 2012 compared to 51% in 2011. This increase was due to improvements in both product and service margins. Product margins improved primarily due to manufacturing efficiencies, as SISD manufacturing costs were lower in 2012 than the prior year. Service margins improved due to a shift in revenue mix to relatively higher margin spare part sales and training services.

Product Margin

Product gross margin as a percentage of revenue was 78% in both 2012 and 2011. Lower MVSD product margins due to higher new product introduction costs were offset by higher SISD product margins due to manufacturing efficiencies.

Service Margin

Service gross margin as a percentage of revenue was 51% in 2012 compared to 46% in 2011. This increase was due to higher margins from spare part sales and training services at SISD, as well as higher margins from consulting services at MVSD.

Operating Expenses

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses in 2012 increased by \$603,000, or 1%, from the prior year. MVSD RD&E expenses were relatively flat, while SISD RD&E expenses increased by \$544,000, or 16%.

The table below (in thousands) details the \$59,000 net increase in MVSD RD&E in 2012:

MVSD RD&E balance in 2011	\$37,614
Personnel-related costs	1,950
Company bonus accruals	(1,066)
Foreign currency exchange rate changes	(686)
Other	(139)
MVSD RD&E balance in 2012	\$37,673

Personnel-related costs have increased from the prior year due to additional headcount, partially offset by lower average costs per employee. Over the past year, the Company has continued to increase headcount to support strategic initiatives, resulting in higher personnel-related costs, such as salaries and fringe benefits. Many of these employees have been added in Budapest, Hungary, which has resulted in a decrease in the average cost per employee. These investments were offset by lower company bonus accruals based on the Company's operating income margin. In addition, a weaker Euro in 2012 compared to the prior year resulted in lower RD&E costs when expenses of the Company's foreign operations were translated to U.S. Dollars.

The increase in SISD RD&E expenses was primarily due to increased salaries and fringe benefits expenses (\$332,000), as well as higher materials spending (\$77,000) and outsourced engineering services (\$61,000).

RD&E expenses as a percentage of revenue were 13% in both 2012 and 2011. We believe that a continued commitment to RD&E activities is essential in order to maintain or achieve product leadership with our existing products and to provide innovative new product offerings. In addition, we consider our ability to accelerate time-to-market for new products to be critical to our revenue growth. Therefore, we expect to continue to make significant RD&E investments in the future. Although we target our RD&E spending to be between 10% and 15% of total revenue, this percentage is impacted by revenue levels.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses in 2012 increased by \$2,134,000, or 2%, from the prior year. MVSD SG&A expenses increased by \$3,624,000, or 4%, and SISD SG&A expenses increased by \$101,000, or 1%. Corporate expenses that are not allocated to either division decreased by \$1,591,000, or 12%.

The table below (in thousands) details the \$3,624,000 net increase in MVSD SG&A in 2012:

MVSD SG&A balance in 2011	\$92,735
Personnel-related costs	5,217
Depreciation expense	690
Stock-based compensation expense	485
China long-term incentive plan	409
Sales demonstration equipment	387
Foreign currency exchange rate changes	(2,273)
Company bonus accruals	(1,054)
Sales commissions	(1,027)
Other	790
MVSD SG&A balance in 2012	\$96,359

Personnel-related costs have increased from the prior year due to additional headcount, and to a lesser extent, higher average costs per employee. Over the past year, the Company has continued to increase headcount in strategic areas, principally Sales, resulting in higher personnel-related costs,

such as salaries, fringe benefits, commissions, and travel expenses. Average costs per employee have increased over the prior year due primarily to modest wage increases granted early in 2012 and higher fringe benefits, such as health care costs. The Company also recorded higher depreciation expense related principally to business system upgrades and leasehold improvements, increased stock-based compensation expense due to a higher valuation of stock options granted in the fourth quarter of 2011 and a lower level of credits related to forfeited options, and increased spending on sales demonstration equipment. In addition, the Company began to accrue expenses in 2012 associated with a long-term incentive plan implemented in China in lieu of granting stock options in this region. These increases were offset by lower company bonus accruals based upon the Company's operating income margin and lower sales commissions as a result of fewer sales employees exceeding their bookings quotas compared to the prior year. In addition, a weaker Euro in 2012 compared to the prior year resulted in lower SG&A costs when expenses of the Company's foreign operations were translated to U.S. Dollars.

The increase in SISD SG&A expenses was primarily due to increased salaries and fringe benefits expenses (\$421,000), partially offset by the unfavorable impact of changes in foreign currency exchange rates (\$280,000).

The decrease in corporate expenses was primarily due to lower company bonus accruals (\$1,110,000) and lower legal fees related to patent-infringement actions (\$532,000 – refer to Note 9 to the Consolidated Financial Statements in Part II – Item 8 of this Annual Report on Form 10-K).

Nonoperating Income (Expense)

The Company recorded foreign currency losses of \$880,000 in 2012 and \$504,000 in 2011. In the third quarter of 2012, management changed the domicile of the subsidiary that held the Company's Eurodenominated investment portfolio and also changed that subsidiary's functional currency from the Euro to the U.S. Dollar. As a result of these changes, the investment portfolio was liquidated, primarily during the second quarter of 2012, and those funds were converted into U.S. Dollars when the change in domicile was completed. To protect against a potential devaluation in the Euro, the Company entered into forward contracts to exchange Euros for U.S. Dollars at fixed exchange rates. The settlement of these forward contracts resulted in a foreign currency loss of \$504,000 recorded in the third quarter of 2012. In addition, the foreign currency losses in each period resulted from the revaluation and settlement of accounts receivable and intercompany balances that are reported in one currency and collected in another. Although a portion of the Company's foreign currency exposure of accounts receivable is mitigated through the use of forward contracts, this program depends upon forecasts of sales and collections, and therefore, gains or losses on the underlying receivables may not perfectly offset losses or gains on the contracts.

Investment income in 2012 increased by \$1,568,000, or 54%, from the prior year. The increase was primarily due to gains recognized on the sale of Euro-denominated investments, as well as an increase in cash that was available for investment.

The Company recorded other expense of \$367,000 in 2012 and \$636,000 in 2011. The Company recorded \$141,000 of other income in the first quarter of 2012 upon the expiration of the statute of limitations relating to a tax holiday, during which time the Company collected value-added taxes from customers that were not required to be remitted to the government authority. Other income (expense) also includes rental income, net of associated expenses, from leasing buildings adjacent to the Company's corporate headquarters. A portion of this space is currently unoccupied.

Income Tax Expense

The Company's effective tax rate was a provision of 21% in 2012 compared to a provision of 20% in 2011. The increase in the effective tax rate was primarily due a higher proportion of the Company's pre-tax income being earned in the United States, which is a relatively higher tax jurisdiction. In addition, the 2012 effective tax rate does not include any benefit from research and development tax credits, as discussed below.

The American Taxpayer Relief Act of 2012 was passed by Congress and signed into law on January 1, 2013. The provisions under this law were made retroactive to January 1, 2012. However, as a result of the law being signed on January 1, 2013, the financial impact of any retroactive provision will be recorded as a discrete event in the first quarter of 2013. The Company estimates that this discrete event will reduce tax expense in the first quarter of 2013 by \$555,000 for the Research and Development tax credit for 2012.

RESULTS OF OPERATIONS

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

Revenue

Revenue for the year ended December 31, 2011 increased by \$31,223,000, or 11%, from the prior year. This increase was due to a \$35,317,000 increase in sales to factory automation customers and a \$4,964,000 increase in sales to surface inspection customers, partially offset by a \$9,058,000 decrease in sales to semiconductor and electronics capital equipment customers.

Factory Automation Market

Sales to customers in the factory automation market represented 73% of total revenue in 2011 compared to 69% of total revenue in 2010. Sales to these customers increased by \$35,317,000, or 18%, from the prior year. A weaker U.S. Dollar relative to the Euro and Japanese Yen, on average, in 2011 compared to 2010 contributed to the higher revenue, as sales denominated in Euros and Yen were translated to U.S. Dollars. Excluding the impact of foreign currency exchange rate changes, which increased factory automation revenue by \$6,523,000, sales to factory automation customers increased by \$28,794,000, or 14%, from 2010.

By region, the largest dollar increases were experienced in the Americas and Europe, where the Company has a broad base of factory automation customers, and the largest percentage increase was experienced in Asia, where the Company has made significant investments to expand its sales and support infrastructure, particularly in China, in order to access more of the machine vision market in this high-potential growth region. Revenue in Japan was lower than the prior year, as business levels in 2011 were negatively impacted by the earthquake that hit this region earlier in the year, as well as a slowdown in the consumer electronics industry during the second half of 2011.

By product, the majority of the growth in factory automation revenue came from sales of the Company's ID products and In-Sight general-purpose vision systems. Sales of ID products, which are used in manufacturing applications as well as in the logistics industry for package sorting and distribution, increased \$16,301,000, or 38%, from the prior year.

Semiconductor and Electronics Capital Equipment Market

Sales to customers who make automation equipment for the semiconductor and electronics industries represented 12% of total revenue in 2011 compared to 16% of total revenue in 2010. Sales to these customers decreased by \$9,058,000, or 19%, from the prior year. Excluding the impact of foreign currency exchange rate changes, which decreased semiconductor and electronics capital equipment revenue by \$1,356,000, sales to semiconductor and electronics capital equipment customers decreased by \$10,414,000, or 22%, from 2010. Geographically, revenue decreased most significantly in Japan where many of the Company's semiconductor and electronics capital equipment customers are located.

Surface Inspection Market

Sales to customers in the surface inspection market represented 15% of total revenue in both 2011 and 2010. Sales to these customers increased by \$4,964,000, or 12%, from the prior year. Excluding the impact of foreign currency exchange rate changes, which increased surface inspection revenue by \$1,332,000, sales to surface inspection customers increased by \$3,632,000, or 8%, from 2010.

Geographically, revenue increased in the Americas, Europe, and Asia where we believe SISD gained market share, while revenue decreased in Japan in the aftermath of the earthquake that hit this region earlier in the year.

Product Revenue

Product revenue increased by \$33,847,000, or 13%, from the prior year due primarily to a higher volume of systems sold to customers in the factory automation market. The impact of the higher volume was partially offset by slightly lower MVSD average selling prices, as the Company introduced new products at lower price points. The growth in ID product units that are sold at relatively lower price points also contributed to the lower average selling prices.

Service Revenue

Service revenue, which is derived from the sale of maintenance and support, education, consulting, and installation services, decreased by \$2,624,000, or 10%, from the prior year. In 2010, service revenue included \$6,500,000 related to an arrangement with a single customer for which the work was performed over the prior four years, but revenue was deferred until the final obligation was completed in the fourth quarter of 2010. This decrease was partially offset by higher SISD installation and maintenance and support revenue, including spare part sales. Service revenue decreased as a percentage of total revenue to 8% in 2011 from 9% in 2010.

Gross Margin

Gross margin as a percentage of revenue was 76% for 2011 compared to 73% for 2010. This increase was due to improvements in both MVSD and SISD product margins.

MVSD Margin

MVSD gross margin as a percentage of revenue was 80% in 2011 compared to 78% in 2010. This increase was due to higher product margins resulting from manufacturing efficiencies achieved from higher revenue levels, as fixed manufacturing costs were spread over a higher revenue base. A greater percentage of MVSD revenue from the sale of products as opposed to lower-margin services also contributed to the increase.

SISD Margin

SISD gross margin as a percentage of revenue was 51% in 2011 compared to 44% in 2010. This increase was due to improvements in both product and service margins. Product margins improved primarily due to low-cost sourcing initiatives, higher average selling prices, and the impact of relatively flat manufacturing costs spread over a higher revenue base. The improvement in service margins was the result of a higher number of completed installations, as well as efficiencies achieved in the installation process.

Product Margin

Product gross margin as a percentage of revenue was 78% in 2011 compared to 77% in 2010. This increase was due to higher product margins at both MVSD and SISD as described above.

Service Margin

Service gross margin as a percentage of revenue was 46% in 2011 compared to 41% in 2010. This increase was due to higher SISD service margins as described above.

Operating Expenses

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses in 2011 increased by \$7,866,000, or 24%, from the prior year. MVSD RD&E expenses increased by \$7,857,000, or 26%, while SISD RD&E expenses were relatively flat.

The table below (in thousands) details the \$7,857,000 net increase in MVSD RD&E in 2011:

MVSD RD&E balance in 2010	\$29,757
Personnel-related costs	3,972
Stock-based compensation expense	1,244
Outsourced engineering services	581
Patent-related costs	547
Material costs	493
Foreign currency exchange rate changes	434
Other	586
MVSD RD&E balance in 2011	\$37,614

During 2011, the Company increased MVSD RD&E headcount in strategic areas, resulting in higher personnel-related costs, such as salaries and fringe benefits. The Company also recorded increased stock-based compensation expense due to a higher valuation of stock options granted during 2011, increased spending on outsourced engineering services and materials related to engineering activities, and higher costs to patent new technology. In addition, a weaker U.S. Dollar relative to the Euro, on average, in 2011 compared to 2010 resulted in higher RD&E costs when expenses of the Company's foreign engineering centers, primarily in Hungary, were translated to U.S. Dollars.

RD&E expenses as a percentage of revenue were 13% in 2011 and 11% in 2010.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses in 2011 increased by \$13,459,000, or 13%, from the prior year. MVSD SG&A expenses increased by \$15,463,000, or 20%, and SISD SG&A expenses increased by \$576,000, or 5%. Corporate expenses that are not allocated to either division decreased by \$2,580,000, or 16%.

The table below (in thousands) details the \$15,463,000 net increase in MVSD SG&A in 2011:

MVSD SG&A balance in 2010	\$77,272
Personnel-related costs	9,583
Foreign currency exchange rate changes	3,776
Stock-based compensation expense	2,250
Marketing and promotional expenses	1,665
Sales demonstration equipment	896
Sales commissions	(3,946)
Other	1,239
MVSD SG&A balance in 2011	\$92,735

During 2011, the Company increased MVSD SG&A headcount in strategic areas, resulting in higher personnel-related costs, such as salaries, fringe benefits, commissions, and travel expenses. The Company also recorded increased stock-based compensation expense due to a higher valuation of stock options granted during 2011, increased spending on marketing and promotional activities intended to grow factory automation revenue, and higher spending on sales demonstration equipment. In addition, a weaker U.S. Dollar relative to the Euro and Japanese Yen, on average, in 2011 compared to 2010 resulted in higher SG&A costs when expenses of the Company's foreign sales and support offices were translated to U.S. Dollars. Offsetting the increase in sales commissions associated with additional personnel was a decrease in sales commissions as a result of fewer sales employees exceeding their bookings quotas compared to the prior year.

The increase in SISD SG&A expenses was primarily due to the unfavorable impact of changes in foreign currency exchange rates (\$365,000) and increased stock-based compensation expense (\$150,000).

The decrease in corporate expenses was due to lower legal fees related to patent-infringement actions (\$4,273,000 – refer to Note 9 to the Consolidated Financial Statements in Part II – Item 8 of this Annual Report on Form 10-K). This decrease was partially offset by increased stock-based compensation expense (\$1,003,000) and costs associated with the Company's 30th Anniversary parties held in the first quarter of 2011 (\$480,000).

Nonoperating Income (Expense)

The Company recorded foreign currency losses of \$504,000 in 2011 and \$328,000 in 2010. The foreign currency fluctuations in each period resulted primarily from the revaluation and settlement of accounts receivable and intercompany balances that are reported in one currency and collected in another. Although the foreign currency exposure of accounts receivable is largely mitigated through the use of forward contracts, this program depends upon forecasts of sales and collections, and therefore, gains or losses on the underlying receivables may not perfectly offset losses or gains on the contracts.

Investment income in 2011 increased by \$1,481,000, or 104%, from the prior year. The increase was primarily due to an increase in cash generated from operations that was available for investment, as well as a shift in investment mix to higher-yielding securities. Beginning in the second quarter of 2010, the Board of Directors approved a change to the Company's investment policy to allow management to invest excess cash accumulated in the Company's international entities in debt securities. Prior to this change, these funds were invested in lower-yielding savings accounts.

The Company recorded other expense of \$636,000 in 2011 and \$703,000 in 2010. Other expense includes rental income, net of associated expenses, from leasing buildings adjacent to the Company's corporate headquarters. For a majority of 2011, these buildings were partially unoccupied.

Income Tax Expense

The Company's effective tax rate was a provision of 20% in 2011 compared to a provision of 19% in 2010.

The effective tax rate for 2011 included the impact of the following discrete events: (1) a decrease in tax expense of \$808,000 from the expiration of the statutes of limitations for certain reserves for income taxes, (2) a decrease in tax expense of \$155,000 from the finalization of the Advanced Pricing Agreement between Japan and Ireland (Refer to Note 15 to the Consolidated Financial Statements in Part II- Item 8 of this Annual Report on Form 10-K.), partially offset by, (3) an increase in tax expense of \$574,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, and (4) an increase in tax expense of \$201,000 from the write down of a noncurrent deferred tax asset based upon a change in the tax rate in Japan. The effective tax rate in 2011 was a provision of 20%, with or without these discrete events.

The effective tax rate for 2010 included the impact of the following discrete events: (1) a decrease in tax expense of \$462,000 from the settlement of the Competent Authority case with Japan, (2) a decrease in tax expense of \$151,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, (3) a decrease in tax expense of \$124,000 from the receipt of a state refund, and (4) a decrease in tax expense of \$105,000 from the expiration of the statutes of limitations for certain reserves for income taxes. These discrete events changed the effective tax rate in 2010 from a provision of 20% to a provision of 19%.

The Company's effective tax rate excluding discrete events in both 2011 and 2010 remained a provision of 20%.

LIQUIDITY AND CAPITAL RESOURCES

The Company has historically been able to generate positive cash flow from operations, which has funded its operating activities and other cash requirements and has resulted in an accumulated cash,

cash equivalent, and investment balance of \$388,520,000 as of December 31, 2012. The Company has established guidelines relative to credit ratings, diversification, and maturities of its investments that maintain liquidity.

The Company's cash requirements in 2012 were met with its existing cash balances, cash from investment maturities, positive cash flows from operations, and the proceeds from stock option exercises. Cash requirements consisted of operating activities, purchases of investments, the payment of dividends, and capital expenditures. Capital expenditures totaled \$9,878,000 in 2012 and consisted primarily of expenditures for computer hardware, computer software (including business system upgrades), manufacturing test equipment related to new product introductions, building improvements at the Company's headquarters in Natick, Massachusetts, and leasehold improvements.

In the third quarter of 2012, management changed the domicile of the subsidiary that held the Company's Euro-denominated investment portfolio and also changed that subsidiary's functional currency from the Euro to the U.S. Dollar. As a result of these changes, the investment portfolio was liquidated, primarily during the second quarter of 2012, and those funds were converted to U.S. Dollars. These funds were then used to purchase U.S. Dollar-denominated investments during the third quarter of 2012 once the change in domicile was completed. As of December 31, 2012, the Company's investment portfolio consisted entirely of U.S Dollar-denominated securities.

The following table summarizes the Company's material contractual obligations, both fixed and contingent (in thousands):

Year Ending December 31,	Venrock Limited Partnership Interest	Inventory Purchase Commitments	Leases	Total
2013	\$614	\$7,156	\$ 5,411	\$13,181
2014	-	-	3,686	3,686
2015	-	-	2,265	2,265
2016	-	-	1,392	1,392
2017	-	-	708	708
Thereafter	<u>-</u>	<u>-</u>	1,050	1,050
	<u>\$614</u>	\$7,156	\$14,512	\$22,282

In 2000, the Company became a Limited Partner in Venrock Associates III, L.P. (Venrock), a venture capital fund. The Company has committed to a total investment in the limited partnership of up to \$20,500,000, with the commitment period expiring on December 31, 2013. The Company does not have the right to withdraw from the partnership prior to December 31, 2013. As of December 31, 2012, the Company contributed \$19,886,000 to the partnership. No contributions were made during 2012. The remaining commitment of \$614,000 can be called by Venrock in any period through December 31, 2013.

In addition to the obligations described above, the following items may also result in future material uses of cash:

Dividends

Beginning in the third quarter of 2003, the Company's Board of Directors has declared and paid a cash dividend in each quarter, including a dividend of \$0.10 per share in the first quarter of 2012 and a dividend of \$0.11 per share in the second, third, and fourth quarters of 2012. In December 2012, the Company also declared and paid dividends totaling \$1.11 per share, which represents an accelerated dividend of \$0.11 per share for the fourth quarter of 2012 that would normally be declared in the first quarter of 2013 in conjunction with the 2012 earnings release and a special dividend of \$1.00 per share that prepays expected dividends for the eight quarters in 2013 and 2014. The additional \$0.11

dividend and the \$1.00 dividend were accelerated due to the anticipated increase in the federal tax on dividends paid after December 31, 2012. Future dividends will be declared at the discretion of the Company's Board of Directors and will depend upon such factors as the Board deems relevant, including, among other things, the Company's ability to generate positive cash flow from operations.

Stock Repurchase Program

In April 2008, the Company's Board of Directors authorized the repurchase of up to \$50,000,000 of the Company's common stock. As of December 31, 2012, the Company had repurchased 1,375,875 shares at a cost of \$30,000,000 under this program. In November 2011, the Company's Board of Directors authorized the repurchase of up to \$80,000,000 of the Company's common stock to help reduce share dilution associated with employee stock options. This new authorization will commence once the Company completes the \$50,000,000 program noted above, of which \$20,000,000 remains available. The Company did not repurchase shares under these programs in 2012. However, the Board may authorize the repurchase of shares in future periods depending upon a variety of factors, including, among other things, stock price, share availability, and cash reserve requirements.

Reserve for Income Taxes

The Company may be required to make cash outlays related to its reserve for income taxes in a future period. Due to the uncertainty of the timing of future cash payments associated with its reserve for income taxes, the Company is unable to make reasonably reliable estimates of the future period of cash settlement, if any, with the respective taxing authorities. Foreign subsidiaries' undistributed earnings are deemed to be permanently reinvested outside the United States. It is management's belief that the Company will not need to repatriate these earnings in future years due to the relatively strong cash flows at our domestic entities.

Acquisitions

The Company's business strategy includes selective expansion into new machine vision applications through the acquisition of businesses and technologies, which may result in significant cash outlays in the future.

The Company believes that its existing cash, cash equivalent, and investment balances, together with cash flow from operations, will be sufficient to meet its operating, investing, and financing activities for the next twelve months. As of December 31, 2012, the Company had approximately \$384,780,000 in either cash, cash equivalents, debt securities, or equity securities that could be converted into cash. In addition, Cognex has no long-term debt and does not anticipate needing debt financing in the near future. We believe that our strong cash position has put us in a relatively good position with respect to our longer-term liquidity needs.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2012, the Company had no off-balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of the Company's financial condition and results of operations is based upon the 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 management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and various other assumptions believed to be 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. Actual results could differ from these estimates under different assumptions or circumstances resulting in charges that could be material in future reporting periods. We believe the following critical accounting policies require the use of significant estimates and judgments in the preparation of our consolidated financial statements.

Revenue Recognition

The Company's product revenue is derived from the sale of machine vision systems, which can take the form of hardware with embedded software or software-only, and related accessories. The Company also generates revenue by providing maintenance and support, training, consulting, and installation services to its customers. Certain of the Company's arrangements include multiple deliverables that provide the customer with a combination of products or services. In order to recognize revenue, the Company requires that a signed customer contract or purchase order is received, the fee from the arrangement is fixed or determinable, and collection of the resulting receivable is probable. Assuming that these criteria have been met, product revenue is recognized upon delivery, revenue from maintenance and support programs is recognized ratably over the program period, revenue from training and consulting services is recognized over the period that the services are provided, and revenue from installation services is recognized when the customer has signed off that the installation is complete.

The majority of the Company's product offerings consist of hardware with embedded software. Under the revenue recognition rules for tangible products, the fee from a multiple-deliverable arrangement is allocated to each of the deliverables based upon their relative selling prices as determined by a selling-price hierarchy. A deliverable in an arrangement qualifies as a separate unit of accounting if the delivered item has value to the customer on a stand-alone basis. A delivered item that does not qualify as a separate unit of accounting is combined with the other undelivered items in the arrangement and revenue is recognized for those combined deliverables as a single unit of accounting. The selling price used for each deliverable is based upon vendor-specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, and management's best estimate of selling price (BESP) if neither VSOE nor TPE are available. TPE is the price of the Company's or any competitor's largely interchangeable products or services in stand-alone sales to similarly-situated customers. BESP is the price at which the Company would sell the deliverable if it were sold regularly on a stand-alone basis, considering market conditions and entity-specific factors.

Management exercises judgment in connection with the determination of the amount of revenue to be recognized each period. Such judgments include, but are not limited to, determining whether separate contracts with the same customer that are entered into at or near the same time should be accounted for as a single arrangement, identifying the various elements in an arrangement, determining if delivered items have stand-alone value, determining the relative selling prices of the arrangement's deliverables, determining whether options to buy additional products or services in the future are substantive and should be accounted for as a deliverable in the original arrangement, assessing whether the fee is fixed or determinable, determining the probability of collecting the receivable, determining whether customer-specified acceptance criteria are substantive in nature, and assessing whether vendor-specific objective evidence of fair value has been established for undelivered elements.

Investments

As of December 31, 2012, the Company's investment balance totaled \$343,360,000, of which \$337,489,000 consisted of debt securities, \$2,131,000 consisted of equity securities, and \$3,740,000 consisted of a limited partnership interest in a venture capital fund. The debt securities are reported at fair value, with unrealized gains and losses, net of tax, recorded in shareholders' equity as other comprehensive income (loss) since these securities are designated as available-for-sale securities. As of December 31, 2012, the Company's portfolio of debt securities had a net unrealized gain of \$683,000. The equity securities represent stock in a publicly-traded U.S. company and are reported at fair value, with unrealized gains and losses recorded in current operations since these securities are designated as trading securities. The limited partnership interest is in Venrock Associates III, L.P., a venture capital fund with an investment focus on Information Technology and Health Care and Life Sciences. The limited partnership interest is accounted for using the cost method because our investment is less than 5% of the partnership and we have no influence over the partnership's operating and financial policies. Furthermore, this investment does not have a readily determinable market value, and therefore, does

not qualify for fair value accounting. As of December 31, 2012, the carrying value of this investment was \$3,740,000 compared to an estimated fair value of \$6,932,000.

The Company applies a three-level valuation hierarchy for fair value measurements. The categorization of assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the measurement of fair value. Level 1 inputs to the valuation methodology utilize unadjusted quoted market prices in active markets for identical assets and liabilities. Level 2 inputs to the valuation methodology are other observable inputs, including quoted market prices for similar assets and liabilities, quoted prices for identical and similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data. Level 3 inputs to the valuation methodology are unobservable inputs based upon management's best estimate of the inputs that market participants would use in pricing the asset or liability at the measurement date, including assumptions about risk. Changes in the valuation methodology, interest rates, credit rates, or the market for these investments could result in changes to their fair values. Changes to the Level of an investment within the fair value hierarchy are determined at the end of the reporting period.

The fair value of the Company's debt securities is based upon model-driven valuations in which all significant inputs are observable or can be derived from or corroborated by observable market data for substantially the full term of the assets, and are therefore classified as Level 2 investments. Management is responsible for estimating the fair value of these investments, and in doing so, considers valuations provided by a large, third-party pricing service. This service maintains regular contact with market makers, brokers, dealers, and analysts to gather information on market movement, direction, trends, and other specific data. They use this information to structure yield curves for various types of debt securities and arrive at the daily valuations.

The fair value of the Company's equity securities is based upon quoted market prices on a stock exchange, and are therefore classified as Level 1 investments.

The fair value of the Company's limited partnership interest takes into consideration valuations of the partnership's investments as determined by the General Partner. Publicly-traded investments in active markets are reported at the market closing price less a discount, as appropriate, to reflect restricted marketability. Fair value for private investments for which observable market prices in active markets do not exist is based upon the best information available including the value of a recent financing, reference to observable valuation measures for comparable companies (such as revenue multiples), public or private transactions (such as the sale of a comparable company), and valuations for publicly-traded comparable companies. The valuations also incorporate the General Partner's own judgment and close familiarity with the business activities of each portfolio company. The portfolio consists of securities of public and private companies, and consequently, inputs used in the fair value calculation are classified as Level 3. These valuations are judgmental and require the use of many assumptions and estimates, and changes in these assumptions could result in an impairment charge in future periods.

The majority of the partnership's portfolio consists of investments in early-stage, private companies characterized by a high degree of risk, volatility, and illiquidity, and the global economic slowdown and credit market crisis have made the environment for these startups much less forgiving. As a result, it is possible that some of the younger companies in the portfolio that require capital investments to fund their current operations may not be as well prepared to survive this economic uncertainty as would a more mature company. These factors make the assumptions and estimates used in the fair valuation calculations more judgmental.

Management monitors the carrying value of its investments in debt securities and a limited partnership interest compared to their fair value to determine whether an other-than-temporary impairment has occurred. In considering whether a decline in fair value is other-than-temporary, we consider many factors, both qualitative and quantitative in nature. In its evaluation of its debt securities, management considers the type of security, the credit rating of the security, the length of time the security has been in a loss position, the size of the loss position, our ability and intent to hold the security to expected recovery of value, and other meaningful information. In its evaluation of its limited partnership interest,

management considers the duration and extent of the decline, the length of the Company's commitment to the investment, general economic trends, and specific communications with the General Partner. If a decline in fair value is determined to be other-than-temporary, an impairment charge would be recorded in current operations to reduce the carrying value of the investment to its fair value. There were no other-than-temporary impairments of investments in 2012, 2011, or 2010. If the fair value of the Company's limited partnership interest decreases below its current carrying value, which would represent a decline of greater than 46%, the Company may be required to record an impairment charge related to this investment.

Accounts Receivable

The Company maintains reserves against its accounts receivable for potential credit losses. Ongoing credit evaluations of customers are performed and the Company has historically not experienced significant losses related to the collection of its accounts receivable. Allowances for specific accounts determined to be at risk for collection are estimated by management taking into account the length of time the receivable has been outstanding, the customer's current ability to pay its obligations to the Company, general economic and industry conditions, as well as various other factors. Global economic uncertainty may result in longer payment cycles and challenges in collecting accounts receivable balances, which make these estimates more judgmental. An adverse change in any of these factors could result in higher than expected customer defaults and may result in the need for additional bad debt provisions. As of December 31, 2012, the Company's reserve against accounts receivable was \$1,131,000, or 3% of the gross accounts receivable balance. A 10% difference in the reserve against accounts receivable as of December 31, 2012 would have affected net income by approximately \$89,000.

Inventories

Inventories are stated at the lower of cost or market. Management estimates excess and obsolescence exposures based upon assumptions about future demand, product transitions, and market conditions, and records reserves to reduce the carrying value of inventories to their net realizable value. Volatility in the global economy makes these assumptions about future demand more judgmental. Among the risks associated with the introduction of new products are difficulty predicting customer demand and effectively managing inventory levels to ensure adequate supply of the new product and avoid excess supply of the legacy product. In addition, we may strategically enter into non-cancelable commitments with vendors to purchase materials for products in advance of demand in order to take advantage of favorable pricing or address concerns about the availability of future supplies and long lead times. As of December 31, 2012, the Company's reserve for excess and obsolete inventory totaled \$3,414,000, or 11% of the gross inventory balance. A 10% difference in inventory reserves as of December 31, 2012 would have affected net income by approximately \$270,000.

Long-lived Assets

The Company has long-lived assets, including property, plant, and equipment, and acquired intangible assets. These assets are susceptible to shortened estimated useful lives and changes in fair value due to changes in their use, market or economic changes, or other events or circumstances. The Company evaluates the potential impairment of these long-lived assets whenever events or circumstances indicate their carrying value may not be recoverable. Factors that could trigger an impairment review include historical or projected results that are less than the assumptions used in the original valuation of an acquired asset, a change in the Company's business strategy or its use of an acquired asset, or negative economic or industry trends.

If an event or circumstance indicates the carrying value of long-lived assets may not be recoverable, the Company assesses the recoverability of the assets by comparing the carrying value of the assets to the sum of the undiscounted future cash flows that the assets are expected to generate over their remaining economic lives. If the carrying value exceeds the sum of the undiscounted future cash flows, the Company compares the fair value of the long-lived assets to the carrying value and records an

impairment loss for the difference. The Company generally estimates the fair value of its long-lived assets using the income approach based upon a discounted cash flow model. The income approach requires the use of many assumptions and estimates including future revenues and expenses, discount factors, income tax rates, the identification of groups of assets with highly independent cash flows, and assets' economic lives. Volatility in the global economy makes these assumptions and estimates more judgmental. No impairment losses were recorded in 2012, 2011, or 2010. Actual future operating results and the remaining economic lives of our long-lived assets could differ from those used in assessing the recoverability of these assets and could result in an impairment of long-lived assets in future periods.

Goodwill

Management evaluates the potential impairment of goodwill for each of its reporting units annually each fourth quarter and whenever events or circumstances indicate their carrying value may not be recoverable. The Company has identified two reporting units for its goodwill test: MVSD and SISD. Determining the Company's reporting units requires judgments regarding what constitutes a business and at what level discrete financial information is available and reviewed by management.

In the third quarter of 2011, the Financial Accounting Standards Board issued an Accounting Standards Update intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities an option to perform a qualitative assessment (commonly known as "step zero") to determine whether further impairment testing is necessary. If this qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, the entity would proceed to a two-step process. Step one compares the fair value of the reporting unit with its carrying value, including goodwill. If the carrying amount exceeds the fair value of the reporting unit, step two is required to determine if there is an impairment of the goodwill. Step two compares the implied fair value of the reporting unit goodwill to the carrying amount of the goodwill. The Company estimates the fair value of its reporting units using the income approach based upon a discounted cash flow model. In addition, the Company uses the market approach, which compares the reporting unit to publicly-traded companies and transactions involving similar businesses, to support the conclusions based upon the income approach. The income approach requires the use of many assumptions and estimates including future revenues, expenses, capital expenditures, and working capital, as well as discount factors and income tax rates.

The Company elected to perform a qualitative assessment for its 2012 and 2011 analyses of goodwill. Factors that management considered in this assessment include macroeconomic conditions, industry and market considerations, overall financial performance (both current and projected), changes in management or strategy, and changes in the composition or carrying amount of net assets. In addition, management took into consideration the goodwill valuation it performed under the two-step process as of October 4, 2010, which indicated that the fair value of the MVSD unit exceeded its carrying value by approximately 208%, while the fair value of the SISD unit exceeded its carrying value by approximately 119% at that date. Based on the qualitative assessments performed in 2012 and 2011, management does not believe that it is more likely than not that the carrying value of either reporting unit exceeds its fair value.

Warranty Obligations

The Company records the estimated cost of fulfilling product warranties at the time of sale based upon historical costs to fulfill claims. Obligations may also be recorded subsequent to the time of sale whenever specific events or circumstances impacting product quality become known that would not have been taken into account using historical data. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers and third-party contract manufacturers, the Company's warranty obligation is affected by product failure rates, material usage, and service delivery costs incurred in correcting a product failure. An adverse change in any of these factors may result in the need for additional warranty provisions. As of December 31, 2012, the Company's accrued warranty obligations amounted to \$2,256,000. A 10%

difference in accrued warranty obligations as of December 31, 2012 would have affected net income by approximately \$178,000.

Contingencies

Estimated losses from contingencies are accrued by management based upon whether a loss is probable and whether management has the ability to reasonably estimate the amount of the loss. Estimating potential losses, or even a range of losses, is difficult and involves a great deal of judgment. Management relies primarily on assessments made by its internal and external legal counsel to make our determination as to whether a loss contingency arising from litigation should be recorded or disclosed. This analysis is performed on a quarterly basis or when facts and circumstances dictate. Should the resolution of a contingency result in a loss that we did not accrue because management did not believe that the loss was probable or capable of being reasonably estimated, then this loss would result in a charge to income in the period the contingency was resolved. The Company did not have any significant accrued contingencies as of December 31, 2012.

Stock-Based Compensation

Compensation expense is recognized for all stock option grants. Determining the appropriate valuation model and estimating the fair values of these grants requires the input of subjective assumptions, including expected stock price volatility, dividend yields, expected term, and forfeiture rates. The expected volatility assumption is based partially upon the historical volatility of the Company's common stock, which may or may not be a true indicator of future volatility, particularly as the Company continues to seek to diversify its customer base. The assumptions used in calculating the fair values of stock option grants represent management's best estimates, but these estimates involve inherent uncertainties and the application of judgment. As a result, if factors change and different assumptions are used, stock-based compensation expense could be significantly different from what the Company recorded in the current period.

Income Taxes

Significant judgment is required in determining worldwide income tax expense based upon tax laws in the various jurisdictions in which the Company operates. The Company has established reserves for income taxes by applying the "more likely than not" criteria, 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.

As part of the process of preparing consolidated financial statements, management is required to estimate income taxes in each of the jurisdictions in which the Company operates. 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 the Consolidated Balance Sheets.

The Company has net deferred tax assets primarily resulting from temporary differences between the financial statement and tax bases of assets and liabilities. Management has evaluated the realizability of these deferred tax assets and has determined that it is more likely than not that these assets will be realized, net of any valuation allowance. In reaching this conclusion, we have evaluated relevant criteria, including the Company's historical profitability, current projections of future profitability, and the lives of tax credits, net operating and capital losses, and other carryforwards, certain of which have indefinite lives. Should the Company fail to generate sufficient pre-tax profits in future periods, we may be required to record material adjustments to these deferred tax assets, resulting in a charge to income in the period of determination.

Derivative Instruments

In certain instances, the Company enters into forward contracts to hedge against foreign currency fluctuations. These contracts are used to minimize foreign currency gains or losses, as the gains or losses on these contracts are intended to offset the losses or gains on the underlying exposures. The Company does not engage in foreign currency speculation and these forward contracts are not subject to effective hedge accounting. Administering the Company's foreign currency risk management program requires the use of estimates and the application of judgment, including compiling forecasts of transaction activity denominated in various currencies. The failure to identify foreign currency exposures and construct effective hedges may result in material foreign currency gains or losses.

Purchase Accounting

Business acquisitions are accounted for under the purchase method of accounting. Allocating the purchase price requires the Company to estimate the fair value of various assets acquired and liabilities assumed. Management is responsible for determining the appropriate valuation model and estimated fair values, and in doing so, considers a number of factors, including information provided by an outside valuation advisor. The Company primarily establishes fair value using the income approach based upon a discounted cash flow model. The income approach requires the use of many assumptions and estimates including future revenues and expenses, as well as discount factors and income tax rates.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

The Company faces exposure to foreign currency exchange rate fluctuations, as a significant portion of its revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of the Company's subsidiaries or the reporting currency of the Company, which is the U.S. Dollar. These exposures may change over time as business practices evolve. The Company evaluates its foreign currency exposures on an ongoing basis and makes adjustments to its foreign currency risk management program as circumstances change. The failure to identify new exposures and hedge them in an effective manner may result in material foreign currency gains or losses.

The Company faces two types of foreign currency exchange rate exposures:

- transactional currency/functional currency exchange rate exposures from transactions that are denominated in currencies other than the functional currency of the subsidiary (for example, a U.S. Dollar receivable on the Company's Irish subsidiary's books for which the functional currency is the Euro), and
- functional currency/reporting currency exchange rate exposures from transactions that are denominated in currencies other than the U.S. Dollar, which is the reporting currency of the Company.

The Company faces transactional currency/functional currency exposures that it may hedge from time to time. These exposures include cash balances, accounts receivable or payable denominated in currencies other than the functional currency of the subsidiary, and intercompany balances denominated in currencies other than the functional currency of the subsidiary. The Company presently manages its intercompany foreign currency risk by transferring cash to minimize intercompany balances at the end of each month, and in certain instances, entering into forward contracts. In addition, the Company enters into forward contracts to hedge the exposure of its Irish subsidiary's accounts receivable denominated in U.S. dollars.

Forward contracts to exchange 3,590,000 U.S. Dollars for Euros at a weighted-average settlement price of 1.31 USD/Euro, with terms between one and four months, were outstanding as of December 31, 2012. At fair value, these instruments had a net gain of \$30,000 as of December 31, 2012.

These forward contracts are used to minimize foreign currency gains or losses, as the gains or losses on these contracts are intended to offset the losses or gains on the underlying exposures. Both the underlying exposures and the forward contracts are recorded at fair value on the Consolidated Balance Sheets and changes in fair value are reported as "Foreign currency gain (loss)" on the Consolidated Statements of Operations. The Company does not engage in foreign currency speculation and these forward contracts are not subject to effective hedge accounting. The success of this hedging program depends upon forecasts of sales and collections denominated in various currencies. To the extent that these forecasts are overstated or understated during periods of currency volatility, the Company could experience unanticipated foreign currency gains or losses that could have a material impact on the Company's results of operations.

The Company's functional currency/reporting currency exchange rate exposures result from revenues and expenses that are denominated in currencies other than the U.S. Dollar. A significant portion of our revenues and expenses are denominated in the Euro and the Japanese Yen. The Company's predominant currency of sale is the U.S. Dollar in the Americas, the Euro in Europe, the Yen in Japan, and the U.S. Dollar and Chinese Yuan in Southeast Asia. We estimate that approximately 50% of our sales in 2012 were invoiced in currencies other than the U.S. Dollar, and we expect sales denominated in foreign currencies to continue to represent a significant portion of our total revenue. While we also have expenses denominated in these same foreign currencies, the impact on revenues has historically been, and is expected to continue to be, greater than the offsetting impact on expenses. Therefore, in times when the U.S. Dollar strengthens in relation to these foreign currencies, we would expect to report a net decrease in operating income. Conversely, in times when the U.S. Dollar weakens in relation to these foreign currencies, we would expect to report a net increase in operating income.

Interest Rate Risk

The Company's investment portfolio of debt securities includes corporate bonds, asset-backed securities, treasury bills, agency bonds, municipal bonds, sovereign bonds, and covered bonds. Debt securities with original maturities greater than three months are designated as available-for-sale and are reported at fair value. As of December 31, 2012, the fair value of the Company's portfolio of debt securities amounted to \$337,489,000, with principal amounts totaling \$336,806,000, maturities that do not exceed eight years, and a yield to maturity of 0.70%. Differences between the fair value and principal amounts of the Company's portfolio of debt securities are primarily attributable to discounts and premiums arising at the acquisition date, as well as unrealized gains and losses as of the balance sheet date.

Although it is the Company's policy to invest in debt securities with effective maturities that do not exceed ten years, 91% of the investment portfolio as of December 31, 2012 has effective maturity dates of less than three years. Given the relatively short maturities and investment-grade quality of the Company's portfolio of debt securities as of December 31, 2012, a sharp rise in interest rates should not have a material adverse effect on the fair value of these instruments. As a result, the Company does not currently hedge these interest rate exposures.

The following table presents the hypothetical change in the fair value of the Company's portfolio of debt securities arising from selected potential changes in interest rates (in thousands). This modeling technique measures the change in fair value that would result from a parallel shift in the yield curve plus or minus 50 and 100 basis points (BP) over a twelve-month time horizon.

Type of security	Valuation of se		No change in interest rates	Valuation of se an interest r	
	(100 BP)	(50 BP)		50 BP	100 BP
Corporate Bonds	\$148,298	\$147,186	\$146,073	\$144,960	\$143,847
Asset-Backed Securities	53,180	52,778	52,376	51,974	51,571
Treasury Bills	42,937	42,605	42,273	41,941	41,610
Agency Bonds	37,498	37,211	36,923	36,636	36,349
Municipal Bonds	34,558	34,314	34,070	33,827	33,583
Sovereign Bonds	14,817	14,704	14,592	14,480	14,367
Covered Bonds	11,354	11,268	11,182	11,096	11,010
	\$342,642	\$340,066	\$337,489	\$334,914	\$332,337

Other Market Risks

As noted above, the Company's investments include a variety of debt securities. These debt securities are all denominated in U.S. Dollars and the majority of these securities are debt of U.S. companies.

The Company's investments also include stock in a publicly-traded U.S. company. As of December 31, 2012, the fair value of the corporate stock securities was \$2,131,000. This investment is marked-to-market each reporting period, with unrealized gains and losses recorded in current operations. This stock is traded on an open and active market, and is therefore subject to market fluctuations. Given the small balance of this investment relative to the Company's overall portfolio of investments and management's ability to exercise discretion in when to sell this stock, management believes there is little market risk related to this investment.

The Company's investment portfolio also includes a limited partnership interest in Venrock Associates III, L.P., a venture capital fund with an investment focus on Information Technology and Health Care and Life Sciences. The fair value of the Company's limited partnership interest takes into consideration valuations of the partnership's investments as determined by the General Partner. Publicly-traded investments in active markets are reported at the market closing price less a discount, as appropriate, to reflect restricted marketability. Fair value for private investments for which observable market prices in active markets do not exist is based upon the best information available including the value of a recent financing, reference to observable valuation measures for comparable companies (such as revenue multiples), public or private transactions (such as the sale of a comparable company), and valuations for publicly-traded comparable companies. The valuations also incorporate the General Partner's own judgment and close familiarity with the business activities of each portfolio company. These valuations are judgmental and require the use of many assumptions and estimates, and changes in these assumptions could result in an impairment charge in future periods.

The majority of the partnership's portfolio consists of investments in early-stage, private companies characterized by a high degree of risk, volatility, and illiquidity, and the global economic slowdown and credit market crisis have made the environment for these startups much less forgiving. As a result, it is possible that some of the younger companies in the portfolio that require capital investments to fund their current operations may not be as well prepared to survive economic uncertainty as would a more mature company. These factors make the assumptions and estimates used in the fair valuation calculations more judgmental.

As of December 31, 2012, the carrying value of this investment was \$3,740,000 compared to an estimated fair value of \$6,932,000. Should the fair value of this investment decline in future periods below its carrying value, management will determine whether this decline is other-than-temporary and future impairment charges may be required.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Cognex Corporation:

We have audited the accompanying consolidated balance sheets of Cognex Corporation (a Massachusetts corporation) and subsidiaries (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive income, changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Cognex Corporation and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 11, 2013 expressed an unqualified opinion.

/s/ GRANT THORNTON LLP

Boston, Massachusetts February 11, 2013

COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF OPERATIONS

Year Ended December 31,

	Year Ended December 31,						
		2012		2011		2010	
	(In thousands, except per share				e amounts)		
Revenue Product Service	\$	295,588 28,691 324,279	\$	297,310 24,604 321,914	\$	263,463 27,228 290,691	
Cost of revenue Product	_	65,432 14,063 79,495		64,732 13,187 77,919		61,497 16,091 77,588	
Gross margin Product Service		230,156 14,628 244,784		232,578 11,417 243,995	_	201,966 11,137 213,103	
Research, development, and engineering expenses Selling, general, and administrative expenses Restructuring charges (Note 16)		41,549 119,828		40,946 117,694		33,080 104,235 75	
Operating Income		83,407 (880) 4,470 (367)		85,355 (504) 2,902 (636)	_	75,713 (328) 1,421 (703)	
Income before income tax expense		86,630 18,532	<u></u>	87,117 17,248	_	76,103 14,722	
Net income	\$	68,098	\$	69,869	\$	61,381	
Net income per common and common-equivalent share: Basic	\$	1.59	\$	1.67	\$	1.54	
Diluted	\$	1.56	\$	1.63	\$	1.52	
Weighted-average common and common-equivalent shares outstanding: Basic		42,833	-	41,859		39,924	
Diluted	=	43,640	=	42,762	==	40,297	
Cash dividends per common share	\$	1.54	\$	0.36	\$	0.25	

COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,					
		2012	2011			2010
			(În	thousands)		
Net income	\$	68,098	\$	69,869	\$	61,381
Other comprehensive loss, net of tax:						
Net unrealized gain (loss) on available-for-sale investments,						
net of tax of \$129, \$123, and (\$185) in 2012, 2011, and						
2010, respectively		(1,311)		355		(507)
Foreign currency translation adjustments, net of tax of \$7,		•				` ,
\$238 and \$149 in 2012, 2011, and 2010, respectively		(12,546)		(8,491)		(5,349)
Other comprehensive loss		(13,857)		(8,136)		(5,856)
Comprehensive income	\$	54,241	\$	61,733	\$	55,525

COGNEX CORPORATION – CONSOLIDATED BALANCE SHEETS

	Decemb	oer 31,
	2012	2011
	(In thou	sands)
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 45,160	\$ 38,103
Short-term investments	105,105	144,431
2011, respectively	42,387	48,206
Inventories	26,182	28,098
Deferred income taxes	6,369	6,880
Prepaid expenses and other current assets	14,394	<u>19,628</u>
Total current assets	239,597	285,346
Long-term investments	238,255	174,906
Property, plant, and equipment, net	34,820	31,744
Deferred income taxes	15,647	15,919
Intangible assets, net	14,770	18,910
Goodwill	81,689	82,029
Other assets	2,827	3,027
	\$ 627,605	\$ 611,881
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		# 7 000
Accounts payable	\$ 6,815	\$ 7,098
Accrued expenses	29,590	32,290
Accrued income taxes	1,009	1,259
Deferred revenue and customer deposits	12,690	13,458
Total current liabilities	50,104	54,105
Reserve for income taxes	5,216	4,796
Commitments and contingencies (Note 9)		
Shareholders' equity:		
Common stock, \$.002 par value –		
Authorized: 140,000 shares, issued and outstanding: 43,055 and	00	0.4
42,223 shares in 2012 and 2011, respectively	86 165 248	84 135,668
Additional paid-in capital	165,248 436,466	434,581
Retained earnings	436,466 (29,515)	•
Accumulated other comprehensive loss, net of tax		
Total shareholders' equity	572,285	552,980
	\$ 627,605	\$ 611,881

COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,			
	2012	2011	2010	
Cook flows for an area of the		(In thousands)		
Cash flows from operating activities:				
Net income	\$ 68,098	\$ 69,869	\$ 61,381	
Adjustments to reconcile net income to net cash provided by				
operations:				
Stock-based compensation expense	8,520	8,068	3,027	
Depreciation of property, plant, and equipment	6,721	5,529	4,685	
Amortization of intangible assets	4,137	4,227	5,124	
Amortization of discounts or premiums on investments	5,735	6,383	3,195	
Realized (gain) loss on sale of investments	(1,625)	181	(10)	
Change in deferred income taxes	429	(425)	1,034	
Tax effect of stock option exercises	(3,594)	(4,045)	(1,941)	
Changes in operating assets and liabilities:				
Accounts receivable	5,035	(2,031)	(14,535)	
Inventories	1,872	(5,743)	(6,190)	
Accrued expenses	(1,974)	2,747	10,134	
Accrued income taxes	3,363	(2,865)	9,567	
Deferred revenue and customer deposits	(761)	3,316	(4,740)	
Return of Japan tax deposit (Note 15)	-	-	9,336	
Other	5,175	1,064	(3,734)	
Net cash provided by operating activities	101,131	86,275	76,333	
Cash flows from investing activities:	101,131	00,273	70,333	
Purchases of investments	(460,486)	(323,946)	(253,867)	
Maturities and sales of investments	431,510	241,557	82,928	
Purchases of property, plant, and equipment	(9,878)			
Cash received related to discontinued business	(9,070)	(7,620)	(5,852)	
			315	
Net cash used in investing activities	(38,854)	(90,209)	(176,476)	
Cash flows from financing activities:				
Issuance of common stock under stock option plans	17,468	30,863	28,384	
Payment of dividends	(66,213)	, , ,	(10,014)	
Repurchase of common stock	-	(10,000)	-	
Stock option buyback	-	-	(83)	
Tax effect of stock option exercises	3,594	4,045	1,941	
Net cash provided by (used in) financing activities	(45,151)	9,794	20,228	
Effect of foreign exchange rate changes on cash and cash	() - /	-,	,	
equivalents	(10,069)	(960)	(6,713)	
Net change in cash and cash equivalents	7,057	4,900		
Cash and cash equivalents at beginning of year	7,057 38,103	•	(86,628)	
		33,203	119,831	
Cash and cash equivalents at end of year	\$ 45,160	\$ 38,103	\$ 33,203	

COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Accumulated

		Common Stock		Retained	Other Comprehensive	Total Shareholders'
thousands)	Shares	Par Value	Paid-in Capital	Earnings	Loss	Equity
Balance as of December 31, 2009	39,665	\$ 79	\$ 69,271	\$328,459	\$ (3,361)	\$394,448
Issuance of common stock under stock option plans		3	28,381	-	-	28,384
Stock-based compensation expense	· -	-	3,027	-	-	3,027
Excess tax benefit from stock option exercises	-	-	1,941	-	-	1,941
Payment of dividends	-	-	-	(10,014)	-	(10,014)
Net income	-	-	-	61,381	-	61,381
Net unrealized loss on available-for-sale investments, net of tax of \$185	-	-	-	-	(507)	(507)
Foreign currency translation adjustment, net of tax of \$149					(5,349)	(5,349)
Balance as of December 31, 2010	41.065	\$82	\$102,620	\$379,826	\$ (9,217)	\$473,311
Issuance of common stock under stock option plans	1,495	3	30,860	-	-	30,863
Stock-based compensation expense	-	-	8,068	-	-	8,068
Excess tax benefit from stock option exercises	-	-	4,045	-	-	4,045
Tax benefit for research and development credits as a result of stock option						_,
accounting	-	-	74	-	-	74
Repurchase of common stock	(337)	(1)	(9,999)	-	-	(10,000)
Payment of dividends	-	-	-	(15,114)	-	(15,114)
Net income	-	-	-	69,869	-	69,869
Net unrealized gain on available-for-sale investments, net of tax of \$123	-	-	-	-	355	355
Foreign currency translation adjustment, net of tax of \$238					(8,491)	(8,491)
Balance as of December 31, 2011	42,223	\$84	\$135,668	\$434,581	\$(17,353)	\$552,980
Issuance of common stock under stock option plans	832	2	17,466	-	-	17,468
Stock-based compensation expense	-	-	8,520	-	-	8,520
Excess tax benefit from stock option exercises	-	-	3,594	-	-	3,594
Payment of dividends	-	-	-	(66,213)	-	(66,213)
Net income	-	-	-	68,098	-	68,098
Reclassification of realized gain on the sale of available-for-sale					4.005	1 005
investments	-	-	-	-	1,695	1,695
Net unrealized loss on available-for-sale investments, net of tax of \$129	-	-	-	-	(1,311)	(1,311)
Foreign currency translation adjustment, net of tax of \$7					(12,546)	(12,546)
Balance as of December 31, 2012		\$86	\$165,248 ———	\$436,466	\$(29,515)	\$572,285 ————

NOTE 1: Summary of Significant Accounting Policies

The accompanying consolidated financial statements reflect the application of the significant accounting policies described below.

Nature of Operations

Cognex Corporation is a leading provider of machine vision products that capture and analyze visual information in order to automate tasks, primarily in manufacturing processes, where vision is required.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities as of the balance sheet date, and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates. Significant estimates and judgments include those related to revenue recognition, investments, accounts receivable, inventories, long-lived assets, goodwill, warranty obligations, contingencies, stock-based compensation, income taxes, derivative instruments, and purchase accounting.

Basis of Consolidation

The consolidated financial statements include the accounts of Cognex Corporation and its subsidiaries, all of which are wholly-owned. All intercompany accounts and transactions have been eliminated.

Foreign Currency

The financial statements of the Company's foreign subsidiaries, where the local currency is the functional currency, are translated using exchange rates in effect at the end of the year for assets and liabilities and average exchange rates during the year for results of operations. The resulting foreign currency translation adjustment is recorded in shareholders' equity as other comprehensive loss.

Fair Value Measurements

The Company applies a three-level valuation hierarchy for fair value measurements. The categorization of assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the measurement of fair value. Level 1 inputs to the valuation methodology utilize unadjusted quoted market prices in active markets for identical assets and liabilities. Level 2 inputs to the valuation methodology are other observable inputs, including quoted market prices for similar assets and liabilities, quoted prices for identical and similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data. Level 3 inputs to the valuation methodology are unobservable inputs based upon management's best estimate of the inputs that market participants would use in pricing the asset or liability at the measurement date, including assumptions about risk. A change to the level of an asset or liability within the fair value hierarchy is determined at the end of a reporting period.

Cash, Cash Equivalents, and Investments

Money market instruments purchased with original maturities of three months or less are classified as cash equivalents and are stated at amortized cost. Debt securities with original maturities greater than three months and remaining maturities of one year or less, as well as equity securities that the Company intends to sell within one year, are classified as short-term investments. Debt securities with remaining maturities greater than one year, as well as a limited partnership interest, are classified as long-term investments. It is the Company's policy to invest in debt securities with effective maturities that do not exceed ten years.

NOTE 1: Summary of Significant Accounting Policies (continued)

Debt securities with original maturities greater than three months are designated as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, recorded in shareholders' equity as other comprehensive income (loss). Equity securities that are held for short periods of time with the intention of selling them in the near term are designated as trading and are reported at fair value, with unrealized gains and losses recorded in current operations. Realized gains and losses are included in current operations, along with the amortization of the discount or premium on debt securities arising at acquisition, and are calculated using the specific identification method. The Company's limited partnership interest is accounted for using the cost method because the Company's investment is less than 5% of the partnership and the Company has no influence over the partnership's operating and financial policies. Furthermore, the investment does not have a readily determinable market value, and therefore, does not qualify for fair value accounting.

Management monitors the carrying value of its investments in debt securities and a limited partnership interest compared to their fair value to determine whether an other-than-temporary impairment has occurred. If the fair value of a debt security is less than its amortized cost, the Company assesses whether the impairment is other-than-temporary. In considering whether a decline in fair value is otherthan-temporary, we consider many factors. In its evaluation of its debt securities, management considers the type of security, the credit rating of the security, the length of time the security has been in a loss position, the size of the loss position, our intent and ability to hold the security to expected recovery of value, and other meaningful information. An impairment is considered other-than-temporary if (i) the Company has the intent to sell the security, (ii) it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis, or (iii) the Company does not expect to recover the entire amortized cost basis of the security. If impairment is considered other-than-temporary based upon condition (i) or (ii) described above, the entire difference between the amortized cost and the fair value of the security is recognized in current operations. If an impairment is considered other-than-temporary based upon condition (iii), the amount representing credit losses (defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis of the security) will be recognized in current operations and the amount relating to all other factors will be recognized in other comprehensive income (loss). In its evaluation of its limited partnership interest, management considers the duration and extent of the decline, the length of the Company's commitment to the investment, general economic trends, and specific communications with the General Partner.

Accounts Receivable

The Company extends credit with various payment terms to customers based upon an evaluation of their financial condition. Accounts that are outstanding longer than the payment terms are considered to be past due. The Company establishes reserves against its accounts receivable for potential credit losses when it determines receivables are at risk for collection based upon the length of time the receivable has been outstanding, the customer's current ability to pay its obligations to the Company, general economic and industry conditions, as well as various other factors. Receivables are written off against these reserves in the period they are determined to be uncollectible and payments subsequently received on previously written-off receivables are recorded as a reversal of the bad debt provision.

For certain customers in Japan, as part of its customary business practice, the Company accepts promissory notes of up to 180 days after the original credit terms expire. Promissory notes receivable totaled \$1,211,000 and \$2,706,000 as of December 31, 2012 and 2011, respectively, and are included in "Accounts receivable" on the Consolidated Balance Sheets.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using standard costs, which approximates actual costs under the first-in, first-out (FIFO) method. The Company's inventory is

NOTE 1: Summary of Significant Accounting Policies (continued)

subject to rapid technological change or obsolescence. The Company reviews inventory quantities on hand and estimates excess and obsolescence exposures based upon assumptions about future demand, product transitions, and market conditions, and records reserves to reduce the carrying value of inventories to their net realizable value. If actual future demand is less than estimated, additional inventory write-downs would be required.

The Company generally disposes of obsolete inventory upon determination of obsolescence. The Company does not dispose of excess inventory immediately, due to the possibility that some of this inventory could be sold to customers as a result of differences between actual and forecasted demand. When inventory has been written down below cost, such reduced amount is considered the new cost basis for subsequent accounting purposes. As a result, the Company would recognize a higher than normal gross margin if the reserved inventory were subsequently sold.

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost and depreciated using the straight-line method over the assets' estimated useful lives. Buildings' useful lives are 39 years, building improvements' useful lives are ten years, and the useful lives of computer hardware and software, manufacturing test equipment, and furniture and fixtures range from two to five years. Leasehold improvements are depreciated over the shorter of the estimated useful lives or the remaining terms of the leases. Maintenance and repairs are expensed when incurred; additions and improvements are capitalized. Upon retirement or disposition, the cost and related accumulated depreciation of the disposed assets are removed from the accounts, with any resulting gain or loss included in current operations.

Intangible Assets

Intangible assets are stated at cost and amortized over the assets' estimated useful lives. Intangible assets are either amortized in relation to the relative cash flows anticipated from the intangible asset or using the straight-line method, depending upon facts and circumstances. The useful lives of distribution networks range from eleven to twelve years, of customer contracts and relationships from eight to twelve years, and of completed technologies and other intangible assets from three to eight years. The Company evaluates the possible impairment of long-lived assets, including intangible assets, whenever events or circumstances indicate the carrying value of the assets may not be recoverable. At the occurrence of a certain event or change in circumstances, the Company evaluates the potential impairment of an asset by estimating the future undiscounted cash flows expected to result from the use and eventual disposition of the asset. If the sum of the estimated future cash flows is less than the carrying value, the Company determines the amount of such impairment by comparing the fair value of the asset to its carrying value. The fair value is based upon the present value of the estimated future cash flows using a discount rate commensurate with the risks involved.

Goodwill

Goodwill is stated at cost. The Company evaluates the possible impairment of goodwill annually each fourth quarter and whenever events or circumstances indicate the carrying value of the goodwill may not be recoverable. In the third quarter of 2011, the Financial Accounting Standards Board issued an Accounting Standards Update intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities an option to perform a qualitative assessment (commonly known as "step zero") to determine whether further impairment testing is necessary. Factors that management considers in this assessment include macroeconomic conditions, industry and market considerations, overall financial performance (both current and projected), changes in management or strategy, and changes in the composition or carrying amount of net assets. In addition, management takes into consideration the goodwill valuation under the last quantitative analysis that was performed. If this

NOTE 1: Summary of Significant Accounting Policies (continued)

qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, the entity would proceed to a two-step process. Step one compares the fair value of the reporting unit with its carrying value, including goodwill. If the carrying amount exceeds the fair value of the reporting unit, step two is required to determine if there is an impairment of the goodwill. Step two compares the implied fair value of the reporting unit goodwill to the carrying amount of the goodwill.

Warranty Obligations

The Company warrants its hardware products to be free from defects in material and workmanship for periods primarily ranging from six months to two years from the time of sale based upon the product being purchased and the terms of the customer arrangement. Warranty obligations are evaluated and recorded at the time of sale since it is probable that customers will make claims under warranties related to products that have been sold and the amount of these claims can be reasonably estimated based upon historical costs to fulfill claims. Obligations may also be recorded subsequent to the time of sale whenever specific events or circumstances impacting product quality become known that would not have been taken into account using historical data.

Contingencies

Loss contingencies are accrued if the loss is probable and the amount of the loss can be reasonably estimated. Legal costs associated with potential loss contingencies, such as patent infringement matters, are expensed as incurred.

Revenue Recognition

The Company's product revenue is derived from the sale of machine vision systems, which can take the form of hardware with embedded software or software-only, and related accessories. The Company also generates revenue by providing maintenance and support, training, consulting, and installation services to its customers. Certain of the Company's arrangements include multiple deliverables that provide the customer with a combination of products or services. In order to recognize revenue, the Company requires that a signed customer contract or purchase order is received, the fee from the arrangement is fixed or determinable, and collection of the resulting receivable is probable. Assuming that these criteria have been met, product revenue is recognized upon delivery, revenue from maintenance and support programs is recognized ratably over the program period, revenue from training and consulting services is recognized over the period that the services are provided, and revenue from installation services is recognized when the customer has signed off that the installation is complete.

The majority of the Company's product offerings consist of hardware with embedded software. Under the revenue recognition rules for tangible products, the fee from a multiple-deliverable arrangement is allocated to each of the deliverables based upon their relative selling prices as determined by a selling-price hierarchy. A deliverable in an arrangement qualifies as a separate unit of accounting if the delivered item has value to the customer on a stand-alone basis. A delivered item that does not qualify as a separate unit of accounting is combined with the other undelivered items in the arrangement and revenue is recognized for those combined deliverables as a single unit of accounting. The selling price used for each deliverable is based upon vendor-specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, and management's best estimate of selling price (BESP) if neither VSOE nor TPE are available. TPE is the price of the Company's or any competitor's largely interchangeable products or services in stand-alone sales to similarly-situated customers. BESP is the price at which the Company would sell the deliverable if it were sold regularly on a stand-alone basis, considering market conditions and entity-specific factors.

NOTE 1: Summary of Significant Accounting Policies (continued)

The selling prices used in the relative selling price allocation method for (1) certain of the Company's services are based upon VSOE, (2) third-party accessories available from other vendors are based upon TPE, and (3) hardware products with embedded software, custom accessories, and services for which VSOE does not exist are based upon BESP. The Company does not believe TPE exists for these products and services because they are differentiated from competing products and services in terms of functionality and performance and there are no competing products or services that are largely interchangeable. For the Company's Modular Vision Systems Division (MVSD), BESP has been established for each product line within each region, and for the Company's Surface Inspection Systems Division (SISD), BESP has been established for each industry within each region. Management establishes BESP with consideration for market conditions, such as the impact of competition and geographic considerations, and entity-specific factors, such as the cost of the product and the division's profit objectives. Management believes that BESP is reflective of reasonable pricing of that deliverable as if priced on a stand-alone basis.

Under the revenue recognition rules for software-only products, the fee from a multiple-deliverable arrangement is allocated to each of the undelivered elements based upon VSOE, which is limited to the price charged when the same deliverable is sold separately, with the residual value from the arrangement allocated to the delivered element. The portion of the fee that is allocated to each deliverable is then recognized as revenue when the criteria for revenue recognition are met with respect to that deliverable. If VSOE does not exist for all of the undelivered elements, then all revenue from the arrangement is typically deferred until all elements have been delivered to the customer.

The Company's products are sold directly to end users, as well as to resellers including original equipment manufacturers (OEMs), distributors, and integrators. Revenue is recognized upon delivery of the product to the reseller, assuming all other revenue recognition criteria have been met. The Company establishes reserves against revenue for potential product returns, since the amount of future returns can be reasonably estimated based upon experience. These reserves have historically been immaterial.

Amounts billed to customers related to shipping and handling, as well as reimbursements received from customers for out-of-pocket expenses, are classified as revenue, with the associated costs included in cost of revenue.

Research and Development

Research and development costs for internally-developed or acquired products are expensed when incurred until technological feasibility has been established for the product. Thereafter, all software costs are capitalized until the product is available for general release to customers. The Company determines technological feasibility at the time the product reaches beta in its stage of development. Historically, the time incurred between beta and general release to customers has been short, and therefore, the costs have been insignificant. As a result, the Company has not capitalized software costs associated with internally-developed products.

Advertising Costs

Advertising costs are expensed as incurred and totaled \$1,792,000 in 2012, \$2,157,000 in 2011, and \$1,402,000 in 2010.

Stock-Based Compensation

The Company's share-based payments that result in compensation expense consist solely of stock option grants. The Company has reserved a specific number of shares of its authorized but unissued shares for issuance upon the exercise of stock options. When a stock option is exercised, the

NOTE 1: Summary of Significant Accounting Policies (continued)

Company issues new shares from this pool. The fair values of stock options granted after January 1, 2006 are estimated on the grant date using a binomial lattice model. The fair values of options granted prior to January 1, 2006 were estimated using the Black-Scholes option pricing model. The Company believes that a binomial lattice model results in a better estimate of fair value because it identifies patterns of exercises based upon triggering events, tying the results to possible future events instead of a single path of actual historical events. Management is responsible for determining the appropriate valuation model and estimating these fair values, and in doing so, considers a number of factors, including information provided by an outside valuation advisor.

The Company recognizes compensation expense using the graded attribution method, in which expense is recognized on a straight-line basis over the service period for each separately vesting portion of the stock option as if the option was, in substance, multiple awards. The amount of compensation expense recognized at the end of the vesting period is based upon the number of stock options for which the requisite service has been completed. No compensation expense is recognized for options that are forfeited for which the employee does not render the requisite service. The term "forfeitures" is distinct from "expirations" and represents only the unvested portion of the surrendered option. The Company applies estimated forfeiture rates to its unvested options to arrive at the amount of compensation expense that is expected to be recognized over the requisite service period. At the end of each separately vesting portion of an option, the expense that was recognized by applying the estimated forfeiture rate is compared to the expense that should be recognized based upon the employee's service, and a credit to expense is recorded related to those employees that have not rendered the requisite service.

Taxes

The Company recognizes a tax position in its financial statements when that tax position, based solely upon 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 statutes of limitations. Derecognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

Only the portion of the 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 statutes of limitations) or are not expected to be paid within one year are not classified as current. It is the Company's policy to record estimated interest and penalties as income tax expense and tax credits as a reduction in income tax expense.

Deferred tax assets and liabilities are determined based upon the differences between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates that will be in effect when these differences reverse. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

Sales tax in the United States and similar taxes in other jurisdictions that are collected from customers and remitted to government authorities are presented on a gross basis (i.e., a receivable from the customer with a corresponding payable to the government). Amounts collected from customers and retained by the Company during tax holidays are recognized as nonoperating income when earned.

Net Income Per Share

Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income per

NOTE 1: Summary of Significant Accounting Policies (continued)

share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period plus potential dilutive common shares. Dilutive common equivalent shares consist of stock options and are calculated using the treasury stock method. Common equivalent shares do not qualify as participating securities. In periods where the Company records a net loss, potential common stock equivalents are not included in the calculation of diluted net loss per share.

Comprehensive Income

Comprehensive income is defined as the change in equity of a company during a period from transactions and other events and circumstances, excluding transactions resulting from investments by owners and distributions to owners. Accumulated other comprehensive loss consists of foreign currency translation adjustments, net of tax, of \$28,712,000 and \$16,166,000 as of December 31, 2012 and 2011, respectively; net unrealized gains on available-for-sale investments, net of tax, of \$468,000 and \$84,000 as of December 31, 2012 and 2011, respectively; and losses on currency swaps, net of gains on long-term intercompany loans, net of tax, of \$1,271,000 as of December 31, 2012 and 2011.

Concentrations of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, investments, and trade receivables. The Company has certain domestic and foreign cash balances that exceed the insured limits set by the Federal Deposit Insurance Corporation (FDIC) in the United States and equivalent regulatory agencies in foreign countries. The Company primarily invests in investment-grade debt securities and has established guidelines relative to credit ratings, diversification, and maturities of its debt securities that maintain safety and liquidity. The Company has not experienced any significant realized losses on its debt securities.

The Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. The Company has not experienced any significant losses related to the collection of its accounts receivable.

A significant portion of the Company's MVSD product is manufactured by two third-party contractors. These contractors have agreed to provide Cognex with termination notification periods and last-time-buy rights, if and when that may be applicable. We rely upon these contractors to provide quality product and meet delivery schedules. We engage in extensive product quality programs and processes, including actively monitoring the performance of our third-party manufacturers. Certain key electronic components that are purchased from strategic suppliers, such as processors or imagers, are fundamental to the design of Cognex products. A disruption in the supply of these key components, such as a last-time-buy announcement, natural disaster, financial bankruptcy, or other event, may require us to purchase a significant amount of inventory at unfavorable prices resulting in lower gross margins and higher risk of carrying excess or obsolete inventory. If we are unable to secure adequate supply from alternative sources, we may have to redesign our products, which may lead to a delay in manufacturing and a possible loss of sales.

Derivative Instruments

Derivative instruments are recorded on the Consolidated Balance Sheets at their fair value. Changes in the fair value of derivatives are recorded each period in current operations or in shareholders' equity as other comprehensive income (loss), depending upon whether the derivative is designated as part of a hedge transaction and, if it is, the type of hedge transaction. Hedges of underlying exposures are designated and documented at the inception of the hedge and are evaluated for effectiveness quarterly. The Company does not engage in foreign currency speculation and these derivative instruments are not subject to effective hedge accounting.

NOTE 2: Fair Value Measurements

Financial Assets and Liabilities that are Measured at Fair Value on a Recurring Basis

The following table summarizes the financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2012:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	
Assets:			
Cash equivalents	\$5,098	\$	-
Money market instruments	5,076		-
Corporate stock	2,131		-
Corporate bonds	-	146,073	3
Asset-backed securities	-	52,376	3
Treasury bills	-	42,273	3
Agency bonds	-	36,923	3
Municipal bonds	-	34,070	0
Sovereign bonds	-	14,592	2
Covered bonds	-	11,182	2
Currency forward contracts	44		-
Liabilities:			
Currency forward contracts	14		-

The Company's cash equivalents and money market instruments are reported at fair value based upon the daily market price for identical assets in active markets, and are therefore classified as Level 1 investments. The Company's corporate stock position is reported at fair value based upon quoted market prices on a stock exchange, and is therefore classified as a Level 1 investment. The Company's currency forward contracts are reported at fair value based upon quoted U.S. Dollar foreign currency exchange rates, and are therefore also classified as Level 1 investments.

The Company's debt securities are reported at fair value based upon model-driven valuations in which all significant inputs are observable or can be derived from or corroborated by observable market data for substantially the full term of the asset, and are therefore classified as Level 2 investments. Management is responsible for estimating the fair value of these investments, and in doing so, considers valuations provided by a large, third-party pricing service. This service maintains regular contact with market makers, brokers, dealers, and analysts to gather information on market movement, direction, trends, and other specific data. They use this information to structure yield curves for various types of debt securities and arrive at the daily valuations.

The Company did not record an other-than-temporary impairment of these investments in 2012, 2011, or 2010.

Financial Assets that are Measured at Fair Value on a Non-recurring Basis

The Company has an interest in a limited partnership, which is accounted for using the cost method and is required to be measured at fair value on a non-recurring basis. Management is responsible for estimating the fair value of this investment, and in doing so, considers valuations of the partnership's investments as determined by the General Partner. Publicly-traded investments in active markets are reported at the market closing price less a discount, as appropriate, to reflect restricted marketability. Fair value for private investments for which observable market prices in active markets do not exist is based upon the best information available including the value of a recent financing, reference to

NOTE 2: Fair Value Measurements (continued)

observable valuation measures for comparable companies (such as revenue multiples), public or private transactions (such as the sale of a comparable company), and valuations for publicly-traded comparable companies. The valuations also incorporate the General Partner's own judgment and close familiarity with the business activities of each portfolio company. Significant increases or decreases in any of these inputs in isolation may result in a significantly lower or higher fair value measurement. The portfolio consists of securities of public and private companies, and consequently, inputs used in the fair value calculation are classified as Level 3. The Company did not record an other-than-temporary impairment of this investment in 2012, 2011, or 2010.

Non-financial Assets that are Measured at Fair Value on a Non-recurring Basis

Non-financial assets such as goodwill, intangible assets, and property, plant, and equipment are measured at fair value only when an impairment loss is recognized. The Company did not record an impairment charge related to these assets in 2012, 2011, or 2010.

NOTE 3: Cash, Cash Equivalents, and Investments

Cash, cash equivalents, and investments consisted of the following (in thousands):

	December		r 31,	
		2012		2011
Cash	\$	34,986 5,098 5,076	\$	36,404 - 1,699
Cash and cash equivalents		45,160		38,103
Corporate bonds Asset-backed securities Municipal bonds Agency bonds Treasury bills Covered bonds Sovereign bonds Corporate stock		46,001 17,666 16,224 7,482 5,997 5,618 3,986 2,131		55,570 - 54,036 27,545 1,945 1,319 4,016
Short-term investments		105,105		144,431
Corporate bonds Treasury bills Asset-backed securities Agency bonds Municipal bonds Sovereign bonds Covered bonds Limited partnership interest (accounted for using cost method) Long-term investments		100,072 36,276 34,710 29,441 17,846 10,606 5,564 3,740 238,255	_	59,902 - 12,335 69,680 22,355 4,701 5,933 174,906
	\$	388,520	\$	357,440

The Company's cash balance included foreign bank balances totaling \$23,614,000 and \$29,452,000 as of December 31, 2012 and 2011, respectively.

NOTE 3: Cash, Cash Equivalents, and Investments (continued)

In the third quarter of 2012, management changed the domicile of the subsidiary that held the Company's Euro-denominated investment portfolio and also changed that subsidiary's functional currency from the Euro to the U.S. Dollar. As a result of these changes, the investment portfolio was liquidated, primarily during the second quarter of 2012, and those funds were converted to U.S. Dollars. These funds were then used to purchase U.S. Dollar-denominated investments during the third quarter of 2012 once the change of domicile was complete.

The Company's investment portfolio includes corporate bonds, asset-backed securities, treasury bills, agency bonds, municipal bonds, sovereign bonds, and covered bonds. Corporate bonds consist of debt securities issued by both domestic and foreign companies; asset-backed securities consist of debt securities collateralized by pools of receivables or loans with credit enhancement; treasury bills consist of debt securities issued by both the U.S. and foreign governments; agency bonds consist of domestic or foreign obligations of government agencies and government sponsored enterprises that have government backing; municipal bonds consist of debt securities issued by state and local government entities; sovereign bonds consist of direct debt issued by foreign governments; and covered bonds consist of debt securities backed by governments, mortgages, or public sector loans.

During the fourth quarter of 2012, the Company purchased equity securities, representing stock in a publicly-traded U.S. company, for \$2,136,000. As of December 31, 2012, this security had an aggregate fair value of \$2,131,000, resulting in an unrealized loss of \$5,000.

The following tables summarize the Company's available-for-sale investments as of December 31, 2012 (in thousands):

	Amortized Unrealized Unrea		ross ealized osses	Fa	ir Value		
Short-term:							
Corporate bonds	\$	45,965	\$ 68	\$	(32)	\$	46,001
Asset-backed securities		17,668	16		(18)		17,666
Municipal bonds		16,198	26		-		16,224
Agency bonds		7,489	-		(7)		7,482
Treasury bills		5,996	1		-		5,997
Covered bonds		5,637	2		(21)		5,618
Sovereign bonds		4,000	-		(14)		3,986
Long-term:							
Corporate bonds		99,464	647		(39)		100,072
Treasury bills		36,277	8		(9)		36,276
Asset-backed securities		34,831	32		(153)		34,710
Agency bonds		29,411	54		(24)		29,441
Municipal bonds		17,726	121		(1)		17,846
Sovereign bonds Asset-backed							
securities		10,589	20		(3)		10,606
Covered bonds		5,555	 9				5,564
	\$	336,806	\$ 1,004	\$	(321)	\$	337,489

NOTE 3: Cash, Cash Equivalents, and Investments (continued)

The following table summarizes the Company's gross unrealized losses and fair values for available-for-sale investments in an unrealized loss position as of December 31, 2012 (in thousands):

	Unrealized Loss Position For Less to 12 Months		
	Fair Value	Unrealized Losses	
Corporate bonds	\$ 41,958	\$ (71)	
Asset-backed securities	33,513	(171)	
Agency bonds	20,270	(31)	
Treasury bills	15,977	(9)	
Sovereign bonds	6,322	(17)	
Covered bonds	4,358	(21)	
Municipal bonds	1,484	(1)	
	\$123,882	\$(321)	

As of December 31, 2012, the Company did not recognize an other-than-temporary impairment of these investments. In its evaluation, management considered the type of security, the credit rating of the security, the length of time the security has been in a loss position, the size of the loss position, our intent and ability to hold the security to expected recovery of value, and other meaningful information. The Company does not intend to sell, and is unlikely to be required to sell, any of these available-for-sale investments before its effective maturity or market price recovery.

The Company recorded gross realized gains on the sale of debt securities totaling \$1,990,000 in 2012 and \$82,000 in 2011, and gross realized losses on the sale of debt securities totaling \$295,000 in 2012 and \$263,000 in 2011. Gains and losses were immaterial in 2010. In 2012, the realized gain was primarily due to the liquidation of the Company's Euro-denominated investment portfolio. Prior to the sale of these securities, unrealized gains and losses for these debt securities, net of tax, were recorded in shareholders' equity as a component of other comprehensive income (loss).

The following table presents the effective maturity dates of the Company's available-for-sale investments as of December 31, 2012 (in thousands):

	_	<1 Year	_1	-2 Years	_	2-3 Years	_3	-4 Years	4-	5 Years	5-8	Years	_	Total
Corporate bonds Asset-backed	\$	46,001	\$	14,188	\$	71,828	\$	10,180	\$	3,109	\$	767	\$	146,073
securities		17,666		26,727		7,983		-		-		-		52,376
Treasury bills		5,997		17,307		18,969		-		-		-		42,273
Agency bonds		7,482		17,156		8,196		3,147		942		-		36,923
Municipal bonds		16,224		12,902		2,442		1,084		1,418		-		34,070
Sovereign bonds		3,986		757		3,240		6,609		-				14,592
Covered bonds	_	5,618		1,424	_	2,346		1,794		_				11,182
	\$	102,974	\$	90,461	\$	115,004	\$	22,814	\$	5,469	\$	767	\$	337,489

In 2000, the Company became a Limited Partner in Venrock Associates III, L.P. (Venrock), a venture capital fund. The Company has committed to a total investment in the limited partnership of up to \$20,500,000, with an expiration date of December 31, 2013. As of December 31, 2012, the Company

NOTE 3: Cash, Cash Equivalents, and Investments (continued)

contributed \$19,886,000 to the partnership. The remaining commitment of \$614,000 can be called by Venrock at any time before December 31, 2013. Contributions and distributions are at the discretion of Venrock's management. No contributions were made during 2012. The Company received stock distributions totaling \$2,193,000 during 2012, which were accounted for as a return of capital. These shares were sold, shortly after the distributions, for \$2,128,000, resulting in realized losses of \$65,000. As of December 31, 2012, the carrying value of this investment was \$3,740,000 compared to an estimated fair value of \$6,932,000.

NOTE 4: Inventories

Inventories consisted of the following (in thousands):

	Decem	iber 31,
	2012	2011
Raw materials	\$12,667	\$17,736
Work-in-process	4,193	3,418
Finished goods	9,322	6,944
	\$26,182	\$28,098

NOTE 5: Property, Plant, and Equipment

Property, plant, and equipment consisted of the following (in thousands):

	December 31,			31,
	2012		_	2011
Land	\$	3,951	\$	3,951
Buildings		18,371		18,371
Building improvements		13,186		11,723
Leasehold improvements		4,925		4,327
Computer hardware and software		26,907		25,763
Manufacturing test equipment		12,876		11,522
Furniture and fixtures	_	3,790		3,467
		84,006		79,124
Less: accumulated depreciation		(49,186)		(47,380)
	\$	34,820	\$	31,744

The cost and related accumulated depreciation of certain fully-depreciated property, plant, and equipment totaling \$2,777,000 and \$1,593,000 were removed from these accounts in 2012 and 2011, respectively.

Buildings include rental property with a cost basis of \$5,750,000 as of December 31, 2012 and 2011, and accumulated depreciation of \$2,332,000 and \$2,185,000 as of December 31, 2012 and 2011, respectively.

NOTE 6: Intangible Assets

Amortized intangible assets consisted of the following (in thousands):

	C	Gross arrying Value		umulated ortization	Net arrying Value
Distribution networks Customer contracts and relationships Completed technologies Other	\$	38,060 6,690 670 370	\$	25,193 5,310 311 206	\$ 12,867 1,380 359 164
Balance as of December 31, 2012	\$	45,790	\$	31,020	\$ 14,770
	C	Gross arrying Value		umulated ortization	Net arrying Value
Distribution networks	C	arrying			arrying
Distribution networks	<u>C</u>	arrying Value	Ame	ortization	 arrying Value
	<u>C</u>	arrying Value 38,060	Ame	21,908	 arrying Value 16,152
Customer contracts and relationships	<u>C</u>	38,060 14,722	Ame	21,908 12,648	 arrying Value 16,152 2,074

The cost and related amortization of certain fully-amortized customer contracts and relationships totaling \$8,535,000 were removed from these accounts in 2012.

Estimated amortization expense for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

Year Ending December 31,	Amour	ıt
2013	\$ 3,7	'96
2014	3,6	50
2015	3,6	16
2016	2,6	77
2017	8	68
Thereafter	1	63
	\$ 14,7	70

NOTE 7: Goodwill

The Company has two reporting units with goodwill, the Modular Vision Systems Division (MVSD) and the Surface Inspection Systems Division (SISD), which are also reportable segments.

The changes in the carrying value of goodwill were as follows (in thousands):

	MVSD	SISD	Consolidated
Balance as of December 31, 2010		\$4,562 (89)	\$82,204 (175)
Balance as of December 31, 2011	-	4,473 (172)	82,029 (340)
Balance as of December 31, 2012	\$77,388	\$4,301	\$81,689

NOTE 7: Goodwill (continued)

For its 2012 analysis of goodwill, management elected to perform a qualitative assessment. Based upon this assessment, management does not believe that it is more likely than not that the carrying value of either reporting unit exceeds its fair value. Factors that management considered in this assessment include macroeconomic conditions, industry and market considerations, overall financial performance (both current and projected), changes in management or strategy, and changes in the composition or carrying amount of net assets. In addition, management took into consideration the goodwill valuation performed under the last quantitative analysis as of October 4, 2010. At that date, the fair value of the MVSD unit exceeded its carrying value by approximately 208%, while the fair value of the SISD unit exceeded its carrying value by approximately 119%. As of December 31, 2012, management does not believe any qualitative factors exist that would change the conclusion of their assessment.

NOTE 8: Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	Decem	ber 3	1,
	2012		2011
Salaries, commissions, and payroll taxes	\$ 5,563	\$	5,769
Company bonuses	5,057		8,721
Vacation	4,237		4,109
Japanese retirement allowance	3,487		3,559
Japanese consumption taxes	3,405		2,984
Warranty obligations	2,256		2,097
Other	 5,585	_	5,051
	\$ 29,590	\$	32,290
The changes in the warranty obligation were as follows (in thousands):			
Balance as of December 31, 2010	 		\$ 1,985
Provisions for warranties issued during the period			1,835
Fulfillment of warranty obligations			(1,664)
Foreign exchange rate changes			(59)

Provisions for warranties issued during the period	1,835
Fulfillment of warranty obligations	
Foreign exchange rate changes	(59)
Balance as of December 31, 2011	2,097
Provisions for warranties issued during the period	1,725
Fulfillment of warranty obligations	(1,609)
Foreign exchange rate changes	43
Balance as of December 31, 2012	\$ 2,256

NOTE 9: Commitments and Contingencies

Commitments

As of December 31, 2012, the Company had outstanding purchase orders totaling \$7,156,000 to purchase inventory from various vendors. Certain of these purchase orders may be canceled by the Company, subject to cancellation penalties. These purchase commitments relate to expected sales in 2013.

NOTE 9: Commitments and Contingencies (continued)

The Company conducts certain of its operations in leased facilities. These lease agreements expire at various dates through 2021 and are accounted for as operating leases. Certain of these leases contain renewal options, retirement obligations, escalation clauses, rent holidays, and leasehold improvement incentives. Annual rental expense totaled \$5,806,000 in 2012, \$5,557,000 in 2011, and \$5,190,000 in 2010. Future minimum rental payments under these agreements are as follows (in thousands):

Year Ending December 31,	Amount
2013	\$ 5,411
2014	3,686
2015	2,265
2016	1,392
2017	708
Thereafter	1,050
	\$ 14,512

The Company owns buildings adjacent to its corporate headquarters that are currently occupied with tenants who have lease agreements that expire at various dates through 2017. Annual rental income totaled \$854,000 in 2012, \$791,000 in 2011, and \$607,000 in 2010. Rental income and related expenses are included in "Other income (expense)" on the Consolidated Statements of Operations. Future minimum rental receipts under non-cancelable lease agreements are as follows (in thousands):

Year Ending December 31,	_A	Amount	
2013	\$	679	
2014		725	
2015		728	
2016		703	
2017		432	
	\$	3,267	

Contingencies

In May 2008, the Company filed a complaint against MvTec Software GmbH, MvTec LLC, and Fuji America Corporation in the United States District Court for the District of Massachusetts alleging infringement of certain patents owned by the Company. In April 2009 and again in June 2009, Defendant MvTec Software GmbH filed re-examination requests of the patents-at-issue with the United States Patent and Trademark Office. This matter is ongoing.

In May 2009, the Company pre-filed a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. §1337, against MvTec Software GmbH, MvTec LLC, Fuji America, and several other respondents alleging unfair methods of competition and unfair acts in the unlawful importation into the United States, sale for importation, or sale within the United States after importation. By this filing, the Company requested the ITC to investigate the Company's contention that certain machine vision software, machine vision systems, and products containing the same infringe, and respondents directly infringe and/or actively induce and/or contribute to the infringement in the United States, of one or more of the Company's U.S. patents. In July 2009, the ITC issued an order that it would institute an investigation based upon the Company's assertions. In September 2009, the Company reached a settlement with five additional

NOTE 9: Commitments and Contingencies (continued)

respondents. In March 2010, the Company reached a settlement with respondent Fuji Machine Manufacturing Co., Ltd. and its subsidiary Fuji America Corporation. These settlements did not have a material impact on the Company's financial results. An ITC hearing was held in May 2010. In July 2010, the Administrative Law Judge issued an initial determination finding two of the Company's patents invalid and that respondents did not infringe the patents-at-issue. In September 2010, the ITC issued a notice that it would review the initial determination of the Administrative Law Judge. The ITC issued its Final Determination in November 2010 in which it determined to modify-in-part and affirm-inpart the Administrative Law Judge's determination, and terminate the investigation with a finding of no violation of Section 337 of the Tariff Act of 1930 (as amended 19 U.S.C. §1337). The Company has filed an appeal of the decision with the United States Court of Appeals for the Federal Circuit. An oral hearing before the United States Court of Appeals occurred in February 2012. This matter is ongoing.

The Company cannot predict the outcome of the above-referenced pending matters and an adverse resolution of these lawsuits could have a material adverse effect on the Company's financial position, liquidity, results of operations, and/or indemnification obligations. In addition, various other claims and legal proceedings generally incidental to the normal course of business are pending or threatened on behalf of or against the Company. While we cannot predict the outcome of these incidental matters, we believe that any liability arising from them will not have a material adverse effect on our financial position, liquidity, or results of operations.

NOTE 10: Indemnification Provisions

Except as limited by Massachusetts law, the by-laws of the Company require it to indemnify certain current or former directors, officers, and employees of the Company against expenses incurred by them in connection with each proceeding in which he or she is involved as a result of serving or having served in certain capacities. Indemnification is not available with respect to a proceeding as to which it has been adjudicated that the person did not act in good faith in the reasonable belief that the action was in the best interests of the Company. The maximum potential amount of future payments the Company could be required to make under these provisions is unlimited. The Company has never incurred significant costs related to these indemnification provisions. As a result, the Company believes the estimated fair value of these provisions is minimal.

In the ordinary course of business, the Company may accept standard limited indemnification provisions in connection with the sale of its products, whereby it indemnifies its customers for certain direct damages incurred in connection with third-party patent or other intellectual property infringement claims with respect to the use of the Company's products. The term of these indemnification provisions generally coincides with the customer's use of the Company's products. The maximum potential amount of future payments the Company could be required to make under these provisions is generally subject to fixed monetary limits. The Company has never incurred significant costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the Company believes the estimated fair value of these provisions is minimal.

In the ordinary course of business, the Company also accepts limited indemnification provisions from time to time, whereby it indemnifies customers for certain direct damages incurred in connection with bodily injury and property damage arising from the installation of the Company's products. The term of these indemnification provisions generally coincides with the period of installation. The maximum potential amount of future payments the Company could be required to make under these provisions is generally limited and is likely recoverable under the Company's insurance policies. As a result of this coverage, and the fact that the Company has never incurred significant costs to defend lawsuits or settle claims related to these indemnification provisions, the Company believes the estimated fair value of these provisions is minimal.

NOTE 11: Derivative Instruments

The Company is exposed to certain risks relating to its ongoing business operations including foreign currency exchange rate risk and interest rate risk. The Company currently mitigates certain foreign currency exchange rate risks with derivative instruments. The Company does not currently manage its interest rate risk with derivative instruments.

The Company faces exposure to foreign currency exchange rate fluctuations, as a significant portion of its revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of the Company's subsidiaries or the reporting currency of the Company, which is the U.S. Dollar. The Company faces two types of foreign currency exchange rate exposures:

- transactional currency/functional currency exchange rate exposures from transactions that are denominated in currencies other than the functional currency of the subsidiary (for example, a U.S. Dollar receivable on the Company's Irish subsidiary's books for which the functional currency is the Euro), and
- functional currency/reporting currency exchange rate exposures from transactions that are denominated in currencies other than the U.S. Dollar, which is the reporting currency of the Company.

The Company uses derivative instruments to provide an economic hedge against its transactional currency/functional currency exchange rate exposures. Forward contracts on currencies are entered into to manage the transactional currency/functional currency exposure of the Company's Irish subsidiary's accounts receivable denominated in U.S. dollars and intercompany receivables denominated in Japanese Yen. These forward contracts are used to minimize foreign currency gains or losses, as the gains or losses on these contracts are intended to offset the losses or gains on the underlying exposures.

These forward contracts do not qualify for hedge accounting. Both the underlying exposures and the forward contracts are recorded at fair value on the Consolidated Balance Sheets and changes in fair value are reported as "Foreign currency gain (loss)" on the Consolidated Statements of Operations. The Company recorded net foreign currency losses of \$880,000 in 2012, \$504,000 in 2011, and \$328,000 in 2010.

As of December 31, 2012, the Company had outstanding forward contracts to exchange Euros for \$3,590,000. As of December 31, 2012, the intercompany receivable denominated in Japanese Yen was not significant, and therefore management did not have outstanding forward contracts related to this exposure. The Company did however enter into these forward contracts throughout the year, with total gains and losses on these contracts reflected in current operations. The Company may utilize forward contracts to hedge intercompany balances in the future at the discretion of management. In addition, during the third quarter of 2012, the Company entered into forward contracts to exchange Euros for U.S. Dollars at fixed exchange rates to protect against a potential devaluation of the Euro as it was converting a large amount of Euro-denominated cash into U.S. Dollars. The settlement of these forward contracts resulted in a foreign currency loss of \$504,000 recorded in the third guarter of 2012.

Information regarding the fair value of the forward contracts outstanding as of December 31, 2012 and December 31, 2011 were as follows (in thousands):

	A:	sset Derivatives		Liability Derivatives				
	Balance	Fair \	Fair Value		Fair Value			
	Sheet Location	December 31, 2012	December 31, 2011	Balance Sheet Location	December 31, 2012	December 31, 2011		
Currency	Prepaid expenses and other current	0.4.4	04.4	Accrued	044	0.10 5		
forward contracts	assets	\$44	\$14	expenses	\$14	\$165		

NOTE 11: Derivative Instruments (continued)

Information regarding the effect of the forward contracts, net of the underlying exposures, on the Consolidated Statements of Operations for each of the periods presented were as follows (in thousands):

	Location of Gain (Loss) Recognized in Income on Derivatives	Amous Recogn Deriva Deciva 2012	ome on ended	
Currency	Foreign		2011	2010
forward	currency gain			
contracts	(loss)	\$(722)	\$34	\$62

NOTE 12: Shareholders' Equity

Preferred Stock

The Company has 400,000 shares of authorized but unissued \$.01 par value preferred stock.

Common Stock

Each outstanding share of common stock entitles the record holder to one vote on all matters submitted to a vote of the Company's shareholders. Common shareholders are also entitled to dividends when and if declared by the Company's Board of Directors.

Shareholder Rights Plan

The Company has adopted a Shareholder Rights Plan, the purpose of which is, among other things, to enhance the Board of Directors' ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The Shareholder Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of the Company's common stock. The following summary description of the Shareholder Rights Plan does not purport to be complete and is qualified in its entirety by reference to the Company's Shareholder Rights Plan, which has been previously filed by the Company with the Securities and Exchange Commission as an exhibit to a Registration Statement on Form 8-A filed on December 5, 2008.

In connection with the adoption of the Shareholder Rights Plan, the Board of Directors of the Company declared a dividend distribution of one preferred stock purchase right (a "Right") for each outstanding share of common stock to shareholders of record as of the close of business on December 5, 2008. The Rights currently are not exercisable and are attached to and trade with the outstanding shares of common stock. Under the Shareholder Rights Plan, the Rights become exercisable if a person becomes an "acquiring person" by acquiring 15% or more of the outstanding shares of common stock or if a person commences a tender offer that would result in that person owning 15% or more of the common stock. If a person becomes an "acquiring person," each holder of a Right (other than the acquiring person) would be entitled to purchase, at the then-current exercise price, such number of shares of the Company's preferred stock which are equivalent to shares of common stock having twice the exercise price of the Right. If the Company is acquired in a merger or other business combination transaction after any such event, each holder of a Right would then be entitled to purchase, at the then-current exercise price, shares of the acquiring company's common stock having a value of twice the exercise price of the Right.

Stock Repurchase Program

In April 2008, the Company's Board of Directors authorized the repurchase of up to \$50,000,000 of the Company's common stock. As of December 31, 2012, the Company had repurchased a total of

NOTE 12: Shareholders' Equity (continued)

1,375,875 shares at a cost of \$30,000,000 under this program. In November 2011, the Company's Board of Directors authorized the repurchase of up to \$80,000,000 of the Company's common stock to help reduce share dilution associated with employee stock options. This new authorization will commence once the Company completes the \$50,000,000 program, of which \$20,000,000 remains available. The Company did not repurchase shares under these programs in 2012. The Company may repurchase shares under these programs in future periods depending upon a variety of factors, including, among other things, stock price, share availability, and cash reserve requirements.

Dividend Program

Beginning in the third quarter of 2003, the Company's Board of Directors has declared and paid a cash dividend in each quarter, including a dividend of \$0.10 per share in the first quarter of 2012, and \$0.11 per share in the second, third, and fourth quarters of 2012. The Company also declared and paid an additional \$0.11 dividend in the fourth quarter of 2012 that would normally be declared in the first quarter of 2013 in conjunction with the 2012 earnings release. A special dividend of \$1.00 was also declared and paid in the fourth quarter of 2012 to replace expected quarterly dividend declarations for the next eight quarters, beginning in 2013. The additional \$0.11 dividend and the \$1.00 dividend were accelerated due to the anticipated increase in the federal tax on dividends paid after December 31, 2012. These dividend payments amounted to \$66,213,000 for the year ended December 31, 2012.

NOTE 13: Stock-Based Compensation

Stock Option Plans

The Company's share-based payments that result in compensation expense consist solely of stock option grants. As of December 31, 2012, the Company had 6,319,454 shares available for grant under two stock option plans: the 2001 General Stock Option Plan (4,953,469) and the 2007 Stock Option and Incentive Plan (1,365,985). Each of these plans expires ten years from the date the plan was approved. In December 2011, the 2001 General Stock Option plan received shareholder approval for an amendment and restatement of the plan, extending the plan until September 2021. Generally, stock options are granted with an exercise price equal to the market value of the Company's common stock at the grant date, vest over four years based upon continuous service, and expire ten years from the grant date.

The following table summarizes the Company's stock option activity for the year ended December 31, 2012:

Waighted.

	Shares (in thousands)	Weighted- Average Exercise Price	Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2011	4,473	\$24.48		
Granted	53	36.60		
Exercised	(842)	20.72		
Forfeited or expired	(125)	24.11		
Outstanding as of December 31, 2012	3,559	\$25.56	<u>7.1</u>	\$40,098
Exercisable as of December 31, 2012	1,186	\$21.37	<u>5.4</u>	\$18,351
Options vested or expected to vest at December 31, 2012 (1)	3,203	\$25.15	6.9	\$37,424

NOTE 13: Stock-Based Compensation (continued)

(1) In addition to the vested options, the Company expects a portion of the unvested options to vest at some point in the future. Options expected to vest are calculated by applying an estimated forfeiture rate to the unvested options.

The fair values of stock options granted in each period presented were estimated using the following weighted-average assumptions:

	Year End	nber 31,	
	2012	2011	2010
Risk-free rate	2.0%	2.9%	3.3%
Expected dividend yield	1.2%	1.1%	1.3%
Expected volatility	44%	43%	44%
Expected term (in years)	5.7	5.5	5.3

Risk-free rate

The risk-free rate was based upon a treasury instrument whose term was consistent with the contractual term of the option.

Expected dividend yield

The current dividend yield was calculated by annualizing the cash dividend declared by the Company's Board of Directors for the current quarter and dividing that result by the closing stock price on the grant date. The current dividend yield was then adjusted to reflect the Company's expectations relative to future dividend declarations.

Expected volatility

The expected volatility was based upon a combination of historical volatility of the Company's common stock over the contractual term of the option and implied volatility for traded options of the Company's stock.

Expected term

The expected term was derived from the binomial lattice model from the impact of events that trigger exercises over time.

The weighted-average grant-date fair value of stock options granted was \$13.16 in 2012, \$12.32 in 2011, and \$7.33 in 2010.

The Company stratifies its employee population into two groups: one consisting of senior management and another consisting of all other employees. The Company currently expects that approximately 67% of its stock options granted to senior management and 66% of its options granted to all other employees will actually vest. Therefore, the Company currently applies an estimated forfeiture rate of 12% to all unvested options for senior management and a rate of 14% for all other employees. The Company revised its estimated forfeiture rates in the first quarter of 2012 and 2011 and the second quarter of 2010, resulting in an increase to compensation expense of \$200,000 in 2012, and a reduction to compensation expense of \$80,000 and \$600,000 in 2011 and 2010, respectively.

The total stock-based compensation expense and the related income tax benefit recognized was \$8,520,000 and \$2,772,000, respectively, in 2012, \$8,068,000 and \$2,660,000, respectively, in 2011, and \$3,027,000 and \$996,000, respectively, in 2010. No compensation expense was capitalized in 2012, 2011, or 2010.

NOTE 13: Stock-Based Compensation (continued)

The following table details the stock-based compensation expense by caption for each period presented on the Consolidated Statements of Operations (in thousands):

	Year Ended December 31,					
	2012		2011			2010
Product cost of revenue	\$	581	\$	456	\$	206
Service cost of revenue		161		172		72
Research, development, and engineering		2,149		2,268		1,020
Selling, general, and administrative		5,629		5,172	_	1,729
	\$	8,520	\$	8,068	\$	3,027

The total intrinsic value of stock options exercised was \$16,296,000 in 2012, \$20,108,000 in 2011, and \$10,918,000 in 2010. The total fair value of stock options vested was \$9,362,000 in 2012, \$10,202,000 in 2011, and \$13,159,000 in 2010.

As of December 31, 2012, total unrecognized compensation expense related to non-vested stock options was \$6,742,000, which is expected to be recognized over a weighted-average period of 1.3 years.

NOTE 14: Employee Savings Plan

Under the Company's Employee Savings Plan, a defined contribution plan, U.S. employees who have attained age 21 may contribute up to 25% of their salary on a pre-tax basis subject to the annual dollar limitations established by the Internal Revenue Service. The Company currently contributes fifty cents for each dollar an employee contributes, with a maximum contribution of 3% of an employee's pre-tax salary. From the second quarter of 2009 through the second quarter of 2010, the Company reduced this contribution to twenty-five cents for each dollar an employee contributes, with a maximum contribution of 1.5% of an employee's pre-tax salary. This reduction was done in conjunction with other cost-cutting measures implemented by the Company at that time. Company contributions vest 20%, 40%, 60%, and 100% after two, three, four, and five years of continuous employment with the Company, respectively. Company contributions totaled \$1,362,000 in 2012, \$1,218,000 in 2011, and \$776,000 in 2010. Cognex stock is not an investment alternative and Company contributions are not made in the form of Cognex stock.

NOTE 15: Taxes

Domestic income before taxes was \$36,754,000 in 2012, \$24,836,000 in 2011, and \$19,424,000 in 2010. Foreign income before taxes was \$49,876,000 in 2012, \$62,281,000 in 2011, and \$56,679,000 in 2010.

NOTE 15: Taxes (continued)

The provision for income taxes consisted of the following (in thousands):

	Year Ended December 31,						
	2012		2012 2011		_	2010	
Current:							
Federal	\$	11,284	\$	6,711	\$	5,749	
State		789		806		199	
Foreign		5,790		10,519	_	7,740	
		17,863		18,036		13,688	
Deferred:							
Federal		428		(812)		901	
State		36		34		217	
Foreign		205		(10)		(84)	
		669		(788)		1,034	
	\$	18,532	\$	17,248	\$	14,722	
	_						

A reconciliation of the United States federal statutory corporate tax rate to the Company's effective tax rate was as follows:

	Year End	ber 31,	
	2012	2011	2010
Income tax provision at federal statutory rate	35%	35%	35%
State income taxes, net of federal benefit	1	1	1
Foreign tax rate differential	(14)	(15)	(15)
Tax credit	-	(1)	(1)
Discrete tax events	-	-	(1)
Other	<u>(1</u>)		
Income tax provision	<u>21</u> %	20% ===	19% ==

The effective tax rate for 2012 included the impact of the following discrete events: (1) a decrease in tax expense of \$441,000 from the expiration of the statutes of limitations for certain reserves for income taxes, partially offset by (2) an increase in tax expense of \$101,000 from the write-down of a non-current deferred tax asset based upon a change in the tax rate in Japan and (3) an increase in tax expense of \$84,000 from the final true-up of the prior years' tax accrual upon filing the actual tax returns. Interest and penalties included in these amounts was a decrease to tax expense of \$58,000.

The American Taxpayer Relief Act of 2012 was passed by Congress and signed into law on January 1, 2013. The provisions under this law were made retroactive to January 1, 2012. However, as a result of the law being signed on January 1, 2013, the financial impact of any retroactive provision will be recorded as a discrete event in the first quarter of 2013. The Company estimates that this discrete event will reduce tax expense in the first quarter of 2013 by \$555,000 for Research and Development tax credits for 2012.

The effective tax rate for 2011 included the impact of the following discrete events: (1) a decrease in tax expense of \$808,000 from the expiration of the statutes of limitations for certain reserves for income taxes, (2) a decrease in tax expense of \$155,000 from the finalization of the Advanced Pricing Agreement between Japan and Ireland described below, partially offset by, (3) an increase in tax

NOTE 15: Taxes (continued)

expense of \$574,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, and (4) an increase in tax expense of \$201,000 from the write down of a noncurrent deferred tax asset based upon a change in the tax rate in Japan. Interest and penalties included in these amounts was a decrease to tax expense of \$2,000.

The effective tax rate for 2010 included the impact of the following discrete events: (1) a decrease in tax expense of \$462,000 from the settlement of the Competent Authority case with Japan, (2) a decrease in tax expense of \$151,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, (3) a decrease in tax expense of \$124,000 from the receipt of a state refund, and (4) a decrease in tax expense of \$105,000 from the expiration of the statutes of limitations for certain reserves for income taxes. These discrete events changed the effective tax rate in 2010 from a provision of 20% to a provision of 19%. Interest and penalties included in these amounts was a decrease to tax expense of \$228,000.

The changes in the reserve for income taxes, excluding interest and penalties, were as follows (in thousands):

Balance of reserve for income taxes as of December 31, 2010	\$4,181
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in prior periods	7
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in the current period	937
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	(192)
Gross amounts of decreases in unrecognized tax benefits as a result of the expiration of the applicable statutes of limitations	(785)
Balance of reserve for income taxes as of December 31, 2011	4,148
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in prior periods	43
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in the current period	642
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	(424)
Gross amounts of decreases in unrecognized tax benefits as a result of the expiration of the applicable statutes of limitations	(385)
Balance of reserve for income taxes as of December 31, 2012	\$4,024

The Company's reserve for income taxes, including gross interest and penalties, was \$5,216,000 as of December 31, 2012 and \$5,354,000, of which, \$558,000 was classified as current and \$4,796,000 was classified as non-current as of December 31, 2011. The amount of gross interest and penalties included in these balances was \$1,192,000 and \$1,206,000 as of December 31, 2012 and December 31, 2011, respectively. If the Company's tax positions were sustained or the statutes of limitations related to certain positions expired, these reserves would be released and income tax expense would be reduced in a future period. As a result of the expiration of certain statutes of limitations, there is a potential that a portion of these reserves could be released, which would decrease income tax expense by approximately \$1,500,000 to \$1,800,000 over the next twelve months.

The Company has defined its major tax jurisdictions as the United States, Ireland, and Japan, and within the United States, Massachusetts and California. The tax years 2008 through 2011 remain open to examination by various taxing authorities in the jurisdictions in which the Company operates.

NOTE 15: Taxes (continued)

In 2010, the Company concluded its Competent Authority tax case with Japan. A settlement was finalized between Japan and Ireland as a transfer price adjustment and no finding of a permanent establishment against the Company in Japan was noted. The Company's deposit of 766,257,300 Yen (\$9,336,000) placed with Japan in 2007 was returned, plus interest. This deposit had been included in "Other assets" on the Consolidated Balance Sheets in prior periods. This Competent Authority agreement closed the Company's tax years 2002 through 2005 to future examination in Japan. In 2011, the Company finalized an Advanced Pricing Agreement (APA) with Japan that will cover tax years 2006 through 2011, with a requested extension to 2012. The Company believes it is adequately reserved for these open years.

Deferred tax assets consisted of the following (in thousands):

	Decemi 2012	ber 31, 2011
Current deferred tax assets: Inventory and revenue related Bonuses, commissions, and other compensation Other	\$ 4,303 1,280 1,093	\$ 5,202 1,273 1,283
Gross current deferred tax assets	6,676 (307)	7,758 (878)
Net current deferred tax assets	\$ 6,369	\$ 6,880
Noncurrent deferred tax assets: Federal and state tax credit carryforwards Stock-based compensation expense Depreciation Acquired completed technologies and other intangible assets Unrealized investment gains and losses Correlative tax relief and deferred interest related to reserves Capital loss carryforward Acquired in-process technology Other	\$ 9,747 7,242 1,819 1,119 1,075 520 373 90 1,960	\$12,274 6,160 1,798 1,519 891 609 373 178 1,928
Gross noncurrent deferred tax assets Noncurrent deferred tax liabilities: Nondeductible intangible assets Other	23,945 (4,945) (2,171)	25,730 (6,244) (1,045)
Gross noncurrent deferred tax liabilities	(7,116) (1,182)	(7,289) (2,522)
Net noncurrent deferred tax assets	\$15,647	\$15,919

As of December 31, 2012, the Company had \$1,668,000 of alternative minimum tax credits and \$3,569,000 of foreign tax credits. The Company reversed a valuation allowance of \$2,457,000 originally recorded in 2011 resulting from foreign tax credits generated in 2010 that are currently considered to be realizable. The Company also recorded a valuation allowance of \$546,000 for current-year state research and experimentation tax credits that were not considered to be realizable. The total net change in the valuation allowance in the current year is a reduction of \$1,911,000. These credits may

NOTE 15: Taxes (continued)

be utilized in a future period, and the reserve associated with these credits will be reversed in the period when it is determined that the credits can be utilized to offset future federal and state income tax liabilities. The alternative minimum tax credits have an unlimited life and the foreign tax credits will expire between 2019 and 2022. In addition, the Company had \$4,510,000 of state research and experimentation tax credit carryforwards, net of federal tax benefits, as of December 31, 2012, which will begin to expire in 2015.

If certain of the Company's tax liabilities were paid, the Company would receive correlative tax relief in other jurisdictions. Accordingly, the Company has recognized a deferred tax asset in the amount of \$520,000 as of December 31, 2012, which represents this correlative tax relief and deferred interest.

The Company sold its lane departure warning business to Takata Holdings, Inc. in 2008. A deferred tax asset was established for the tax effect of this capital loss on the books of the Company's Irish subsidiary in the amount of \$373,000. The Company recorded a valuation allowance of \$373,000 to fully reserve this asset.

The Company recorded certain intangible assets as a result of the acquisition of DVT Corporation in 2005. The amortization of these intangible assets is not deductible for U.S. tax purposes. A deferred tax liability was established to reflect the federal and state liability associated with not deducting the acquisition-related amortization expenses. The balance of this liability was \$4,945,000 as of December 31, 2012.

While the deferred tax assets, net of valuation allowance, are not assured of realization, management has evaluated the realizability of these deferred tax assets and has determined that it is more likely than not that these assets will be realized. In reaching this conclusion, we have evaluated certain relevant criteria including the Company's historical profitability, current projections of future profitability, and the lives of tax credits, net operating losses, and other carryforwards. Should the Company fail to generate sufficient pre-tax profits in future periods, we may be required to establish valuation allowances against these deferred tax assets, resulting in a charge to income in the period of determination.

The Company does not provide U.S. income taxes on its foreign subsidiaries' undistributed earnings, as they are deemed to be permanently reinvested outside the United States. Non-U.S. income taxes are, however, provided on those foreign subsidiaries' undistributed earnings. Upon repatriation, the Company would provide the appropriate U.S. income taxes on these earnings, net of applicable foreign tax credits. It is not practicable to determine the income tax liability that might be incurred if the earnings were to be distributed.

The Company recorded \$141,000 of other income in the first quarter of 2012 upon the expiration of the statute of limitations relating to a tax holiday, during which time the Company collected value-added taxes from customers that were not required to be remitted to the government authority.

Cash paid for income taxes totaled \$13,551,000 in 2012, \$18,389,000 in 2011, and \$8,019,000 in 2010, which includes a payment of \$2,526,000 to conclude the Japan Competent Authority case.

NOTE 16: Restructuring Charges

In 2009, the Company announced the closure of its SISD facility in Kuopio, Finland. In 2010, the Company recorded \$75,000 related to this restructuring program. All obligations related to this program were fully paid as of the third guarter of 2010.

NOTE 17: Weighted Average Shares

Weighted-average shares were calculated as follows (in thousands):

	Year En	Year Ended Decemi		
	2012	2011	2010	
Basic weighted-average common shares outstanding	42,833	41,859	39,924	
Effect of dilutive stock options	807	903	373	
Diluted weighted-average common and common-equivalent shares outstanding	43,640	42,762	40,297	

Stock options to purchase 895,455, 1,001,500, and 1,640,327 shares of common stock, on a weighted-average basis, were outstanding in 2012, 2011, and 2010, respectively, but were not included in the calculation of dilutive net income per share because they were anti-dilutive.

NOTE 18: Segment and Geographic Information

The Company has two reportable segments: the Modular Vision Systems Division (MVSD) and the Surface Inspection Systems Division (SISD). MVSD develops, manufactures, and markets modular vision systems and ID products that are used to automate the manufacture and tracking of discrete items by locating, identifying, inspecting, and measuring them during the manufacturing or distribution process. SISD develops, manufactures, and markets surface inspection vision systems that are used to inspect surfaces of materials processed in a continuous fashion, such as metals, papers, nonwoven, plastics, and glass, to ensure there are no flaws or defects on the surfaces. Segments are determined based upon the way that management organizes its business for making operating decisions and assessing performance. The Company evaluates segment performance based upon income or loss from operations, excluding stock-based compensation expense.

Decembiling

The following table summarizes information about the Company's segments (in thousands):

	MVSD		SISD		SISD		SISD		SISD		SISD			ems	Cor	nsolidated
Year Ended December 31, 2012																
Product revenue	\$	263,308	\$	32,280			\$	295,588								
Service revenue		10,388		18,303				28,691								
Depreciation and amortization		9,505		963	\$	390		10,858								
Goodwill and intangibles		90,390		6,069		-		96,459								
Operating income		89,378		11,941	(1	7,912)		83,407								
Year Ended December 31, 2011																
Product revenue	\$	264,956	\$	32,354			\$	297,310								
Service revenue		8,717		15,887				24,604								
Depreciation and amortization		8,445		908	\$	403		9,756								
Goodwill and intangibles		94,322		6,617		-		100,939								
Operating income		94,201		10,301	(1	9,147)		85,355								
Year Ended December 31, 2010																
Product revenue	\$	234,052	\$	29,411			\$	263,463								
Service revenue		13,362		13,866				27,228								
Depreciation and amortization		8,683		757	\$	369		9,809								
Goodwill and intangibles		98,252		7,082		-		105,334								
Operating income		88,342		5,064	(1	7,693)		75,713								

NOTE 18: Segment and Geographic Information (continued)

Reconciling items consist of stock-based compensation expense and unallocated corporate expenses, which primarily include corporate headquarters costs, professional fees, and patent infringement litigation. Additional asset information by segment is not produced internally for use by the chief operating decision maker, and therefore, is not presented. Additional asset information is not provided because cash and investments are commingled and the segments share assets and resources in a number of locations around the world.

No customer accounted for greater than 10% of revenue in 2012, 2011, or 2010.

The following table summarizes information about geographic areas (in thousands):

	United States	 Europe	_	Japan	_	Other	 Total
Year Ended December 31, 2012							
Product revenue	\$ 87,877	\$ 95,376	\$	38,151	\$	74,184	\$ 295,588
Service revenue	13,248	6,083		5,043		4,317	28,691
Long-lived assets	120,596	4,939		2,229		6,342	134,106
Year Ended December 31, 2011							
Product revenue	\$ 87,166	\$ 100,984	\$	45,295	\$	63,865	\$ 297,310
Service revenue	10,796	6,343		4,147		3,318	24,604
Long-lived assets	121,174	10,811		2,773		952	135,710
Year Ended December 31, 2010							
Product revenue	\$ 74,105	\$ 83,432	\$	55,269	\$	50,657	\$ 263,463
Service revenue	12,493	7,611		3,986		3,138	27,228
Long-lived assets	122,760	10,387		2,457		885	136,489

Revenue is presented geographically based upon the customer's country of domicile.

COGNEX CORPORATION - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	Quarter Ended			
	April 1, 2012	July 1, 2012	September 30, 2012	December 31, 2012
	(Ir	n thousands, e	xcept per share a	mounts)
Revenue	\$77,709	\$84,326	\$80,076	\$82,168
Gross margin	58,651	63,777	60,570	61,786
Operating income	17,741	23,350	21,803	20,513
Net income	14,282	19,767	17,805	16,244
Basic net income per share	0.34	0.46	0.42	0.38
Diluted net income per share	0.33	0.45	0.41	0.37
		C	uarter Ended	
	April 201		o, October 2, 2011	December 31, 2011
		(In thousands,	In thousands, except per share amounts)	
Revenue	\$74,3	394 \$83,39	93 \$80,085	\$84,042
Gross margin	56,0)11 64,0°	14 61,132	62,838
Operating income	17,3	368 24,04	12 22,389	21,556
Net income	13,6	36 19,09	97 18,037	19,099
Basic net income per share	0	.33 0.4	16 0.43	0.45
Diluted net income per share	0	.32 0.4	15 0.42	0.44

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Cognex Corporation:

We have audited in accordance with the standards of the Public Company Accounting Oversight Board (United States) the consolidated financial statement of Cognex Corporation and subsidiaries referred to in our report dated February 11, 2013, which is included in the 2012 Annual Report on Form 10-K of Cognex Corporation. Our audits of the basic consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15(2) of this Form 10-K, which is the responsibility of the Company's management. In our opinion, this financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ GRANT THORNTON LLP

Boston, Massachusetts February 11, 2013

COGNEX CORPORATION - SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

		Addit	ions			
Description	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Other	Balance at End of Period
		(In thousand	s)			
Reserve for Uncollectible Accounts:						
2012	\$1,240	\$ 63	\$ -	\$ (184) (a)	\$ 12 (b)	\$1,131
2011	\$1,235	\$ 173	\$ -	\$ (154) (a)	\$ (14) (b)	\$1,240
2010	\$1,358	\$ 322	\$ -	\$ (411) (a)	\$ (34) (b)	\$1,235
Deferred Tax Valuation Allowance:						
2012	\$3,400	\$ 546	\$ -	\$(2,457)		\$1,489
2011	\$ 373	\$3,027	\$ -	\$ -		\$3,400
2010	\$ 373	\$ -	\$ -	\$ -		\$ 373
Reserve for Inventory Obsolescence:						
2012	\$4,359	\$ 949	\$ -	\$(1,924) (a)	\$ 30 (c)	\$3,414
2011	\$5,052	\$1,078	\$ -	\$(1,688) (a)	\$ (83) (c)	\$4,359
2010	\$5,776	\$1,509	\$ -	\$(1,897) (a)	\$(336) (c)	\$5,052

⁽a) Specific write-offs

⁽b) Collections of previously written-off accounts and foreign exchange rate changes(c) Foreign exchange rate changes

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

There were no disagreements with accountants on accounting or financial disclosure during 2012 or 2011.

ITEM 9A: CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As required by Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, the Company has evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of its disclosure controls and procedures (as defined in such rules) as of the end of the period covered by this report. Based on such evaluation, the Chief Executive Officer and Chief Financial Officer concluded that such disclosure controls and procedures were effective as of that date.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Management has evaluated the effectiveness of the Company's internal control over financial reporting based upon the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based upon our evaluation, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2012.

Attestation Report of the Registered Public Accounting Firm on Internal Control over Financial Reporting

The Company's internal control over financial reporting as of December 31, 2012 has been audited by Grant Thornton LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter of the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. The Company continues to review its disclosure controls and procedures, including its internal control over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that the Company's systems evolve with its business.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Cognex Corporation:

We have audited the internal control over financial reporting of Cognex Corporation (a Massachusetts corporation) and subsidiaries (the "Company") as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying management's report on internal control over financial reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

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

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company as of and for the year ended December 31, 2012, and our report dated February 11, 2013 expressed an unqualified opinion on those financial statements.

/s/ GRANT THORNTON LLP

Boston, Massachusetts February 11, 2013 None

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

Information with respect to Directors and Executive Officers of the Company and the other matters required by Item 10 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2013 Annual Meeting of Shareholders to be held on April 25, 2013 and is incorporated herein by reference. In addition, certain information with respect to Executive Officers of the Company may be found in the section captioned "Executive Officers of the Registrant," appearing in Part I – Item 4A of this Annual Report on Form 10-K.

The Company has adopted a Code of Business Conduct and Ethics covering all employees, which is available, free of charge, on the Company's website, www.cognex.com. The Company intends to disclose on its website any amendments to or waivers of the Code of Business Conduct and Ethics on behalf of the Company's directors and executive officers that would otherwise be required to be disclosed under the rules of the SEC or The NASDAQ Stock Market LLC.

ITEM 11: EXECUTIVE COMPENSATION

Information with respect to executive compensation and the other matters required by Item 11 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2013 Annual Meeting of Shareholders to be held on April 25, 2013 and is incorporated herein by reference.

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

Information with respect to security ownership and the other matters required by Item 12 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2013 Annual Meeting of Shareholders to be held on April 25, 2013 and is incorporated herein by reference.

The following table provides information as of December 31, 2012 regarding shares of common stock that may be issued under the Company's existing equity compensation plans:

Number of contrition

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-avera price of outstand warrants, an	ling options,	remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))	
	(a)				
Equity compensation plans approved by shareholders	1,679,532 (1)	\$	22.4685	6,319,454 (2)	
Equity compensation plans not approved by shareholders	1,878,991 (3)		28.3304	0	
	3,558,523	\$	25.5637	6,319,454	

- (1) Includes shares to be issued upon exercise of outstanding options under the Company's 1991 Isys Controls, Inc. Long-Term Equity Incentive Plan, 1998 Stock Incentive Plan, and 2007 Stock Option and Incentive Plan.
- (2) Includes shares remaining available for future issuance under the Company's 2007 Stock Option and Incentive Plan and 2001 General Stock Option Plan, as amended and restated.
- (3) Includes shares to be issued upon the exercise of outstanding options granted under the Company's 2001 Interim General Stock Incentive Plan and granted prior to shareholder approval under the 2001 General Stock Option Plan, as amended and restated.

The 2001 General Stock Option Plan was originally adopted by the Board of Directors in December 2001 without shareholder approval. In December 2011, this plan received shareholder approval for an amendment and restatement of the plan, extending the plan until September 2021. This plan provides for the granting of nonqualified stock options and incentive stock options to any employee who is

actively employed by the Company and is not an officer or director of the Company. The maximum number of shares of common stock available for grant under this plan is 7,110,000 shares. All option grants must have an exercise price per share that is no less than the fair market value per share of the Company's common stock on the grant date and must have a term that is no longer than ten years from the grant date. 2,372,835 stock options have been granted under the 2001 General Stock Option Plan.

The 2001 Interim General Stock Incentive Plan was adopted by the Board of Directors in July 2001 without shareholder approval. This plan provides for the granting of nonqualified stock options to any employee who is actively employed by the Company and is not an officer or director of the Company. The maximum number of shares of common stock available for grant under this plan is 400,000 shares. All option grants have an exercise price per share that is no less than the fair market value per share of the Company's common stock on the grant date and must have a term that is no longer than fifteen years from the grant date. All 400,000 stock options have been granted under the 2001 Interim General Stock Incentive Plan.

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

Information with respect to certain relationships and related transactions and the other matters required by Item 13 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2013 Annual Meeting of Shareholders to be held on April 25, 2013 and is incorporated herein by reference.

ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to principal accountant fees and services and the other matters required by Item 14 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2013 Annual Meeting of Shareholders to be held on April 25, 2013 and is incorporated herein by reference.

PART IV

ITEM 15: EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) Financial Statements

The financial statements are included in Part II – Item 8 of this Annual Report on Form 10-K.

(2) Financial Statement Schedule

Financial Statement Schedule II is included in Part II – Item 8 of this Annual Report on Form 10-K.

Other schedules are omitted because of the absence of conditions under which they are required or because the required information is given in the consolidated financial statements or notes thereto.

(3) Exhibits

The Exhibits filed as part of this Annual Report on Form 10-K are listed in the Exhibit Index, immediately preceding such Exhibits.

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.

COGNEX CORPORATION

By: /s/ Robert J. Willett
Robert J. Willett
President and Chief Executive Officer

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.

Signature	<u>Title</u>	Date
/s/ Robert J. Shillman Robert J. Shillman	Chairman of the Board of Directors and Chief Culture Officer	February 11, 2013
/s/ Robert J. Willett Robert J. Willett	President, Chief Executive Officer, and Director (principal executive officer)	February 11, 2013
/s/ Richard A. Morin Richard A. Morin	Executive Vice President of Finance and Administration and Chief Financial Officer (principal financial and accounting officer)	February 11, 2013
/s/ Patrick Alias Patrick Alias	Director	February 11, 2013
/s/ Jerald Fishman Jerald Fishman	Director	February 11, 2013
/s/ Theodor Krantz Theodor Krantz	Director	February 11, 2013
/s/ Jeffrey Miller Jeffrey Miller	Director	February 11, 2013
/s/ Anthony Sun Anthony Sun	Director	February 11, 2013
/s/ Reuben Wasserman Reuben Wasserman	Director	February 11, 2013

EXHIBIT INDEX

	EXHIBIT INDEX
EXHIBIT NUMBER	
3A	Restated Articles of Organization of Cognex Corporation effective June 27, 1989, as amended April 30, 1991, April 21, 1992, April 25, 1995, April 23, 1996, and May 8, 2000 (filed herewith)
3B	Articles of Amendment to the Articles of Organization of Cognex Corporation establishing Series E Junior Participating Preferred Stock (incorporated by reference to Exhibit 3.1 to Cognex's Registration Statement on Form 8-A filed on December 5, 2008 [File No. 1-34218])
3C	By-laws of Cognex Corporation, as amended and restated through November 21, 2007 (filed herewith)
3D	Amendment to By-laws of Cognex Corporation, dated March 1, 2008 (incorporated by reference to Exhibit 3.1 of Cognex's Current Report on Form 8-K filed on March 3, 2008 [File No. 0-17869])
4A	Specimen Certificate for Shares of Common Stock (incorporated by reference to Exhibit 4 to the Registration Statement on Form S-1 [Registration No. 33-29020])
4B	Shareholder Rights Agreement, dated December 4, 2008, between Cognex Corporation and National City Bank (incorporated by reference to Exhibit 4.1 to Cognex's Registration Statement on Form 8-A filed on December 5, 2008 [File No. 1-34218])
10A *	1991 Isys Controls, Inc. Long-Term Equity Incentive Plan (incorporated by reference to Exhibit 4A to the Registration Statement on Form S-8 [Registration No. 333-02151])
10B *	Cognex Corporation 1998 Non-Employee Director Stock Option Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10C *	Amendment to Cognex Corporation 1998 Non-Employee Director Stock Option Plan, effective as of July 26, 2007 (filed herewith)
10D *	Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10E *	First Amendment to the Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10F *	Second Amendment to the Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 10F of Cognex's Annual Report on Form 10-K for the year ended December 31, 2011 [File No. 1-34218])
10G *	Amendment to Cognex Corporation 1998 Stock Incentive Plan, effective as of July 26, 2007 (filed herewith)
10H *	Cognex Corporation 2001 Interim General Stock Incentive Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 [Registration No. 333-68158])
101 *	Cognex Corporation 2001 General Stock Option Plan, as amended and restated (incorporated by reference to Appendix to the Company's Proxy Statement filed on October 19, 2011 [File No. 001-34218])
10J *	Cognex Corporation 2007 Stock Option and Incentive Plan (filed herewith)
10K *	Form of Letter Agreement between Cognex Corporation and each of Robert J. Shillman, Patrick A. Alias, Jerald G. Fishman, Anthony Sun and Reuben Wasserman (filed herewith)
10L *	Form of Stock Option Agreement (Non-Qualified) under 1998 Stock Incentive Plan (filed herewith)

10M *	Form of Stock Option Agreement (Non-Qualified) under 1998 Non-Employee Director Stock Option Plan (incorporated by reference to Exhibit 10Q of Cognex's Annual Report on Form 10-K for the year ended December 31, 2009 [File No. 001-34218])
10N *	Supplemental Retirement and Deferred Compensation Plan effective April 1, 1995 (incorporated by reference to Exhibit 10S of Cognex's Annual Report on Form 10-K for the year ended December 31, 2009 [File No. 001-34218])
100 *	Summary of Annual Bonus Program (filed herewith)
10P *	Summary of Director Compensation (filed herewith)
10Q *	Form of Indemnification Agreement with each of the Directors of Cognex Corporation (incorporated by reference to Exhibit 10.1 of Cognex's Current Report on Form 8-K filed on March 3, 2008 [File No. 0-17869])
10R *	Employment Agreement, dated June 17, 2008, by and between Cognex Corporation and Robert Willett (incorporated by reference to Exhibit 10.1 of Cognex's Current Report on Form 8-K filed on June 19, 2008 [File No. 0-17869])
105 *	Amendment to Employment Agreement with Robert Willett, dated November 14, 2008 (incorporated by reference to Exhibit 10X of Cognex's Annual Report on Form 10-K for the year ended December 31, 2008 [File No. 1-34218])
10T *	Form of Stock Option Agreement (Non-Qualified) under 2007 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.2 of Cognex's Quarterly Report on Form 10-Q for the quarter ended June 29, 2008 [File No. 0-17869])
10U *	Letter from the Company to Richard A. Morin regarding Stock Option Agreements (incorporated by reference to Exhibit 10.3 of Cognex's Quarterly Report on Form 10-Q for the quarter ended June 29, 2008 [File No. 0-17869])
14	Code of Business Conduct and Ethics as amended March 12, 2004 (incorporated by reference to Exhibit 14 of Cognex's Annual Report on Form 10-K for the year ended December 31, 2009 [File No. 001-34218])
21	Subsidiaries of the registrant (filed herewith)
23.1	Consent of Grant Thornton LLP (filed herewith)
31.1	Certification of Chief Executive Officer (filed herewith)
31.2	Certification of Chief Financial Officer (filed herewith)
32.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (CEO) (furnished herewith)
32.2	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (CFO) (furnished herewith)
101**	xBRL (Extensible Business Reporting Language)

The following materials from Cognex Corporation's Annual Report on Form 10-K for the period ended December 31, 2012, formatted in xBRL: (i) Consolidated Statements of Operations for the years ended December 31, 2012, December 31, 2011, and December 31, 2010; (ii) Consolidated Statements of Comprehensive Income for the years ended December 31, 2012, December 31, 2011, and December 31, 2010; (iii) Consolidated Balance Sheets as of December 31, 2012 and December 31, 2011; (iv) Consolidated Condensed Statements of Cash Flows for the years ended December 31, 2012, December 31, 2011, and December 31, 2010; (v) Consolidated Statement of Shareholders' Equity for the years ended December 31, 2012, December 31, 2011, and December 31, 2010; and (vi) Notes to Consolidated Financial Statements.

- Indicates management contract or compensatory plan or arrangement
- ** Pursuant to Rule 406T of Regulation S-T, the xBRL related information in Exhibit 101 to this Annual Report on Form 10-K is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.