

# Business Is Good



# **B.I.G. Party 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 that 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 Message from Doctor Bob: What's good for business is good for America



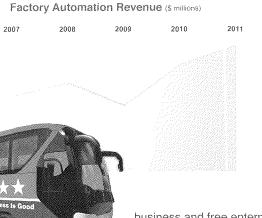
### Dear Shareholders:

Cognex had a fantastic year in 2011. We reported record revenue, record net income and record earnings per share. My partner, Rob Willett, provides more details about the progress that we made in 2011 in his CEO letter, but here's the short version: WOW!

At any other time in America's history, our efforts would be applauded and our results would be publicized as an example for others to follow. Our financial success would be described as the reward for our hard work, smart decisions and willingness to take calculated risks. However, that's not what's happening these days. Things have changed.

### We're rolling!

Cognex set a new record for factory automation revenue, surpassing the previous record set in 2010 by 18%.



During his 2008 campaign, President Barack Obama promised that he would bring fundamental change to our society, and, unfortunately, he has delivered on that promise. Since his election, a worrisome, anti-business movement has emerged that is harmful to our nation. It not only criticizes businesses and the people who run them, but it demonizes them. It is a divisive movement that pits our citizens against each other, and it could result in a destructive, downward spiral for our economy and our country.

In response to this push towards socialism, we are launching the "Business Is Good" Campaign. The objective of the B.I.G. Campaign is to spread the word about how

business and free enterprise are at the core of America's success. We want everyone to understand that business not only creates wealth for those who work hard, work smart and take calculated risks, but it also creates jobs that provide opportunity

and the means for a better life for everyone who is willing to invest time and effort to help their business succeed. What about those who cannot or will not work? Well, they also benefit because business provides goods and services that they use every day, and tax dollars for social welfare programs that support them.

\$200

\$150

\$100

\$50

so.

"Our investors helped build a company that for the past 31 years has created new technologies and a wide range of sophisticated vision-based products..."

vision Char Shares on 2012 Campaign Perspectives on 2012

Dr. Shillman at his appointment by President Obama in 2009.

Vision Cyar Shares

Cognex is a great example of the benefits of the free enterprise system. Our company was founded on the dreams of three young people at a time in the United States when entrepreneurship was encouraged and success in business was praised. What began in 1981 as a startup funded by my life savings of \$87,000 is now the largest and most successful machine vision company in the world, with a market value of over \$1.5 billion.

In our 31 years in business, we never...NEVER...took money from the government to fund our growth. Instead, we turned to the capital markets...both independent and corporate venture capital firms...to raise the necessary funds to grow our company until we reached profitability. Those early financial investors profited handsomely from their investments, and I am very happy about that. We had other investors too...the employees who joined us early on and accepted lower-than-usual salaries in exchange for stock options. Their investment of sweat equity also paid off handsomely. Our philosophy of sharing risks and rewards with our employees continues to this day as Cognoids continue to accept lower salaries than they could earn elsewhere in exchange for a chance to participate in the company's growth.

Their investments in our company...both the cash from venture capitalists and the efforts of our employees...resulted in a good financial return, and those investments also delivered tremendous value to society in general. Our investors helped build a company that for the past 31 years has created new technologies and a wide range of sophisticated visionbased products that are used by customers around the world to produce high-quality goods at the lowest possible cost. And that benefits consumers everywhere!

How do you think that it's possible to purchase a smartphone for \$180, a flat screen monitor for \$99, or a DVD player for \$25? It's because every one of those items... and just about everything else that you buy these days...is manufactured in highly-automated factories where machine vision...most often Cognex machine vision...is a key enabler. And, our vision systems dramatically reduce the

Dr. Shillman at his appointment by President Obama in 2009.

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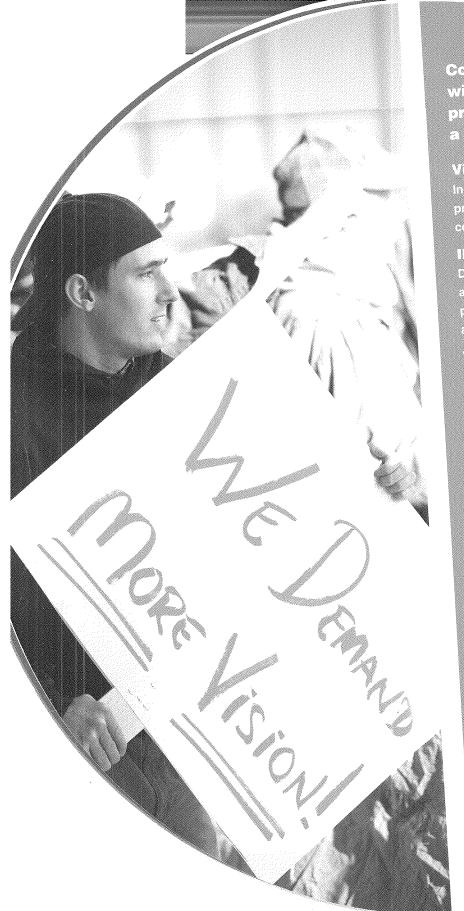
He cited the success of his machine vision company. Cognes Corporation.

He cited the success of his machine he would bring to the mestylence as well as He cited the success of his machine vision company. Cognes Corporation, as well as a country of the presidency, as well as the area and a leadership he would bring to the presidency, as well as the area and another of the leadership he would bring to the presidency. amount of scrap, so the environment wins too. Because of the valuable capabilities that Cognex products deliver, our customers have purchased more than 700,000 units and paid us more

ar an wanger in are raucusing i Ars ONN EXCELLENT 2020 VISHIN. We not only created new technologies and products over the past 31 years, we also created jobs! Last year alone we filled 95 new positions, bringing us to a total of 919 energetic, creative Cognoids around the world. These positions were mostly in engineering to accelerate the pace of innovation to get products

to market sooner, and in sales, service and marketing to grow our worldwide presence.





Cognex offers the widest range of vision products available from a single source.

### Vision Systems

In-Sight® systems are powerful, self-contained products with an easy-to-use interface for configuring all kinds of vision applications.

### ID Producis

DataMan® industrial ID readers read codes on parts and packages during the manufacturing and distribution process to identify and track items, and to ensure that the appropriate processes are performed on them.

### Viston Softkare

VisionPro<sup>®</sup> is a comprehensive library of Cognex vision software tools that customers load and run on computers of their choice to create customized vision applications.

### Vision Sensus

Checker® sensors perform single-function vision tasks, such as determining the presence or absence of parts in an assembly. Checker is targeted at the large market currently served by photoelectric sensors.

# **Web and Surface Inspection Systems**

Smart View\* systems detect and classify surface defects on materials made at high speeds in a continuous fashion. The SmartAdvisor™ Web Monitoring System helps manufacturers determine the root causes of those defects so they can be quickly eliminated. SmartSystem™ integrates these two systems for a complete vision solution to the entire manufacturing process.

Protesters from the Occupy Vision Drive movement gather outside Cognex corporate headquarters in Natick, MA. Scan this code with your smartphone to see more about the protests, or visit http://investor.cognex.com/2011/

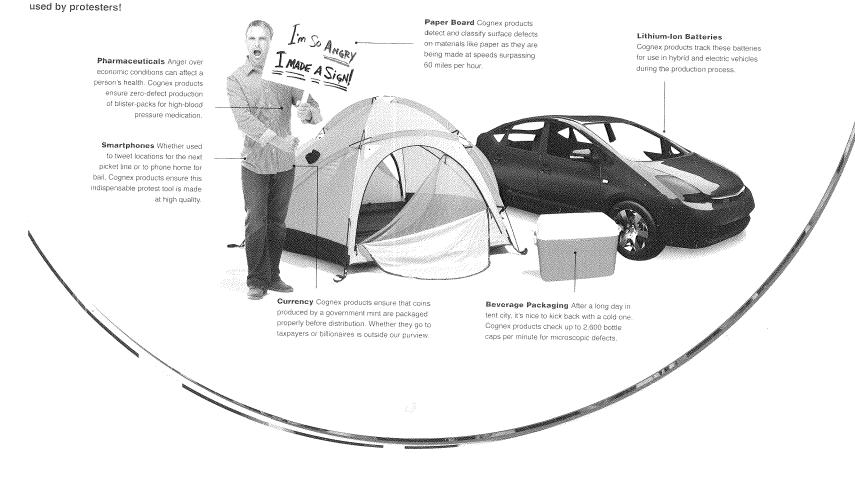


# "We shared our success with our shareholders...those investors who took calculated risk and bought Cognex stock."

Lately, businesses are criticized for not paying their fair share, and for caring about nothing but the bottom line. Our results prove otherwise. Cognex certainly cared about our customers in 2011; you can't experience the kind of revenue growth that we reported unless you are meeting your customers' needs. But we also shared our success with everyone who contributed to it. Check these numbers out:

- Cognoids took home more than \$100 million in their paychecks in 2011. That's money they used to pay rent or mortgages, and to feed and provide for their families. Business is good!
- Our vendors were paid more than \$120 million for their goods and services...and, per our long-standing policy, we paid them either on time or even ahead of time! Business is good!
- Our neighbors received a big bonus in 2011. Our tax dollars helped local, regional, state and national governments provide services their citizens depend on. How much did we share with them? One heck of a lot!
   We paid more than \$20 million in taxes in 2011, with most being income taxes. So, tell me again why making a large profit is a bad thing? Business is good!
- Last but not least, we shared our success with our shareholders...those investors who took calculated risk and bought Cognex stock. We increased our quarterly dividend twice during 2011, and distributed \$15 million of dividends to them. In addition, our investors had the chance to participate in the growth of our stock; \$1,000 of Cognex stock on January 1, 2011 is worth \$1,500 today as I write this letter (February 14, 2012). Business is good!

Even protesters
benefit from
machine vision
Cognex products improve
quality, reliability and
traceability of many
products...even those



# "The B.I.G. Campaign is our attempt to counteract the 'Big Lie' that successful businesses and the people who run them are bad."

Politicians on the left shout about the need for government to "spread the wealth around." As you can see from the chart to the left, Cognex did that without government intervention. And, even after that, we ended the year with \$357 million in cash and investments, which is \$74 million more than we had at the start of 2011, and we have no debt! Some on the left may view our "cash hoard" suspiciously, but it is money we earned from our honest efforts and saved over the past 31 years. It is both the reward and the measurement stick of our success...and we're proud of it!

Now what are we going to do with that cash? Divvy it up between our board members and executive officers? Buy a corporate jet? Hang expensive artwork in our company headquarters? Not a chancel Just like the first dollar that I invested in Cognex, we intend to put that cash to productive use. Perhaps we'll use it to acquire companies that broaden our product offerings, add new technologies to our products or expand our sales channels; or to fund more engineering projects that fuel additional growth; or to pay higher dividends as a reward for our shareholders' faith in us; or to repurchase Cognex stock to reduce the "dilutive effect" of employee stock options; or to support science and math education programs and other worthwhile causes in the towns that Cognex calls home. What's so awful about that?

In summary, Cognex invents new technologies and develops products that benefit all of society; Cognex creates jobs; Cognex pays taxes; Cognex donates to charities; Cognex pays dividends; Cognex stock has increased in value...

which is realized by our shareholders and by many of our employees who hold stock options. So is business good?

The media and politicians on the left enjoy telling stories of businessmen gone bad. Sure, there are a few rotten apples in every barrel. But the vast majority of businessmen and businesswomen are ethical, hardworking people who care about the enterprises that they run, and care about the people who depend on them. The B.I.G. Campaign is our attempt to counteract the "Big Lie" that successful businesses and the people who run them are bad.

When I was a boy, there was a common saying which was generally accepted to be true: "What's good for General Motors is good for America." The essential meaning of that saying is still true today...what's good for business is good for America. As long as I am your Chairman, you can be certain that Cognex will continue to work hard to be a model of what a fine company should be...a company that serves the interests of its customers, employees, vendors, neighbors and, of course, you, our shareholders.

Thank you...and remember to vote B.I.G.!

Sincerely yours,

Cognex Quarterly Dividend Per Share

Q1 Q2 Q3

\$0.08

\$0.06

2011 Q2 Q3 Q4

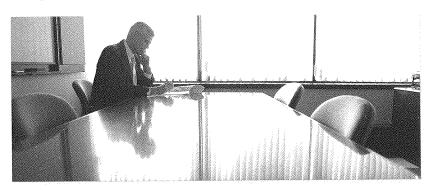
Past dividends are not a guarantee of future dividends

Q4 Q1

Robert J. Shillman ("Doctor Bob")

Chairman and Chief Culture Officer

# A Message from Rob Willett: Cognex is positioned for growth



### Dear Shareholders:

Cognex has a motto, "To preserve and enhance vision," that refers to our tireless effort to make the world's best machine vision products. It also signifies our commitment to preserve and enhance our vision of what a great company can be... innovative, dynamic, successful and a reliable and trustworthy partner to all its stakeholders. As I wrap up my first year as CEO, I am pleased to report our progress toward both goals.

Let's start by examining our financial results. By all counts, 2011 was another outstanding year for Cognex. The impressive numbers delivered by hard-working Cognoids are proof that business *is* good. At Cognex, the B.I.G. Campaign is off the ground...and picking up steam!

Key highlights in 2011 include:

- Record revenue of \$322 million, an 11% increase over last year's record of \$291 million;
  - Record net income of \$70 million, a 14% increase over the \$61 million reported in 2010; and
    - Record earnings per share of \$1.63, up 7% from the record \$1.52 we reported in 2010.

We continued to deliver a high level of profitability in 2011:

- Gross margin was 76%, a 250 basis point increase over 2010. We're especially proud of our gross margin because it reflects the value Cognex customers recognize in our technology;
- Operating margin was 27%, an improvement over 26% in 2010, despite significant investments to drive future growth; and
- Net margin was 22%, an increase over the 21% reported in 2010.

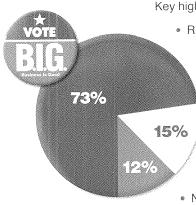
The factory automation market served by our Modular Vision Systems Division (MVSD) drove the lion's share of growth. Factory automation revenue was a record \$236 million in 2011, an 18% increase over \$200 million in 2010.¹ We saw gains especially in automotive as well as in consumer electronics, pharmaceuticals and medical devices. These industries rely increasingly on machine vision to reduce product liability, streamline manufacturing and ensure quality.

Factory automation grew by 22%, excluding \$6.5 million of revenue from a single, multi-year contract that was recorded in 2010. Accounting rules at the time required that revenue be deferred until the contract was completed.



Factory Automation
Surface Inspection

**∭** SEMI



"We launched the largest number of new products in Cognex history in 2011..."

B.I.G. Party candidates speak to supporters at a recent rally.

Robert J. Willett has been tapped by Robert 3. White has occurable of the Robert 3.

J.C. Party canadate LP, Robert J.
Shillman to be his running mate for
the 2012 presidential election.

ne 2014 presidential election.
"Rob's qualifications are impec-

oo s quann catons are impec-e: he's already a president. Shiftman, who named Wil-

said Shillman, who named Wil-lett chief, executive officer of the chief executive officer of Cognes in 2011. Willett already was president and chief operat-was president and chief operat-

proud to join Doctor Doub in this historic race. Willest said. Though I was born in England in Though I was born in England and ann incligible to hold office.

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national discourse on the impor-tance of vision to companies it the U.S. and around the world.

Our Surface Inspection Systems Division (SISD) also had a great year, growing revenue 12% to a record \$48 million. Under new senior leadership, SISD's product margins expanded from 48% in 2010 to 53% in 2011 thanks to decreased costs and improved pricing. In 2011, business increased substantially from paper industry customers who upgraded their factories, and Chinese steel manufacturers who installed surface inspection systems to capitalize on their growing share of the global steel market.

Unfortunately, certain segments of our business slowed in 2011 due to situations beyond our control, such as the devastating earthquake and tsunami in Japan. Although no Cognoids were hurt by these catastrophic events, the fallout from the disasters and a cyclical downturn in the semiconductor and electronics capital equipment (SEMI) market combined to drive down revenue from Japan by \$10 million, 17% below 2010. Good news in what was a Shillman Names B.I.G. Running Mate difficult year for Japan is that business through our collaboration with Mitsubishi grew by more than 30% over 2010, helping us gain market share on the Japanese factory floor. Sales also softened in the second half of 2011 in the solar industry as a result of reduced government subsidies, and in consumer electronics due to weaker demand.

As our sales force and channel partners were bringing in business, Cognex engineers were designing products to fuel future growth. In fact, we launched the largest number of new products in Cognex history in 2011, and we have a strong product pipeline slated for introduction over the next 18 months. Our most exciting product launch in 2011 was the DataMan 500 ID reader, which marked our entry into the \$150 million logistics barcode reading market, consisting of online retailers like Amazon.com and Staples.com, and the companies that handle their shipping, including the U.S. Postal Service, UPS and FedEx. ing officer of Country before his ing officer of Cognex before insolvenion to CEO of am yers before in proud to join Doctor Bob in proud to join Doctor Bob in

DataMan 500 is an image-based 1-D barcode reader that was designed from the ground up to have reading capabilities superior to laser-based systems regarded as the industry standard. Powered by our unique vision system-on-a-chip (Cognex VSoC™) and proprietary algorithms, DataMan 500 can read damaged, distorted, blurred, scratched, low-height and low-contrast codes on package labels both faster and more reliably than existing readers. The market response to the DataMan 500 has been fantastic. Soon after the product launched we received several large orders, all from customers new to Cognex!

Broadening our barcode-reading product line is a strategic focus for Cognex. Thanks to continued investment in engineering and sales channel development, we launched a record number of ID products over the last few years. The return on that investment has been outstanding. Revenue from ID products was \$60 million in 2011, representing 38% growth over 2010, and compound annual growth of 48% over the past 3 years.

Our In-Sight and Checker product lines generated a combined \$139 million of factory automation revenue in 2011, an increase of 18% over 2010. Not too shabby, for sure...but our marketing and engineering teams think we can do even better. So in true Cognoid spirit they're working hard to add new features and functionality, which we expect will expand the use of Cognex vision on the factory floor.

## **Cognex Culture**

An important aspect of Cognex culture is its community giving initiative. Each year the company donates to worthy causes in towns and cities where it has major offices. In 2011, Cognex supported the following causes:

Portland, OR: Training guide dogs for the visually impaired

Milwaukee, WI: Independent living programs for visually impaired senior citizens

**Cork, Ireland:** Annual cycling competition to raise funds to train guide dogs for the visually impaired

Tokyo, Japan: Training guide dogs for the visually impaired; Public elementary school science and math education; Earthquake and tsunami relief

Alameda, CA: Alcohol- and drug-free high school grad night celebrations; Public school science camp programs Natick, MA: July 4th parade and fireworks; Annual children's Halloween celebration; After-school tutoring for students grades 2-12; Science, technology, engineering and math education support for public schools; Technology infrastructure upgrades for public schools; Alcohol- and drug-free after-prom celebration; Middle and high school robotics competition sponsorship; Middle school math team sponsorship; Independent living programs for the visually impaired

### **Cognex Culture Camp**

FastCompany.com recently highlighted the power of a strong company culture ("Culture Eats Strategy for Lunch"). But this is nothing new at Cognex, and as our company grows, so will our culture. For the first time, Cognoids from 11 offices around the world gathered in Natick to discuss what it means to be a Cognoid, and to plan exciting and motivational events for their local offices. Doctor Bob's new title, Chief Culture Officer, reflects his and the company's commitment to preserving and enhancing its "Work Hard, Play Hard, Move Fast" culture at every Cognex office around the world.



"Cognex is now recognized as the leading machine vision brand in China."

BALLOT Total Revenue (\$ million)

\$325 5260 When the dust had settled on 2011, Cognex successfully grew our global presence in developed machine vision markets and emerging regions that we believe hold high potential for future growth. The most exciting of these is China, which we define as the Peoples' Republic of China (PRC), Hong Kong and Taiwan. China's large manufacturing base is investing heavily in state-of-the art, highly-automated facilities that incorporate machine vision.

We aim to win the majority of this business, so we added Cognoids to our existing Chinese sales and service organization, and opened new offices in major industrial centers. What's more, we expanded our network of partners. This includes both local distributors to complement our direct sales force and system integrators who provide greater access to the Chinese factory floor.

These investments in China are already paying off. Our Chinese factory automation business in 2011 increased 65% year over year, and Cognex is now recognized as the leading machine vision brand in China. BALLOT RD&E Expenses (\$ m)

Although the weaker consumer electronics industry has cooled our white-hot pace in China, it is still

growing faster than the rest of our business and we expect strong growth from China over the medium

Is our future bright? We think so. Although I can't predict the future, my management team and I took several steps in 2011 to increase the likelihood of a bright one for Cognex. We invested nearly \$41 million in research, development and engineering, up almost \$8 million over 2010. This is indicative of our commitment to innovation and our willingness to invest in our business for long-term growth. We increased our investment in sales by

\$11 million, adding salesmen and channel partners around the globe. And we increased our marketing investment by \$3 million to target and raise visibility with new customers and early adopters of machine vision.

Even with those significant investments, we were highly profitable, delivering 22% of revenue to the bottom line. As Doctor Bob describes in his Chairman's letter, we shared our success with those who contributed to it, both inside and outside the company. As a candidate of the B.I.G. Campaign, I'm proud of the good Cognex has done for our customers, employees, vendors and shareholders, and for the communities where we live and work.

Now we look forward to 2012. Though many companies are facing challenges due to global economic uncertainty, Cognex is well positioned to deliver on our strategic initiatives. And regardless of the economic climate, we will stay true to our core values and the unique "Work Hard, Play Hard, Move Fast" entrepreneurial culture that fueled our previous successes.

40

Thank you...and remember to vote B.I.G.!

Robert J. Willett

President and Chief Executive Officer



### **Board of Directors and Management**

### **Board of Directors**

Robert J. Shillman

Chairman and Chief Culture Officer

Cognex Corporation

Patrick A. Alias

Senior Vice President Cognex Corporation

Jerald G. Fishman

President and Chief Executive Officer

Analog Devices

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

### **Corporate 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

Bhaskar Banerjee

Director and Business Unit Manager, Vision Systems

Carl Gerst

Vice President and Business Unit Manager, ID Products

Todd Keebaugh

Vice President, Legal Services

Joerg Kuechen

Senior Director and Business Unit Manager, Vision Sensors

Didier Lacroix

Senior Vice President, MVSD Worldwide Sales and Marketing

Herbert Lade

Vice President, Operations

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

Peter Neve

Vice President, Global Marketing

Steven Randazzo

Vice President and General Manager, SISD

Dirk Rathsack

Vice President, MVSD Sales and Service, Europe

Kiyoshi Shima

President, Cognex K.K.

Hisataka Shitara

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

William Silver

Senior Vice President and Senior Fellow

### **Shareholder Information**

### **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 http://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 address below. Or, request information online at http://www.cognex.com.

### **Department of Investor Relations**

Cognex Corporation
One Vision Drive
Natick, Massachusetts 01760

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. Please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations – Forward-Looking Statements" in Part II – Item 7 of the Annual Report on Form 10-K included with this report for a discussion regarding risks associated with these statements.

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### Design

PointOne Marketing & Design www.pointonemarketing.com

### **Photography**

David Shopper www.davidshopper.com



Scan this code with your smartphone to see more about the B.I.G. Party, or visit http://investor.cognex.com/2011/



# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549





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(Mark One) [X] Annual report pursuant to Section 13 or 15(d) of the Sec	curities Exchange Act of 1934 for the fiscal year ended
<u>December 31, 2011</u> or	Washing
[ ] Transition report pursuant to Section 13 or 15(d) of t from to	he Securities Exchange Act of 1934 for the Hansillen period
Commission File N	umber 001-34218
COGNEX CO	RPORATION
(Exact name of registrant a	•
Massachusetts	04-2713778
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Visi	ion Drive
Natick, Massachu	usetts 01760-2059 50-3000
(Address, including zip co including area code, of p	de, and telephone number, rincipal executive offices)
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	issuer, as defined in Rule 405 of the Securities Act.
Yes X	No
Indicate by check mark if the registrant is not required to file report	***
V	
Yes	NoX
Indicate by check mark whether the registrant (1) has filed all repeatchange Act of 1934 during the preceding 12 months (or for streports), and (2) has been subject to such filing requirements for the	uch shorter period that the registrant was required to file such
Yes X	No
Indicate by check mark whether the registrant has submitted ele Interactive Data File required to be submitted and posted pursuan (or for such shorter period that the registrant was required to subm	t to Rule 405 of Regulation S-T during the preceding 12 months
Yes X	No
Indicate by check mark if disclosure of delinquent filers pursuant not be contained, to the best of the registrant's knowledge, in defir in Part III of this Form 10-K or any amendment to this Form 10-K.	to Item 405 of Regulation S-K is not contained herein, and will
Indicate by check mark whether the registrant is a large accelerate reporting company. See the definitions of "large accelerated file 12b-2 of the Exchange Act. (Check one):	ed filer, an accelerated filer, a non-accelerated filer, or a smaller r," "accelerated filer" and "smaller reporting company" in Rule
∠ Large accelerated filer	☐ Non-accelerated filer ☐ Smaller reporting company
(Do not check if a smalle	er reporting company)
Indicate by check mark whether the registrant is a shell company (	
Yes	No X
Aggregate market value of voting stock	
as of July 3, 2011:	\$1,399,855,127
\$.002 par value common stock outstanding a	as of January 29, 2012: 42,419,311 shares
DOCUMENTS INCORPORATED BY REFERENCE:	t to Demulation 144 within 100 days of the and of the first war.
The registrant intends to file a Definitive Proxy Statement pursuan	it to negulation 144 within 120 days of the end of the fiscal year

The registrant intends to file a Definitive Proxy Statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2011. Portions of such Proxy Statement are incorporated by reference in Part III of this report.

# COGNEX CORPORATION ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2011

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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 Alameda, California. MVSD develops, manufactures, and markets modular vision systems that are used to automate the manufacture of discrete items, such as cellular phones, aspirin bottles, and automobile wheels, by locating, identifying, inspecting, and measuring them during the manufacturing 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 85% of total revenue in 2011. Financial information about these segments may be found in Note 19 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		en te distribuir.
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, medical devices, and solar. 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 73% of total revenue in 2011, compared to 69% of total revenue in 2010.

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 12% of total revenue in 2011, compared to 16% of total revenue in 2010.

Surface inspection customers, which 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 15% of total revenue in both 2011 and 2010.

No customer accounted for greater than 10% of total revenue in 2011, 2010, or 2009.

### **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 July 2008, we sold all of the assets of our lane departure warning business for \$3 million. We entered this business in May 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 the second quarter of 2008, we determined that this business did not fit the Cognex business model, primarily because car and truck manufacturers want 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 September 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.

Additional information about acquisitions may be found in Note 20 to the Consolidated Financial Statements, appearing in Part II – Item 8 of this Annual Report on Form 10-K.

### **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, 2011, Cognex employed 210 professionals in RD&E, many of whom are software developers. Cognex's RD&E expenses totaled \$40,946,000 in 2011, \$33,080,000 in 2010, and \$31,132,000 in 2009, or approximately 13%, 11%, and 18% 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 the Company's 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. The Company's 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 Alameda, California facility. The manufacturing process at the Alameda 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, 2011, Cognex's sales force consisted of 335 professionals, and our partner network consisted of approximately 197 active integrators and 244 authorized distributors. Sales engineers call directly on targeted accounts and manage the activities of our partners within their terri-

tories 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. During the third quarter of 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 the second quarter of 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 66% of total revenue in 2011, compared to approximately 67% of total revenue in 2010. In 2011, approximately 33% of the Company's total revenue came from customers based in Europe, 16% from customers based in Japan, and 17% from customers based in Southeast Asia. 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 Southeast Asia are denominated in U.S. Dollars as well as Yuan for sales within Mainland China. Financial information about geographic areas may be found in Note 19 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, 2011, Cognex had been granted, or owned by assignment, 287 patents issued and had another 206 patent applications pending. 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®, Vision-Pro®, In-Sight®, Checker®, DataMan®, IDMax®, and Smart View®, as well as many common-law marks, including, among others, SmartAdvisor™, SmartSystem™, and Cognex VSoC™.

### **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 vary depending upon market segment, geographic region, and application niche. Our competitors are typically other vendors of machine vision systems and manufacturers of image processing systems and sensors. In addition, in the semiconductor and electronics capital equipment market, and selling 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, 2011, backlog totaled \$43,412,000, compared to \$37,428,000 as of December 31, 2010. Backlog reflects customer purchase orders for products scheduled for shipment primarily within 60 days at MVSD and six months at SISD. The MVSD backlog excludes deferred revenue, while the SISD backlog includes deferred revenue. 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, 2011, Cognex employed 919 persons, including 470 in sales, marketing, and service activities; 210 in research, development, and engineering; 105 in manufacturing and quality assurance; and 134 in information technology, finance, and administration. Of the Company's 919 employees, 457 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 <a href="www.cognex.com">www.cognex.com</a>. We make available, free of charge, on our website in the "Company" section under the caption "Investor 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 <a href="www.sec.gov">www.sec.gov</a>. 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 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 increased in 2010 and 2011, our ability to maintain these business volumes and continue to grow may be impacted by global economic conditions, including the current uncertainty surrounding the European economy. If global economic conditions 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, 2011, the Company had approximately \$351 million in either cash, cash equivalents, or debt 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 2011, approximately 12% 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.

# 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. We introduced the DataMan 500 image-based barcode reader in January 2011 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 2011, approximately 66% 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. During the third quarter of 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 the second quarter of 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 and other derivative instruments 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. In addition, although the use of these derivative instruments may be effective in minimizing foreign currency gains or losses, significant cash inflows or outflows may result when these instruments are settled.

A significant portion of our investment portfolio, and therefore our investment income, is denominated in Euros. In addition, 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 for sales in Southeast Asia. We estimate that approximately 46% of our sales in 2011 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 2011, 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 plan. 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 are dependent 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 in order to be able 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 software 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. 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 vary depending upon market segment, geographic region, and application niche. Our competitors are typically other vendors of machine vision systems and manufacturers of image processing systems and sensors. 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, 2011, the Company had \$319 million of investments, of which \$313 million consisted of debt securities. The remaining investment balance of \$6 million represented a limited partner-ship 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). As of December 31, 2011, the Company's portfolio of debt securities had a net unrealized gain of \$127,000. Included in this net gain, however, were gross unrealized losses totaling \$1,086,000, of which \$1,074,000 was in a loss position for less than twelve months. The Company's portfolio of debt securities consists of treasury bills issued by the U.S. and foreign governments, municipal bonds issued by state and local government entities, corporate bonds issued by domestic and foreign companies, agency bonds issued by domestic and foreign government agencies and government-sponsored enterprises, sovereign bonds issued directly by foreign governments, and covered bonds backed by governments, mortgages, or public sector loans. Given the current economic climate, specifically in Europe, our investments in international debt securities may be at risk for impairment.

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, the investment does not have a readily determinable market value, and therefore, does not qualify for fair value accounting. As of December 31, 2011, the carrying value of this investment was \$5,933,000 compared to an estimated fair value of \$7,460,000. 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 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 the Company's 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, 2011, the Company had \$19 million in acquired intangible assets, of which \$16 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, 2011, the Company 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.

We continue to devote significant resources to various business system enhancement projects, including an upgrade to the most recent version of our PeopleSoft Enterprise Resource Planning (ERP) system and the implementation of a new Customer Relationship Management (CRM) system, both planned for 2012. These types of business system projects have the potential to 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 headquarters. 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 2015.

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 Commission 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-in-part 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 is scheduled before the United States Court of Appeals for the Federal Circuit on February 10, 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 AND OTHER MEMBERS OF THE MANAGEMENT TEAM OF THE REGISTRANT

The following table sets forth the names, ages, and titles of Cognex's executive officers as of December 31, 2011:

Name	Age	<u>Title</u>
Robert J. Shillman	65	Chairman of the Board of Directors and Chief Culture Officer
Robert J. Willett	44	President and Chief Executive Officer
Richard A. Morin	62	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.

Messrs. Shillman and Morin have been employed by Cognex in their present capacities 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. On March 16, 2011, the Board of Directors elected Robert J. Willett as Chief Executive Officer of the Company. 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 29, 2012, there were approximately 600 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 2011 and 2010 were as follows:

	First	Second	Third	Fourth
2011				•
High	\$34.97	\$36.89	\$37.49	\$37.12
Low	24.61	28.00	26.02	24.91
2010				
High	\$19.81	\$22.59	\$27.40	\$31.63
Low	16.17	16.99	16.76	25.89

The Company declared and paid a cash dividend of \$0.05 per share in the first quarter of 2010. The quarterly dividend increased to \$0.06 per share in the second and third quarters of 2010, and to \$0.08 per share in the fourth quarter of 2010 and 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. 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 flows 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, 2011, 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 2010 or 2009. 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 equity incentive plans. 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 this program 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:

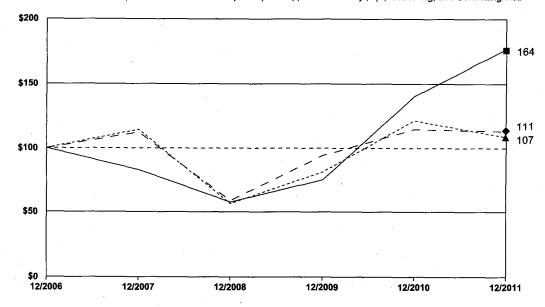
	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 3 – October 30, 2011		_	-	\$ 20,000,631
October 31 – November 27, 2011	-	-	-	\$100,000,631
November 28 – December 31,				
2011		-		\$100,000,631
Total	-	-	· -	\$100,000,631

Set forth below is a line graph comparing the annual percentage change in the cumulative total shareholder 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** Composite

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

<sup>\* \$100</sup> invested on 12/31/06 in stock or index-including reinvestment of dividends. Fiscal year ending December 31.

	12/06	12/07	12/08	12/09	12/10	12/11
Cognex Corporation	100.00	85.87	64.79	79.42	133.45	164.17
NASDAQ Composite	100.00	110.26	65.65	95.19	112.10	110.81
NASDAQ Stocks	100.00	111.93	63.74	84.57	117.95	107.25

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

#### **ITEM 6: SELECTED FINANCIAL DATA**

		Year E	nded December 31,	
	2011	2010	2009 2008	2007
Statement of Operations Date:	(	In thousands,	except per share amour	nts)
Statement of Operations Data: Revenue Cost of revenue (1)	\$321,914 77,919	\$290,691 77,588	\$175,727 \$242,68 56,387 68,42	
Gross margin Research, development, and engineering	243,995	213,103	119,340 174,25	3 161,333
expenses (1) Selling, general, and administrative expenses (1) Restructuring charges	40,946 117,694 -	33,080 104,235 75	31,132 36,26 96,350 112,62 4,526 25	9 99,813
Operating income (loss) Nonoperating income	85,355 1,762	75,713 390	(12,668) 25,10 2,292 10,26	4 28,136
Income (loss) from continuing operations before income tax expense (benefit) Income tax expense (benefit) on continuing operations	87,117	76,103	(10,376) 35,36 (5,507) 4,86	
Income (loss) from continuing operations Loss from operations of discontinued business,	17,248 69,869	14,722 61,381	(5,507) 4,869 (4,869) 30,49	
net of tax	-		- (3,22	
Net income (loss)	\$ 69,869	\$ 61,381	<u>\$ (4,869)</u> <u>\$ 27,27</u>	5 \$ 26,899
Basic income (loss) per weighted-average common			•	
share: Income (loss) from continuing operations Loss from discontinued operations	\$ 1.67 \$ 0.00			
Net income (loss)	\$ 1.67	\$ 1.54	\$ (0.12) \$ 0.6	6 \$ 0.62
Diluted income (loss) per weighted-average common and common-equivalent share: Income (loss) from continuing operations	\$ 1.63	\$ 1.52	\$ (0.12) \$ 0.73	3 \$ 0.63
Loss from discontinued operations	\$ 0.00	•	, , , ,	
Net income (loss)	\$ 1.63	\$ 1.52	\$ (0.12) \$ 0.66	6 \$ 0.61
Weighted-average common and common- equivalent shares outstanding: Basic	41,859	39,924	39,659 41,43	7 43,725
Diluted	42,762	40,297	39,659 41,554	
Cash dividends per common share	\$ 0.36		\$ 0.30 \$ 0.4	
(1) Amounts include stock-based compensation expense, as follows:		· · · · · · · · · · · · · · · · · · ·		
Cost of revenue Research, development, and engineering Selling, general, and administrative	\$ 628 2,268 5,172	\$ 278 1,020 1,729	\$ 774 \$ 1,116 2,163 3,06 6,286 6,046	7 3,239
Total stock-based compensation expense	\$ 8,068	\$ 3,027	\$ 9,223 \$ 10,23	1 \$ 11,715
			December 31,	
	2011	2010	2009 2008	2007
Polongo Shoot Data		. (	In thousands)	
Balance Sheet Data: Working capital Total assets Shareholders' equity	\$231,241 611,881 552,980	\$224,573 533,104 473,311	\$210,674 \$213,374 439,869 474,043 394,448 413,075	7 539,546

## 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, and growth 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 inability to penetrate new markets; (4) the inability to achieve significant international revenue; (5) fluctuations in foreign currency exchange rates; (6) the loss of a large customer; (7) the inability to attract and retain skilled employees; (8) the reliance upon key suppliers to manufacture and deliver critical components for our products; (9) the failure to effectively manage product transitions or accurately forecast customer demand; (10) the inability to design and manufacture high-quality products; (11) the technological obsolescence of current products and the inability to develop new products; (12) the failure to properly manage the distribution of products and services; (13) the inability to protect our proprietary technology and intellectual property; (14) our involvement in time-consuming and costly litigation; (15) the impact of competitive pressures; (16) the challenges in integrating and achieving expected results from acquired businesses; (17) potential impairment charges with respect to our investments or for acquired intangible assets or goodwill; (18) exposure to additional tax liabilities; and (19) 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 forward-looking 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 that are used to automate the manufacture 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, health and beauty, pharmaceutical, medical devices, and solar. 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 73% of total revenue in 2011, compared to 69% of total revenue in 2010.

- 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 12% of total revenue in 2011, compared to 16% of total revenue in 2010.
- Surface inspection customers, which 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 15% of total revenue in both 2011 and 2010.

Revenue for the year ended December 31, 2011 totaled \$321,914,000, representing an increase of 11% over the prior year. While sales in the cyclical semiconductor and electronics capital equipment market declined from 2010, sales in the factory automation and surface inspection markets reached record levels for both the fourth quarter and full year of 2011. The higher revenue contributed to a gross margin of 76% of revenue in 2011, compared to 73% of revenue in 2010. Operating expenses increased by \$21,250,000 over the prior year due primarily to expenses associated with increased headcount in strategic areas, the unfavorable impact of changes in foreign currency exchange rates, and higher stock-based compensation expense. The Company generated net income of \$69,869,000, or 22% of revenue, in 2011, compared to net income of \$61,381,000, or 21% of revenue, in 2010.

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

	2011	2010	2009
Revenue	100%	100%	100%
Cost of revenue	24	27	32
Gross margin	76	73	68
Research, development, and engineering expenses	13	11	18
Selling, general, and administrative expenses	37	36	54
Restructuring charges	-		3
Operating income (loss)	27	26	(7)
Nonoperating income			1
Income (loss) before income tax expense (benefit)	27	26	(6)
Income tax expense (benefit)	5	5	<u>(3</u> )
Net income (loss)	<b>22</b> %	<u>21</u> %	<u>(3</u> )%

Year ended December 31,

#### **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 on revenue, 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. The Company expects its ID business to continue to be a growth engine into 2012.

Sales to factory automation customers increased by \$3,429,000, or 6%, in the fourth quarter 2011 from the third quarter of 2011. During the fourth quarter of 2011, the U.S. Dollar strengthened relative to the Euro, resulting in lower revenue as sales denominated in Euros were translated to U.S. Dollars. Excluding the impact of foreign currency exchange rate changes on revenue, sales to factory automation customers increased by \$4,496,000, or 8%, in the fourth quarter of 2011 from the third quarter of 2011, primarily from customers in the Americas and to a lesser extent Europe, where economic conditions are more uncertain. Revenue trends in Japan and Asia during the second half of 2011 have been negatively impacted by a slowdown in the consumer electronics industry, which overshadowed positive forward momentum in the broader factory automation market.

#### 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 on revenue, 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.

Revenue for this market has declined sequentially in each quarter of 2011. 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 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 on revenue, 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.

Sales to surface inspection customers increased by \$4,196,000, or 35%, in the fourth quarter of 2011 from the third quarter of 2011. 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 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 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 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. 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 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 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 10 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 30<sup>th</sup> 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, 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%.

#### **RESULTS OF OPERATIONS**

#### Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

#### Revenue

Revenue for the year ended December 31, 2010 increased by \$114,964,000, or 65%, from the prior year due to higher sales in all of the Company's primary markets. A stronger U.S. Dollar relative to the Euro, on average, in 2010 compared to 2009, resulted in lower revenue, as sales denominated in Euros were translated to U.S. Dollars. This impact was offset, however, by the favorable impact on revenue of a weaker U.S. Dollar relative to the Japanese Yen.

#### Factory Automation Market

Sales to manufacturing customers in the factory automation market represented 69% of total revenue in 2010 compared to 70% of total revenue in 2009. Sales to these customers increased by \$76,303,000, or 62%, from the prior year. Revenue in 2009 included \$4,400,000 related to an arrangement with a single customer for which product was shipped in 2007 and 2008, but revenue was deferred until the final unit was delivered in the first quarter of 2009. Revenue in 2010 included \$6,500,000 related to an arrangement with another 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. In addition, revenue in 2010 included \$2,505,000 related to the adoption of new revenue recognition rules that would have been deferred under the previous guidance. Excluding the recognition of the revenue noted above, sales to these customers increased by \$71,698,000, or 60%, from the prior year. Management believes that excluding this revenue from the growth in factory automation sales allows investors to more accurately assess business trends.

Revenue levels in 2009 were adversely impacted by the worldwide economic slowdown that first began to affect the Company's business in the third quarter of 2008. During the slowdown, the Company continued to invest in developing and marketing new factory automation products and expanding its global factory automation sales force and partner network. Demand for the Company's factory automation

products increased sequentially in each quarter of 2010 and was at a record level during the fourth quarter of 2010. The largest dollar increases year over year were experienced in the Americas and Europe, where the Company has a broad base of factory automation customers. The largest percentage increases were experienced in Japan, where the Company has invested in a partnership with Mitsubishi Electric Corporation to help grow its factory automation business in this region, and in Southeast Asia, where the Company has expanded its sales and support infrastructure, particularly in China, in order to access more of the machine vision market for this high-potential region.

#### Semiconductor and Electronics Capital Equipment Market

Sales to customers who make automation equipment for the semiconductor and electronics industries represented 16% of total revenue in 2010 compared to 9% of total revenue in 2009. Sales to these customers increased by \$31,828,000, or 208%, from the prior year. Geographically, revenue increased most significantly in Japan where many of the Company's semiconductor and electronics capital equipment customers are located. The adoption of the new revenue recognition rules did not have a material impact on revenue from these customers in 2010.

Although revenue levels were significantly higher than the prior year, business in this market in 2009 was adversely impacted by the worldwide economic slowdown. Furthermore, demand in this market has declined sequentially in each quarter since the second quarter of 2010. This business continues to be impacted by the shift to software-only products, which have higher gross margins but average lower selling prices than a complete vision system with embedded hardware.

#### Surface Inspection Market

Sales to surface inspection customers represented 15% of total revenue in 2010 compared to 21% of total revenue in 2009. Revenue from these customers increased by \$6,833,000, or 19%, from the prior year. In addition, surface inspection revenue increased on a sequential basis in each quarter of 2010 and was at a record level during the fourth quarter of 2010. This increase can be attributed to overall growth in the segment's base business, the Smart View® product line, as well as incremental revenue earned as a result of the Company's acquisition and development of the SmartAdvisor™ product line. However, due to the relatively large average order values at SISD, the revenue reported for sales to surface inspection customers in each quarter can vary significantly depending upon the timing of customer orders, system deliveries, and installations, as well as the impact of revenue deferrals. The adoption of the new revenue recognition rules did not have a material impact on revenue from these customers in 2010.

#### Product Revenue

Product revenue increased by \$105,084,000 in 2010 or 66%, from the prior year due to a significantly higher volume of vision systems sold, slightly offset by lower average selling prices, as the Company introduced new products at lower price points. A higher percentage of revenue from the sale of software-only products, which have relatively low selling prices, also contributed to the decrease in average selling prices from the prior year. Product revenue in 2009 included \$4,400,000 related to an arrangement with a single customer for which product was shipped during 2007 and 2008, but revenue was deferred until the final unit was delivered in the first quarter of 2009.

#### Service Revenue

Service revenue, which is derived from the sale of maintenance and support, education, consulting, and installation services, increased by \$9,880,000 in 2010 or 57%, from the prior year. In 2010, this 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. The remaining increase was due primarily to higher revenue from main-

tenance and support arising from a higher level of spare part sales and repair services, as well as higher revenue from consulting and installation services. Service revenue decreased as a percentage of total revenue to 9% in 2010 from 10% in 2009.

#### **Gross Margin**

Gross margin as a percentage of revenue was 73% for 2010 compared to 68% for 2009. This increase was primarily due to higher MVSD product margins and a higher percentage of total revenue from the sale of modular vision systems, which have higher margins than the sale of surface inspection systems.

#### MVSD Margin

MVSD gross margin as a percentage of revenue was 78% in 2010 compared to 74% in 2009. In 2010, MVSD margin included \$6,500,000 of revenue from a customer arrangement with a 51% margin, which decreased the MVSD margin by one percentage point, while in 2009, MVSD margin included \$4,400,000 of revenue from a customer arrangement with a 92% margin, which increased the MVSD margin by one percentage point. Excluding the recognition of these specific customer arrangements, the MVSD gross margin as a percentage of revenue was 79% in 2010 compared to 73% in 2009. The increase in MVSD margin was primarily due to higher product margins resulting from improved absorption of manufacturing overhead costs, relatively flat new product introduction costs spread over a higher revenue base, and lower provisions for excess and obsolete inventory. A higher percentage of revenue from the sale of software-only products, which have relatively high margins, also contributed to the increase in product margin from the prior year.

#### SISD Margin

SISD gross margin as a percentage of revenue was 44% in 2010 compared to 46% in 2009. The decrease in SISD margin was primarily due to a shift in mix of sales to lower-margin paper sales, higher discounting of products in response to competitive market pressures, and costs incurred in 2010 to start up a manufacturing operation in China. Although the Company achieved cost savings from the closure of its Kuopio, Finland facility late in 2009, certain of the manufacturing positions that were terminated in Finland were replaced at the division's headquarters in Alameda, California, resulting in minimal impact on the SISD margin.

#### Product Margin

Product gross margin as a percentage of revenue was 77% in 2010 compared to 72% in 2009. This increase was primarily due to higher MVSD product margins as described above, as well as a higher percentage of total revenue from the sale of modular vision systems, which have higher margins than the sale of surface inspection systems.

#### Service Margin

Service gross margin as a percentage of revenue was 41% in 2010 compared to 35% in 2009. This increase was primarily due to a shift in mix to higher-margin spare parts, repair, and consulting services, as well as improvements in product ease of use that resulted in lower technical support costs. Consulting services included \$6,500,000 of revenue from a single customer arrangement recorded in 2010 with a margin of 51%.

#### **Operating Expenses**

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses in 2010 increased by \$1,948,000, or 6%, from the prior year. MVSD RD&E expenses increased by \$1,821,000, or 7%, and SISD RD&E expenses increased \$127,000, or 4%.

The table below details the \$1,821,000 net increase in MVSD RD&E in 2010:

MVSD RD&E balance in 2009	\$27,936
Stock-based compensation expense	(1,068)
Company bonus accruals	2,052
Vacation	645
Other	192
MVSD RD&E balance in 2010	\$29,757

The lower stock-based compensation expense was due to the declining trend in the number of options granted, the accelerated expense taken in the fourth quarter of 2009 related to unvested options tendered by employees in the Company's cash tender offer for certain underwater stock options, and higher estimated forfeiture rates in 2010. These savings were offset by the impact of stock options that were granted late in the second quarter of 2010 as part of the Company's annual program. In addition, expenses increased as a result of company bonus accruals recorded during 2010 as the Company returned to profitability and higher vacation expense in 2010 as the Company did not continue the mandatory shutdown programs employed in 2009.

Although a work force reduction in the second quarter of 2009, primarily in the United States, reduced personnel-related costs in 2009, the Company increased RD&E headcount in strategic areas in 2010 due to the improved business climate, resulting in relatively flat personnel-related costs year over year. The majority of the headcount increase was in lower-cost regions, such as Hungary.

The increase in SISD RD&E expenses for 2010 was due to company bonus accruals recorded in 2010 (\$149,000) and increased materials costs related to product development efforts (\$136,000). These higher expenses were offset by lower personnel-related costs due to the closure of the division's Kuopio, Finland facility late in 2009 (\$240,000).

#### Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses in 2010 increased by \$7,885,000, or 8%, from the prior year. MVSD SG&A expenses increased by \$3,520,000, or 5%, while SISD SG&A expenses were relatively flat. Corporate expenses that are not allocated to either division increased by \$4,320,000, or 38%.

The table below details the \$3,520,000 net increase in MVSD SG&A in 2010:

MVSD SG&A balance in 2009	\$73,752
Stock-based compensation expense	(4,437)
Intangible asset impairment	(1,000)
Sales commissions	4,875
Marketing and promotional expenses	2,166
Company bonus accruals	2,023
Other	(107)
MVSD SG&A balance in 2010	\$77,272

The lower stock-based compensation expense was due to the declining trend in the number of options granted, the accelerated expense taken in the fourth quarter of 2009 related to unvested options ten-

dered by employees, higher estimated forfeiture rates in 2010, and higher credits related to forfeited options in 2010. These savings were offset by the impact of stock options that were granted late in the second quarter of 2010 as part of the Company's annual program. A \$1,000,000 intangible asset impairment charge in the first quarter of 2009 also contributed to the decrease in SG&A expenses. Offsetting these savings were higher sales commissions related to the increase in revenues over the prior year, higher spending on marketing and promotional expenses intended to grow factory automation revenue, and company bonus accruals recorded during 2010 as the Company returned to profitability.

Although a work force reduction in the second quarter of 2009 reduced personnel-related costs in 2009, the Company increased SG&A headcount in strategic areas in 2010 due to the improved business climate, resulting in relatively flat personnel-related costs year over year. The majority of this headcount increase was in lower-cost regions, such as China.

There were no significant changes to SISD SG&A expenses from the prior year.

The increase in corporate expenses was due to higher legal fees primarily related to patent-infringement actions (\$1,463,000), company bonus accruals recorded in 2010 (\$1,629,000), and higher tax service fees related to the settlement of the Competent Authority tax case with Japan (\$312,000). In addition, a majority of the remaining increase is due to expenses for the Company's President, which were transferred from MVSD into the corporate group upon his promotion in January 2010, as he then became responsible for both divisions.

#### Restructuring Charges

#### November 2008

In November 2008, the Company announced the closure of its MVSD facility in Duluth, Georgia. The \$12,000 balance in this restructuring accrual as of December 31, 2009 was paid in the first quarter of 2010, thereby concluding this restructuring program.

#### April 2009

In April 2009, the Company implemented a variety of cost-cutting measures at MVSD intended to more closely align the Company's cost structure with the lower levels of business at that time. Of the \$16,000 balance in this restructuring accrual as of December 31, 2009, \$4,000 was reversed in the first quarter of 2010, \$8,000 was paid in the first quarter of 2010, and \$4,000 was paid in the second quarter of 2010, thereby concluding this restructuring program.

#### September 2009

On October 1, 2009, which was part of the Company's fiscal September, the Company announced the closure of its SISD facility in Kuopio, Finland to achieve cost savings and production efficiencies. This SISD facility included a system assembly and integration team, a spare parts depot, and an engineering group dedicated to supporting the Company's SISD products, as well as finance and support staff.

The restructuring charge from these actions was \$584,000, all of which has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the SISD reporting segment. The following table summarizes this restructuring plan (in thousands):

	Incurred through December 31, 2010	Year Ended December 31, 2010
One-time termination benefits	\$365	\$ 63
Contract termination costs	153	(13)
Other associated costs	66	29
	<b>\$584</b>	\$ 79

One-time termination benefits included salary, which the Company was obligated to pay over the legal notification period, and severance for eight employees who were terminated. A liability for the termination benefits of those employees who were not retained to render service beyond the legal notification period was measured and recognized at the communication date. A liability for the termination benefits of those employees who were retained to render service beyond the legal notification period was measured initially at the communication date but was recognized over the future service period. Contract termination costs included rental payments for the Kuopio, Finland facility during the periods for which the Company did not receive an economic benefit, as well as lease cancellation costs. The costs related to rental payments were recognized in the fourth quarter of 2009 when the Company ceased using the facility. Lease cancellation costs had been recorded based upon management's estimates of those costs; however, a final settlement was recognized in the third quarter of 2010 when negotiations with the landlord concluded. Other associated costs included legal costs related to the employee termination actions and lease negotiations, as well as travel and transportation expenses between Kuopio and other Cognex locations related to the closure of the facility. These costs were recognized when the services were performed.

The following table summarizes the activity in the Company's restructuring reserve related to the closure of the Finland facility, which is included in "Accrued expenses" on the Consolidated Balance Sheets (in thousands):

	One-time Termination Benefits	Contract Termination Costs	Other Associated Costs	Total
Balance as of December 31, 2009	\$ 113	\$ 153	\$ -	\$ 266
Restructuring charges	63	-	29	92
Cash payments	(176)	(140)	(29)	(345)
Restructuring adjustments	-	(13)		(13)
Balance as of December 31, 2010	<b>\$</b> -	<u>\$ -</u>	<u>\$ -</u>	<u>\$</u>

#### Nonoperating Income (Expense)

The Company recorded foreign currency losses of \$328,000 and \$1,265,000 in 2010 and 2009, respectively. 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. In the second half of 2010, the Company began to record Yen-denominated accounts receivable on the books of its Japanese subsidiary, while in prior periods, these receivables were translated into Euros on the books of its Irish subsidiary, resulting in foreign currency gains or losses that the Company is no longer exposed to. 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 2010 decreased by \$764,000, or 35%, from the prior year. The decrease was primarily due to declining coupon rates on the Company's portfolio of debt 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. This change is expected to contribute to higher investment income in future periods.

The Company recorded other expense of \$703,000 in 2010 compared to income of \$1,372,000 in 2009. The Company recorded \$2,003,000 of other income in the first quarter of 2009 upon the expiration of the applicable 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. For a majority of 2010, these buildings were partially unoccupied.

#### Income Tax Expense (Benefit) on Continuing Operations

The Company's effective tax rate on continuing operations was a provision of 19% in 2010, compared to a benefit of 53% in 2009.

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 effective tax rate for 2009 included the impact of the following discrete events: (1) a decrease in tax expense of \$3,150,000 from the expiration of the statutes of limitations for certain reserves for income taxes, (2) a decrease in tax expense of \$406,000 from the receipt of a state refund, and (3) a decrease in tax expense of \$51,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns and other year-end adjustments, partially offset by (4) an increase in tax expense of \$72,000 from the write-off of certain foreign tax credits. These discrete events changed the effective tax rate in 2009 from a benefit of 19% to a benefit of 53%.

The Company's effective tax rate excluding discrete events increased from a benefit of 19% of the Company's pre-tax loss in 2009 to a provision of 20% of the Company's pre-tax income in 2010 due to more of the Company's profits being earned in higher tax jurisdictions.

#### 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 \$357,440,000 as of December 31, 2011. The Company has established guidelines relative to credit ratings, diversification, and maturities of its investments that maintain liquidity.

The Company's cash requirements in 2011 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, the repurchase of common stock, and capital expenditures. Capital expenditures totaled \$7,820,000 in 2011 and consisted primarily of expenditures for computer hardware, computer software related to business system upgrades, manufacturing test equipment related to new product introductions, and building improvements at the Company's headquarters in Natick, Massachusetts.

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
2012	\$ 614	\$ 6,938	\$ 2,957	\$ 10,509
2013		-	2,273	2,273
2014	<u>-</u>	-	1,821	1,821
2015	-	-	1,281	1,281
2016		-	908	908
Thereafter	·	· <u> </u>	1,479	1,479
	\$ 614	\$ 6,938	\$ 10,719	\$ 18,271

In June 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, 2011, the Company had contributed \$19,886,000 to the partnership. No contributions were made and no distributions were received during 2011. 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 \$0.08 per share in the first quarter of 2011, a dividend of \$0.09 per share in the second and third quarters of 2011, and a dividend of \$0.10 per share in the fourth quarter of 2011 that totaled \$15,114,000 in 2011. On February 8, 2012, the Company's Board of Directors declared a cash dividend of \$0.10 per share payable in the first quarter of 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, primarily as a means to reduce the dilutive effect of employee stock options. As of December 31, 2011, the Company had repurchased 1,375,875 shares at a cost of \$30,000,000 under this program, including 337,078 shares at a cost of \$10,000,000 during 2011. 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 equity incentive plans. 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 this program 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 totaling \$5,354,000 as of December 31, 2011, of which \$558,000 will likely be paid within the next twelve

months and \$4,796,000 may be paid 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.

#### 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, 2011, the Company had approximately \$351,507,000 in either cash, cash equivalents, or debt 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, 2011, 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 sellingprice 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, 2011, the Company's investment balance totaled \$319,337,000, of which \$313,404,000 consisted of debt securities. These securities are reported at fair value, with unrealized gains and losses, net of tax, recorded in shareholders' equity as other comprehensive income (loss). As of December 31, 2011, the Company's portfolio of debt securities had net unrealized gains totaling \$127,000.

The remaining investment balance of \$5,933,000 represented 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. A Director of the Company was a General Partner of Venrock Associates through December 31, 2009. The Company's 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, the investment does not have a readily determinable market value, and therefore, does not qualify for fair value accounting. As of December 31, 2011, the carrying value of this investment was \$5,933,000 compared to an estimated fair value of \$7,460,000.

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.

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. In estimat-

ing the fair value of its debt securities, management takes into consideration 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 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 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 2011, 2010, or 2009. 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 20%, 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, 2011, the Company's reserve against accounts receivable was \$1,240,000, or 3% of the gross accounts receivable balance. A 10% difference in the reserve against accounts receivable as of December 31, 2011 would have affected net income by approximately \$99,000.

#### **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, 2011, the Company's reserve for excess and obsolete inventory totaled \$4,359,000, or 13% of the gross inventory balance. A 10% difference in inventory reserves as of December 31, 2011 would have affected net income by approximately \$349,000.

#### **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. The Company recorded an impairment loss on an intangible asset in 2009 based on lower revenue expected to be generated from the respective assets. No impairment losses were recorded in 2010 or 2011. 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 2011 analysis of goodwill. Based on 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 it performed under the two-step process as of October 4, 2010. This process 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.

#### **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, 2011, the Company's accrued warranty obligations amounted to \$2,097,000. A 10% difference in accrued warranty obligations as of December 31, 2011 would have affected net income by approximately \$168,000.

#### **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, 2011.

#### 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 and other derivative instruments 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.

#### **NEW PRONOUNCEMENTS**

Accounting Standards Update (ASU) 2011-04, "Fair Value Measurements: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs"

The amendments in this ASU change certain aspects of the fair value measurement guidance in Accounting Standards Codification (ASC) 820, "Fair Value Measurement" in order to make U.S. GAAP and international standards more consistent. These changes include the application of the concepts of highest and best use and valuation premise, introduction of an option to measure groups of offsetting assets and liabilities on a net basis, incorporation of certain discounts and premiums in fair value measurements, and measurement of the fair value of certain instruments classified in shareholders' equity. In addition, the amended guidance includes new fair value disclosure requirements, including, among other things, information about valuation techniques and unobservable inputs used in Level 3 fair value measurements and a narrative description of Level 3 measurements' sensitivity to changes in unobservable inputs. ASU 2011-04 must be applied prospectively and is effective for the first quarter of 2012. Management does not expect this ASU to have a material impact on the fair value of our investments portfolio or the related disclosure requirements.

### Accounting Standards Updates (ASU) 2011-05 and 2011-12, "Comprehensive Income"

The amendments in ASU 2011-05 revise the manner in which companies present comprehensive income in their financial statements in order to make U.S. GAAP and international standards more consistent. This ASU requires companies to report the components of comprehensive income in either a continuous statement of comprehensive income or in two separate but consecutive statements. In the two-statement approach, the first statement would present the components of net income, similar to the Company's current Consolidated Statements of Operations, while the second statement would include the components of other comprehensive income, as well as a cumulative total for comprehensive income.

In December 2011, the Financial Accounting Standards Board issued ASU 2011-12 to defer one provision of ASU 2011-05. The amendments in ASU 2011-12 defer the requirements under ASU 2011-05 to present reclassification adjustments by component in both the statement where net income is presented and the statement where other comprehensive income is presented. This deferral was prompted by users' concerns that the presentation requirements would be costly to implement and could add unnecessary complexity to financial statements.

Neither of these ASU's change the items that must be reported in other comprehensive income. Both Updates must be applied retrospectively beginning in the first quarter of 2012. At that time, management has elected to present other comprehensive income in two separate but consecutive statements.

#### Accounting Standards Update (ASU) 2011-08, "Testing Goodwill For Impairment"

In the third quarter of 2011, the Financial Accounting Standards Board issued an ASU aimed at simplifying entities' annual goodwill impairment test. This ASU is intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities an option to perform a qualitative assessment to determine whether further impairment testing is necessary. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011; however, early adoption is allowed. Management has elected to adopt this ASU early and has applied the provisions of this Update to its 2011 analysis of goodwill.

#### 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 3,790,000 U.S. Dollars for Euros at a weighted-average settlement price of 1.34 USD/Euro, with terms between one and three months, were outstanding as of December 31, 2011. At fair value, these instruments had a loss of \$87,000 as of December 31, 2011. In addition, the Company also had one outstanding forward contract to exchange 200,000,000 Japanese Yen for Euros at a settlement price of 102.20 JPY/Euro as of December 31, 2011. At fair value, this instrument had a loss of \$64,000 as of December 31, 2011.

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 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 for sales in Southeast Asia. We estimate that approximately 46% of our sales in 2011 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 portfolio of debt securities includes treasury bills, municipal bonds, corporate bonds, agency 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, 2011, the fair value of the Company's portfolio of debt securities amounted to \$313,404,000, with principal amounts totaling \$313,277,000, maturities that do not exceed five years, and a yield to maturity of 1.31%. 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, 90% of the investment portfolio as of December 31, 2011 have 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, 2011, 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 s an interest	securities given rate decrease	No change in interest rates	Valuation of se an interest ra	
	(100 BP)	(50 BP)		50 BP	100 BP
Municipal Bonds	\$125,696	\$124,706	\$123,716	\$122,727	\$121,737
Corporate Bonds	117,129	116,301	115,472	114,646	113,819
Agency Bonds	40,426	40,153	39,880	39,607	39,334
Sovereign Bonds	26,732	26,551	26,371	26,190	26,010
Covered Bonds	6,102	6,061	6,020	5,978	5,937
Treasury Bills	1,971	1,958	1,945	1,931	1,918
	\$318,056	\$315,730	\$313,404	\$311,079	\$308,755

#### Other Market Risks

As noted above, the Company's investments include a variety of debt securities held in both domestic and foreign portfolios. Given the current economic climate, specifically in Europe, the investments in the foreign portfolio may be subject to increased market risk.

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 majority of the partnership's portfolio consists of investments in early stage, private companies characterized by a high degree of risk, volatility, and illiquidity. A Director of the Company was a General Partner of Venrock Associates through December 31, 2009.

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, 2011, the carrying value of this investment was \$5,933,000 compared to an estimated fair value of \$7,460,000. 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 and subsidiaries as of December 31, 2011 and 2010, and the related consolidated statements of operations, shareholders' equity and comprehensive income (loss), and cash flows for each of the three years in the period ended December 31, 2011. 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, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011 in conformity with accounting principles generally acceptable 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 effectiveness of Cognex Corporation's internal control over financial reporting as of December 31, 2011, 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 9, 2012 expressed an unqualified opinion.

/s/ Grant Thornton LLP

Boston, Massachusetts February 9, 2012

## **COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF OPERATIONS**

	Year Ended December 31,						
		2011		2010		2009	
		(In thousands, except per shar				re amounts)	
Revenue Product Service	\$	297,310 24,604 321,914	\$	263,463 27,228 290,691	\$	158,379 17,348 175,727	
Cost of revenue Product	<del></del>	64,732 13,187 77,919		61,497 16,091 77,588		45,026 11,361 56,387	
Gross margin Product		232,578 11,417 243,995		201,966 11,137 213,103		113,353 5,987 119,340	
Research, development, and engineering expenses Selling, general, and administrative expenses		40,946 117,694		33,080 104,235 75		31,132 96,350 4,526	
Operating income (loss)		85,355 (504) 2,902 (636)		75,713 (328) 1,421 (703)		(12,668) (1,265) 2,185 1,372	
Income (loss) before income tax expense (benefit) Income tax expense (benefit)		87,117 17,248		76,103 14,722		(10,376) (5,507)	
Net income (loss)	\$	69,869	\$	61,381	\$_	(4,869)	
Net income (loss) per common and common-equivalent share: Basic	\$	1.67	\$	1.54	\$	(0.12)	
Diluted	<b>* \$</b>	1.63	\$	1.52	<u>∓</u> \$	(0.12)	
Weighted-average common and common-equivalent shares outstanding:	≚	<del></del>	<del>*</del>		<del>*</del>	39,659	
Basic	=	41,859	_	39,924	==		
Diluted	=	42,762	` <del>===</del>	40,297	=	39,659	
Cash dividends per common share	\$	0.36	\$	0.25	\$	0.30	

## **COGNEX CORPORATION – CONSOLIDATED BALANCE SHEETS**

	December 31,		
	2011	2010	
	(In thousands)		
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 38,103	\$ 33,203	
Short-term investments	144,431	147,823	
Accounts receivable, less reserves of \$1,240 and \$1,235 in 2011 and			
2010, respectively	48,206	45,901	
Inventories	28,098	22,717	
Deferred income taxes	6,880	6,302	
Prepaid expenses and other current assets	19,628	23,059	
Total current assets	285,346	279,005	
Long-term investments	174,906	102,055	
Property, plant, and equipment, net	31,744	29,596	
Deferred income taxes	15,919	15,555	
Intangible assets, net	18,910	23,130	
Goodwill Other assets	82,029 3,027	82,204	
Officer assers		1,559	
	<b>\$ 611,881</b>	\$ 533,104	
LIABILITIES AND SHAREHOLDERS' EQUITY Current liabilities:			
Accounts payable	\$ 7,098	\$ 7,153	
Accrued expenses	32,290	29,346	
Accrued income taxes	1,259	7,771	
Deferred revenue and customer deposits	13,458	10,162	
Total current liabilities	54,105	54,432	
Reserve for income taxes	4,796	5,361	
Commitments and contingencies (Note 10)	•	•	
Shareholders' equity:			
Common stock, \$.002 par value –			
Authorized: 140,000 shares, issued: 42,223 and 41,065 shares in			
2011 and 2010, respectively	84	82	
Additional paid-in capital	135,668	102,620	
Retained earnings	434,581	379,826	
Accumulated other comprehensive loss, net of tax	(17,353)	(9,217)	
Total shareholders' equity	552,980	473,311	
	\$ 611,881	\$ 533,104	

## **COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Year I	er 31,	
	2011	2010	2009
		(In thousands)	
Cash flows from operating activities:			
Net income (loss)	\$ 69,869	\$ 61,381	\$ (4,869)
Adjustments to reconcile net income (loss) to net cash			
provided by operations:		•	
Intangible asset impairment charge (Note 7)	-	-	1,000
Stock-based compensation expense	8,068	3,027	9,223
Depreciation of property, plant, and equipment	5,529	4,685	4,701
Amortization of intangible assets	4,227	5,124	4,879
Amortization of discounts or premiums on investments	6,383	3,195	1,512
Change in deferred income taxes	(425)	1,034	1,985
Tax effect of stock option exercises	(4,045)	(1,941)	472
Changes in operating assets and liabilities:			
Accounts receivable	(2,031)	(14,535)	(287)
Inventories	(5,743)	(6,190)	8,618
Accrued expenses	2,747	10,134	(3,208)
Accrued income taxes	(2,865)	9,567	(6,611)
Deferred revenue and customer deposits	3,316	(4,740)	(4,532)
Return of Japan tax deposit (Note 16)	_	9,336	_
Other	1,064	(3,734)	(600)
Net cash provided by operating activities	86,094	76,343	12,283
	60,094	70,343	12,200
Cash flows from investing activities:  Purchases of investments	(323,946)	(253,867)	(33,779)
Maturities and sales of investments	241,738	82,918	43,720
	•		(5,466)
Purchases of property, plant, and equipment	(7,820)	(5,852)	
Cash paid for business acquisitions, net of cash acquired		- 01 <i>E</i>	(4,941)
Cash received related to discontinued business		315	
Net cash used in investing activities	(90,028)	(176,486)	(466)
Cash flows from financing activities:			
Issuance of common stock under stock option and stock			
purchase plans	30,863	28,384	146
Payment of dividends	(15,114)	(10,014)	(11,897)
Repurchase of common stock	(10,000)	•-	-
Stock option buyback (Note 14)	-	(83)	(9,075)
Tax effect of stock option exercises	4,045	1,941	(472)
Net cash provided by (used in) financing activities	9,794	20,228	(21,298)
Effect of foreign exchange rate changes on cash	(960)		2,174
		''	
Net change in cash and cash equivalents	4,900	(86,628)	(7,307)
Cash and cash equivalents at beginning of year	33,203	119,831	127,138
Cash and cash equivalents at end of year	\$ 38,103	\$ 33,203	\$ 119,831
	<del></del>		

# COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS)

Shares . 39,655 . 10	Par Value \$79	Paid-in Capital \$ 73,280	Retained Earnings	Comprehensive Income (Loss)	Comprehensive Income (Loss)	
. 10	\$79	\$ 73.280				Shareholders' Equity
. 10	•		\$345,225	\$ (5,509)		\$413,075
	-	146		- (-,,		146
	-	9,223		-		9.223
	-	(9,158)	-			(9,158)
	-	(3,748)	-	-		(3,748)
	-	(472)	-	-		(472)
	-	-	(11,897)	• • • • • • • • • • • • • • • • • • •		(11,897)
	-	-	(4,869)	-	\$ (4.869)	(4,869)
	-	-	• •	(189)	(189)	(189)
	-	-	_	2,337	2,337	2,337
					\$ (2,721)	
39.665	\$79	\$ 69 271	\$328.459	\$ (3.361)		\$394,448
1.400	4		Ψ020,400	Ψ (0,501)		28,384
· -	-	,	_			3.027
_	٠ -		-	_		1,941
. <del>-</del>	-	-	(10,014)	-		(10,014)
_	_	_	61 381		\$61 381	61.381
_	_	_	01,001	(507)		(507)
	_		-			(5,349)
				(5,515)	\$55,525	(0,010)
41.065		¢100 coo	£070.006	£ (0.047)		
1 405	* -		<b>\$379,820</b>	\$ (9,217)		\$473,311
1,495	-		-	-		30,863
_	-		-	-		8,068 4.045
_	_	•	_	-		4,045 74
(337)	(1)		-	-		(10.000)
(55.)	-	(0,000)	(15 114)	_		(15,114)
			(10,114)			(10,114)
-	-	-	69,869	-	\$69,869	69,869
-	-	-	-	355	355	355
	-	-		(8,491)	(8,491)	(8,491)
					\$61,733	
42,223	\$84	\$135,668	\$434,581	\$(17,353)		\$552,980
	. 39,665 . 1,400 	39,665 \$79 1,400 3 41,065 \$82 1,495 3 (337) (1)			(3,748) (11,897) (11,897) (11,897) (11,897) (11,897) (11,897) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) (189) (189) (189) (189) - (189) (189) (189) (189) - (189) - (189) (189) - (189) - (189) (189) - (189) - (189) - (189) -	

#### **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 income (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.

#### 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 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). Realized gains and losses are included in current operations, along with the amortization of the discount or premium 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.

The Company monitors the carrying value of its investments 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 other-than-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 \$2,706,000 and \$3,876,000 as of December 31, 2011 and 2010, 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 sub-

#### **NOTE 1: Summary of Significant Accounting Policies (continued)**

ject 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

#### **NOTE 1: Summary of Significant Accounting Policies (continued)**

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 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-

# NOTE 1: Summary of Significant Accounting Policies (continued)

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.

The selling prices used in the relative selling price allocation method (1) for certain of the Company's services are based upon VSOE, (2) for third-party accessories available from other vendors are based upon TPE, and (3) for 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.

Prior to the adoption of updated revenue recognition guidance in January 2010, all of the Company's revenue fell within the scope of the software revenue recognition rules. The adoption of the updated guidance, described in the Company's policy above, resulted in earlier revenue recognition in multiple-deliverable arrangements involving the Company's hardware products with embedded software because revenue can be recognized for each deliverable based upon their relative selling prices. In 2010, revenue was \$3,008,000 higher than it would have been if this updated guidance had not been adopted.

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.

## NOTE 1: Summary of Significant Accounting Policies (continued)

## 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 \$2,157,000 in 2011, \$1,402,000 in 2010, and \$856,000 in 2009.

### 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 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

## **NOTE 1: Summary of Significant Accounting Policies (continued)**

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 (Loss) Per Share

Basic net income (loss) per share is computed by dividing net income (loss) available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income (loss) per share is computed by dividing net income (loss) 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 cumulative net loss, potential common stock equivalents are not included in the calculation of diluted net loss per share.

#### Comprehensive Income (Loss)

Comprehensive income (loss) 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 \$16,166,000 and \$7,675,000 as of December 31, 2011 and 2010, respectively; a net unrealized gain on available for sale investments, net of tax, of \$84,000 as of December 31, 2011 and a net unrealized loss on available-for-sale investments, net of tax, of \$271,000 as of December 31, 2010; and losses on currency swaps, net of gains on long-term intercompany loans, net of tax, of \$1,271,000 as of December 31, 2011 and 2010.

#### 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.

### **NOTE 1: Summary of Significant Accounting Policies (continued)**

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 are dependent 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 balance sheet 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: New Pronouncements**

Accounting Standards Update (ASU) 2011-04, "Fair Value Measurements: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs"

The amendments in this ASU change certain aspects of the fair value measurement guidance in Accounting Standards Codification (ASC) 820, "Fair Value Measurement" in order to make U.S. GAAP and international standards more consistent. These changes include the application of the concepts of highest and best use and valuation premise, introduction of an option to measure groups of offsetting assets and liabilities on a net basis, incorporation of certain discounts and premiums in fair value measurements, and measurement of the fair value of certain instruments classified in shareholders' equity. In addition, the amended guidance includes new fair value disclosure requirements, including, among other things, information about valuation techniques and unobservable inputs used in Level 3 fair value measurements and a narrative description of Level 3 measurements' sensitivity to changes in unobservable inputs. ASU 2011-04 must be applied prospectively and is effective for the first quarter of 2012. Management does not expect this ASU to have a material impact on the fair value of our investments portfolio or the related disclosure requirements.

## Accounting Standards Updates (ASU) 2011-05 and 2011-12, "Comprehensive Income"

The amendments in ASU 2011-05 revise the manner in which companies present comprehensive income in their financial statements in order to make U.S. GAAP and international standards more consistent. This ASU requires companies to report the components of comprehensive income in either a continuous statement of comprehensive income or in two separate but consecutive statements. In the two-statement approach, the first statement would present the components of net income, similar

### **NOTE 2: New Pronouncements (continued)**

to the Company's current Consolidated Statements of Operations, while the second statement would include the components of other comprehensive income, as well as a cumulative total for comprehensive income.

In December 2011, the Financial Accounting Standards Board issued ASU 2011-12 to defer one provision of ASU 2011-05. The amendments in ASU 2011-12 defer the requirements under ASU 2011-05 to present reclassification adjustments by component in both the statement where net income is presented and the statement where other comprehensive income is presented. This deferral was prompted by users' concerns that the presentation requirements would be costly to implement and could add unnecessary complexity to financial statements.

Neither of these ASU's change the items that must be reported in other comprehensive income. Both Updates must be applied retrospectively beginning in the first quarter of 2012. At that time, management has elected to present other comprehensive income in two separate but consecutive statements.

## Accounting Standards Update (ASU) 2011-08, "Testing Goodwill For Impairment"

In the third quarter of 2011, the Financial Accounting Standards Board issued an ASU aimed at simplifying entities' annual goodwill impairment test. This ASU is intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities an option to perform a qualitative assessment to determine whether further impairment testing is necessary. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011, however, early adoption is allowed. Management has elected to adopt this ASU early and has applied the provisions of this Update to its 2011 analysis of goodwill.

#### **NOTE 3: 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, 2011:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:		
Money market instruments	\$1,699	\$ -
Municipal bonds	-	123,716
Corporate bonds		115,472
Agency bonds	-	39,880
Sovereign bonds	-	26,371
Covered bonds	- '	6,020
Treasury bills	-	1,945
Currency forward contracts	14	-
Liabilities:		
Currency forward contracts	165	· -

The Company's 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 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.

## **NOTE 3: Fair Value Measurements (continued)**

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 2011, 2010, or 2009.

## 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 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 the 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. The Company did not record an other-than-temporary impairment of this investment in 2011, 2010, or 2009.

#### 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 2011 or 2010; however, an intangible asset impairment charge of \$1,000,000 was recorded in 2009.

In the first quarter of 2009, the Company determined that the intangible asset related to Siemens Customer Relationships was impaired, which required the Company to measure the asset at fair value. The Company estimated the fair value of this asset using the income approach on a discounted cash flow basis. The fair value test indicated the Siemens Customer Relationships had a fair value of \$300,000 as of April 5, 2009 compared to a carrying value of \$1,300,000, resulting in an impairment charge of \$1,000,000. The following table presents the Company's fair value hierarchy for the Siemens Customer Relationships as of April 5, 2009, which was the date of the fair value measurement (in thousands):

	Unobservable Inputs (Level 3)	Total	Total Loss
Siemens Customer Relationships	<u>\$300</u>	\$300	\$(1,000)

Cianificant

The significant inputs in the discounted cash flow analysis included an estimate of revenue streams from the customers obtained in the acquisition and estimates of expenses attributable to the revenue

## **NOTE 3: Fair Value Measurements (continued)**

stream. The estimate of revenue streams from the customers obtained in the acquisition was based upon actual revenue streams from these customers in the first quarter of 2009, as well as input from the Company's sales and marketing personnel who interact with these customers. Estimates of expenses attributable to the revenue stream were based upon the Company's historical expense levels. The discount rate used in the discounted cash flow analysis was not a significant input to the analysis due to the short time frame of the revenue stream.

## NOTE 4: Cash, Cash Equivalents, and Investments

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

		Decem	ber	31,
	_	2011		2010
Cash	\$	36,404	\$	26,650
Money market instruments		1,699	_	6,553
Cash and cash equivalents		38,103	===	33,203
Corporate bonds		55,570		34,543
Municipal bonds		54,036		75,457
Agency bonds		27,545		15,979
Sovereign bonds		4,016		19,350
Treasury bills		1,945		2,494
Covered bonds		1,319		
Short-term investments		144,431	_	147,823
Municipal bonds		69,680		34,794
Corporate bonds		59,902		36,762
Sovereign bonds		22,355		-
Agency bonds		12,335		21,025
Covered bonds		4,701		3,541
Limited partnership interest (accounted for using cost method)		5,933	_	5,933
Long-term investments		174,906	_	102,055
	\$	357,440	\$	283,081

The Company's cash balance included foreign bank balances totaling \$29,452,000 and \$23,639,000 as of December 31, 2011 and 2010, respectively.

The Company's portfolio of debt securities consists of treasury bills, municipal bonds, corporate bonds, agency bonds, sovereign bonds, and covered bonds. Treasury bills consist of debt securities issued by both the U.S. and foreign governments; municipal bonds consist of debt securities issued by state and local government entities; corporate bonds consist of debt securities issued by both domestic and foreign companies; agency bonds consist of domestic or foreign obligations of government agencies and government sponsored enterprises that have government backing; 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.

## NOTE 4: Cash, Cash Equivalents, and Investments (continued)

The following table summarizes the Company's available-for-sale investments as of December 31, 2011 (in thousands):

		Amortized Cost		Gross Unrealized Gains		Gross realized osses	Fair Value	
Short-term:								
Corporate bonds	\$	56,277	\$	32	\$	(739)	\$	55,570
Municipal bonds		53,974		65		(3)		54,036
Agency bonds		27,676		19		(150)		27,545
Sovereign bonds		3,973		43		-		4,016
Treasury bills		1,944		1		-		1,945
Covered bonds		1,317		2		<u>-</u>		1,319
Long-term:								
Municipal bonds		69,576		201		(97)		69,680
Corporate bonds	•	59,461		467		(26)		59,902
Sovereign bonds		22,029		326		-		22,355
Agency bonds		12,371		35		(71)		12,335
Covered bonds		4,679		22		<u> </u>		4,701
	\$ :	313,277	\$	1,213	\$	(1,086)	\$	313,404

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, 2011 (in thousands):

#### **Unrealized Loss Position For:**

•	Less than	12 Months	12 Months	or Greater	Total			
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses		
Corporate bonds	\$ 42,094	\$ (754)	\$5,316	\$(11)	\$ 47,410	\$ (765)		
Municipal bonds	34,657	(100)	-	-	34,657	(100)		
Agency bonds	24,610	(220)	3,280	<u>(1</u> )	27,890	(221)		
	\$101,361	<u>\$(1,074)</u>	\$8,596	<b>\$(12)</b>	\$109,957	<b>\$(1,086)</b>		

As of December 31, 2011, 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 securities before its effective maturity or market price recovery. The Company recorded gross realized gains on the sale of debt securities totaling \$82,000 in 2011, \$7,000 in 2010, and \$19,000 in 2009, and gross realized losses on the sale of debt securities totaling \$263,000 in 2011. Losses were immaterial in 2010 and 2009.

## NOTE 4: Cash, Cash Equivalents, and Investments (continued)

The following table presents the effective maturity dates of the Company's available-for-sale investments as of December 31, 2011 (in thousands):

	 <1 Year	_1	-2 Years	_2	-3 Years	3-	4 Years	_4	-5 Years	 Total
Municipal bonds	\$ 54,036	\$	25,713	\$	23,976	\$	-	\$	19,991	\$ 123,716
Corporate bonds	55,570		33,555		21,543		2,398		2,406	115,472
Agency bonds	27,545		7,700		4,635		-		-	39,880
Sovereign bonds	4,016		10,831		5,933		-		5,591	26,371
Covered bonds	1,319		4,701		-		-		-	6,020
Treasury bills	 1,945				-					 1,945
	\$ 144,431	\$	82,500	\$	56,087	\$	2,398	\$	27,988	\$ 313,404

The Company has chosen to disclose its Euro-denominated investment portfolio by country and specifically by security type. Financial institutions are included within the corporate bond sector and represent 11% of the total international portfolio. The following table summarizes the Company's available-for-sale investments held in its international portfolio as of December 31, 2011 (in thousands):

Short-term	Corporate bonds		_	Agency bonds		overeign bonds	asury ills	vered onds	_	Total
Australia	\$	3,235	\$		\$	-	\$ · -	\$ · -	\$	3,235
Canada		3,551		•		•	-	-		3,551
France		3,374		~		-	-	_		3,374
Germany		5,062		3,636	×.	3,973	-	-		12,671
<b>Great Britain</b>		10,836		5,466			- '	1,317		17,619
Japan		1,332		. •		-	-	-		1,332
Netherlands		2,202		10,379		-	1,945	-		14,526
Supranational		-		2,865		-	-	-		2,865
Sweden		1,943		3,557		-	-	-		5,500
Switzerland		3,542	_	· ·			 _	-		3,542
Total	\$	35,077	\$	25,903	\$	3,973	\$ 1,945	\$ 1,317	\$	68,215

NOTE 4: Cash, Cash Equivalents, and Investments (continued)

Long-term	orporate bonds	Sovereign bonds			Agency bonds		overed oonds	 Total
Austria	\$ -	\$		\$	3,062	\$	_	\$ 3,062
Canada	-		-		4,568		-	4,568
Denmark	-		_		-		1,694	1,694
Finland	-		1,880				-	1,880
France	4,100				-			4,100
Germany	3,498		16,522		-		_	20,020
Great Britain	6,346		-		-		-	6,346
Japan	1,853		-	•	_		-	1,853
Netherlands	6,831		3,952		1,334		1,673	13,790
Norway	_		-				1,333	1,333
Sweden	-		-		1,004		-	1,004
Switzerland	2,149	·			<u> </u>		-	 2,149
Total	\$ 24,777	\$	22,354	\$	9,968	\$	4,700	\$ 61,799

In June 2000, the Company became a Limited Partner in Venrock Associates III, L.P. (Venrock), a venture capital fund. A Director of the Company was a General Partner of Venrock Associates through December 31, 2009. 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, 2011, the Company 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. No contributions were made and no distributions were received during 2011. Distributions are received and contributions are requested at the discretion of Venrock's management. As of December 31, 2011, the carrying value of this investment was \$5,933,000 compared to an estimated fair value of \$7,460,000.

#### **NOTE 5: Inventories**

Inventories consisted of the following (in thousands):

	Decem	iber 31,
	2011	2010
Raw materials	\$17,736	\$14,791
Work-in-process	3,418	2,051
Finished goods	6,944	5,875
	\$28,098	\$22,717

## NOTE 6: Property, Plant, and Equipment

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

	Decem	ber 3	31,
	 2011		2010
Land	\$ 3,951	\$	3,951
Buildings	18,371		18,371
Building improvements	11,723		10,632
Leasehold improvements	4,327		4,038
Computer hardware and software	25,763		23,595
Manufacturing test equipment	11,522		10,093
Furniture and fixtures	 3,467		3,757
	79,124		74,437
Less: accumulated depreciation	 (47,380)		(44,841)
	\$ 31,744	\$	29,596

The cost and related accumulated depreciation of certain fully-depreciated property, plant, and equipment totaling \$1,593,000 and \$2,263,000 were removed from these accounts in 2011 and 2010, respectively.

Buildings include rental property with a cost basis of \$5,750,000 as of December 31, 2011 and 2010, and accumulated depreciation of \$2,185,000 and \$2,037,000 as of December 31, 2011 and 2010, respectively.

## **NOTE 7: Intangible Assets**

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

	_	Gross arrying Value		umulated ortization		Net arrying Value
Distribution networks	\$	38,060	\$	21,908	\$	16,152
Customer contracts and relationships		14,722		12,648		2,074
Completed technologies		670		215		455
Other		750		521	-	229
Balance as of December 31, 2011	\$	54,202	\$_	35,292	\$	18,910
	C	Gross arrying Value		umulated ortization		Net arrying Value
Distribution networks	C	arrying				arrying
Distribution networks	<u> </u>	arrying Value	Am	ortization		arrying Value
	<u> </u>	arrying Value 38,060	Am	ortization 18,621		arrying Value 19,439
Customer contracts and relationships	<u> </u>	38,060 14,937	Am	18,621 12,087		arrying Value 19,439 2,850

The cost and related amortization of certain fully-amortized completed technology totaling \$3,680,000 was removed from these accounts in 2011.

### **NOTE 7: Intangible Assets (continued)**

Aggregate amortization expense was \$4,227,000 in 2011, \$5,124,000 in 2010, and \$5,879,000 in 2009. Amortization expense included an impairment charge of \$1,000,000 in 2009. No impairment charges were recorded in 2011 or 2010. Estimated amortization expense for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

Year Ending December 31,	Amount
2012	\$ 4,141
2013	3,796
2014	3,650
2015	3,616
2016	2,677
Thereafter	1,030
1	\$ 18,910

In March 2003, the Company acquired the wafer identification business of Siemens Dematic AG, a subsidiary of Siemens AG and leading supplier of wafer identification systems to semiconductor manufacturers in Europe. A portion of the purchase price was allocated to an intangible asset for relationships with a group of customers (Siemens Customer Relationships) reported under the MVSD segment. In the first quarter of 2009, the Company's wafer identification business decreased dramatically from the levels experienced in 2008 and it became apparent that a recovery was unlikely to happen before the end of the year. The Company determined that this significant decrease in business was a "triggering event" that required the Company to perform an impairment test of the Siemens Customer Relationships. The Company estimated the fair value of the Siemens Customer Relationships using the income approach on a discounted cash flow basis. The fair value test indicated the Siemens Customer Relationships had a fair value of \$300,000 as of April 5, 2009, compared to a carrying value of \$1,300,000, resulting in an impairment charge of \$1,000,000 recorded in the first quarter of 2009, which is included in "Selling, general, and administrative expenses" on the Consolidated Statements of Operations in 2009. This asset has been fully amortized as of December 31, 2011.

## **NOTE 8: 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		solidated
Balance as of December 31, 2009			4,764 (202)	\$	82,604 (400)
Balance as of December 31, 2010		77,642 <b>(86)</b>	 4,562 <b>(89)</b>		82,204 <b>(175)</b>
Balance as of December 31, 2011	\$	77,556	\$ 4,473	\$	82,029

In the third quarter of 2011, the Financial Accounting Standards Board issued an Accounting Standards Update (ASU) intended to reduce the cost and complexity of the annual goodwill impairment test by providing entities with an option to perform a qualitative assessment, to determine whether further impairment testing is necessary. For its 2011 analysis of goodwill, management elected to perform a

## NOTE 8: Goodwill (continued)

qualitative assessment as permitted by the new ASU. Based on 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, 2011, management does not believe any qualitative factors exist that would change the conclusion of their assessment. In future years, management will determine whether a quantitative or qualitative analysis is more appropriate.

## **NOTE 9: Accrued Expenses**

Accrued expenses consisted of the following (in thousands):

	December 31	
	011	2010
Company bonuses \$	8,721	\$ 7,354
	5,769	5,765
Vacation	4,109	3,699
Japanese retirement allowance	3,559	3,204
Japanese consumption taxes	2,984	1,858
Warranty obligations	2,097	1,985
Other	5,051	5,481
<u>\$ 3</u>	2,290	\$ 29,346
The changes in the warranty obligation were as follows (in thousands):		
Balance as of December 31, 2009		\$ 1,377
Provisions for warranties issued during the period		2,141
Fulfillment of warranty obligations		(1,506
Foreign exchange rate changes		(27
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
Balance as of December 31, 2011		\$ 2,097

## **NOTE 10: Commitments and Contingencies**

## Commitments

As of December 31, 2011, the Company had outstanding purchase orders totaling \$6,938,000 to purchase inventory from various vendors. Certain of these purchase orders may be cancelled by the Company, subject to cancellation penalties. These purchase commitments relate to expected sales in 2012.

#### **NOTE 10: 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 \$5,557,000 in 2011, \$5,190,000 in 2010, and \$6,574,000 in 2009. Future minimum rental payments under these agreements are as follows (in thousands):

Year Ending December 31,	Amount		
2012	\$ 2,957		
2013	2,273		
2014	1,821		
2015	1,281		
2016	908		
Thereafter	1,479		
	<b>\$ 10,719</b>		

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 \$791,000 in 2011, \$607,000 in 2010, and \$645,000 in 2009. 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,	Amount	
2012	\$ 767	
2013	812	
2014	867	
2015	748	
2016	682	
Thereafter	411	
	\$ 4,287	

#### 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

## **NOTE 10: Commitments and Contingencies (continued)**

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 Commission 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-in-part 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 is scheduled before the United States Court of Appeals for the Federal Circuit on February 10, 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 11: 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

## **NOTE 11: Indemnification Provisions (continued)**

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 12: 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 currently 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 loss" on the Consolidated Statements of Operations. The Company recorded net foreign currency losses of \$504,000 in 2011, \$328,000 in 2010, and \$1,265,000 in 2009.

As of December 31, 2011, the Company had the following outstanding forward contracts that were entered into to mitigate foreign currency exchange rate risk:

CurrencyAmountU.S. Dollar/Euro3,790,000 U.S. DollarsJapanese Yen/Euro200,000,000 Japanese Yen

### **NOTE 12: Derivative Instruments (continued)**

Information regarding the fair value of the forward contracts outstanding as of December 31, 2011 and December 31, 2010 were as follows (in thousands):

* •	As	sset Derivatives		Liability Derivatives			
	Balance	Fair \	/alue	Balance	Fair \	/alue	
	Sheet Location	December 31, 2011	December 31, 2010	Sheet Location	December 31, 2011	December 31, 2010	
Currency	Prepaid expenses and						
forward contracts	other current assets	\$14	\$83	Accrued expenses	\$165	\$125	

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	Amount of Gain (Loss) Recognized In Income on Derivatives Year ended December 31.				
	on Derivatives	2011	2010	2009		
Currency	Foreign					
forward	currency gain					
contracts	(loss)	\$34	\$62	\$(526)		

## **NOTE 13: 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 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

## NOTE 13: Shareholders' Equity (continued)

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, 2011, the Company had repurchased a total of 1,375,875 shares at a cost of \$30,000,000 under this program, including 337,078 shares at a cost of \$10,000,000 in 2011. The Company did not purchase any shares under this program in 2010 or 2009. 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 equity incentive plans. 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 this program in future periods depending upon a variety of factors, including, among other things, stock price, share availability, and cash reserve requirements.

#### Employee Stock Purchase Plan

Under the Company's Employee Stock Purchase Plan (ESPP), which expired December 31, 2009, employees who completed six months of continuous employment with the Company could purchase common stock semi-annually at 95% of the fair market value of the stock on the last day of the purchase period through accumulation of payroll deductions. Employees were required to hold common stock purchased under the ESPP for a period of three months from the date of purchase. Shares purchased under the ESPP totaled 9,763 in 2009.

#### **NOTE 14: 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, 2011, the Company had 6,272,762 shares available for grant under two stock option plans: the 2001 General Stock Option Plan (4,906,777) 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.

In November 2009, the Company commenced a cash tender offer for certain underwater stock options held by employees, officers, and directors. Included in the tender offer were 5,153,307 outstanding

## **NOTE 14: Stock-Based Compensation (continued)**

stock options having an exercise price equal to or greater than \$23.00 per share. These options were granted under the Company's 2007 Stock Option and Incentive Plan, 1998 Stock Incentive Plan, as amended, and 1998 Non-Employee Director Stock Option Plan, as amended. Under the offer, eligible options with exercise prices of \$23.00 and greater were eligible to receive a cash payment ranging from \$0.05 to \$3.42 per share. In December 2009, options to purchase a total of 4,900,694 shares of the Company's common stock were tendered under the offer for an aggregate purchase price of \$9,158,000. As a result of the tender offer, the Company incurred stock-based compensation expense of \$2,657,000 during the fourth quarter of 2009, representing the accelerated expense associated with unvested stock options that were tendered by employees.

The following table summarizes the Company's stock option activity for the year ended December 31, 2011:

Malabaad

	Shares (in thousands)	Weighted- Average Exercise Price	Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2010	4,318	\$20.05		
Granted	1,769	31.83	•	
Exercised	(1,501)	20.67		
Forfeited or expired	(113)	22.26		
Outstanding as of December 31, 2011	4,473	\$24.48	7.5 ===	\$50,680
Exercisable as of December 31, 2011	1,187	\$20.51	4.8	\$18,211

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

	Year Ended December 31,			
	2011	2010	2009	
Risk-free rate	2.9%	3.3%	3.3%	
Expected dividend yield	1.1%	1.3%	1.4%	
Expected volatility	43%	44%	43%	
Expected term (in years)	5.5	5.3	4.8	

## 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.

### **NOTE 14: Stock-Based Compensation (continued)**

## **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 \$12.32 in 2011, \$7.33 in 2010, and \$5.42 in 2009.

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 66% of its stock options granted to senior management and 68% of its options granted to all other employees will actually vest. Therefore, the Company currently applies an estimated forfeiture rate of 13% 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 2011 and the second quarter of 2010, resulting in a reduction to compensation expense of \$80,000 and \$600,000, respectively.

The total stock-based compensation expense and the related income tax benefit recognized was \$8,068,000 and \$2,660,000, respectively, in 2011, \$3,027,000 and \$996,000, respectively, in 2010, and \$9,223,000 and \$3,070,000, respectively, in 2009. No compensation expense was capitalized as of December 31, 2011 or December 31, 2010.

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,					,
		<b>2011</b> 2010		2010	2009	
Product cost of revenue	\$	456	\$	206	\$	532
Service cost of revenue		172	•	72		242
Research, development, and engineering		2,268		1,020		2,163
Selling, general, and administrative		5,172		1,729		6,286
	\$	8,068	\$	3,027	\$	9,223

The total intrinsic value of stock options exercised was \$20,108,000 in 2011, \$10,918,000 in 2010, and \$3,000 in 2009. The total fair value of stock options vested was \$10,202,000 in 2011, \$13,159,000 in 2010, and \$14,177,000 in 2009.

As of December 31, 2011, total unrecognized compensation expense related to non-vested stock options was \$13,289,000, which is expected to be recognized over a weighted-average period of 1.7 years.

#### NOTE 15: Employee Savings Plan

Under the Company's Employee Savings Plan, a defined contribution plan, 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

### **NOTE 15: Employee Savings Plan (continued)**

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 the 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 \$1,218,000 in 2011, \$776,000 in 2010, and \$874,000 in 2009. Cognex stock is not an investment alternative and Company contributions are not made in the form of Cognex stock.

#### **NOTE 16: Taxes**

Domestic income (loss) before taxes was income of \$24,836,000 in 2011, income of \$19,424,000 in 2010, and a loss of \$5,555,000 in 2009. Foreign income (loss) before taxes was income of \$62,281,000 in 2011, income of \$56,679,000 in 2010, and a loss of \$4,821,000 in 2009.

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

	Year Ended December 31,						
	2011		2010			2009	
Current:				•			
Federal	\$	6,711	\$	5,749	\$	(12,771)	
State		806		199		(774)	
Foreign		10,519		7,740		1,053	
		18,036		13,688		(12,492)	
Deferred:							
Federal		(812)		901		6,434	
State		34		217		57	
Foreign		(10)		(84)		494	
		(788)	_	1,034		6,985	
	\$	17,248	\$	14,722	_\$	(5,507)	

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

	Year Ended December 31,			
	2011	2010	2009	
Income tax provision (benefit) at federal statutory rate	35%	35%	(35)%	
State income taxes, net of federal benefit	1	1	(2)	
Foreign tax rate differential	(15)	(15)	22	
Tax credit	(1)	(1)	(3)	
Discrete tax events	-	(1)	(34)	
Tax-exempt investment income	-	-	(5)	
Other	-	<u> </u>	_4	
Income tax provision (benefit)	20%	<u>19</u> %	<u>(53</u> )%	

### **NOTE 16: Taxes (continued)**

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, 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. 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 effective tax rate for 2009 included the impact of the following discrete events: (1) a decrease in tax expense of \$3,150,000 from the expiration of the statutes of limitations for certain reserves for income taxes, (2) a decrease in tax expense of \$406,000 from the receipt of a state refund, (3) a decrease in tax expense of \$51,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns and other year-end adjustments, partially offset by (4) an increase in tax expense of \$72,000 resulting from the write-off of certain foreign tax credits. These discrete events changed the effective tax rate in 2009 from a benefit of 19% to a benefit of 53%. Interest and penalties included in these amounts was a decrease to tax expense of \$325,000.

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, 2009	\$ 5,355
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in prior periods	420
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in the current period	606
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	
Gross amounts of decreases in unrecognized tax benefits as a result of the expiration of the applicable statutes of limitations	(78)
Balance of reserve for income taxes as of December 31, 2010	4,181
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	
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	
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

## NOTE 16: Taxes (continued)

The Company's reserve for income taxes, including gross interest and penalties, was \$5,354,000 as of December 31, 2011, of which \$558,000 was classified as current and \$4,796,000 was classified as noncurrent, and \$5,361,000 as of December 31, 2010. The amount of gross interest and penalties included in these balances was \$1,206,000 and \$1,180,000 as of December 31, 2011 and December 31, 2010, 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 \$300,000 to \$500,000 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 2007 through 2010 remain open to examination by various taxing authorities in the jurisdictions in which the Company operates.

During the third quarter of 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. During the third quarter of 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.

## **NOTE 16: Taxes (continued)**

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

	Decemi	ber 31,
	2011	2010
Current deferred tax assets: Inventory and revenue related	\$ 5,202	\$ 4,031
Bonuses, commissions, and other compensation	1,273	1,029
	•	•
Other	1,283	1,242
Gross current deferred tax assets	7,758	6,302
Valuation allowance	(878)	· · · -
Net current deferred tax assets	\$ 6,880	\$ 6,302
Noncurrent deferred tax assets:	•	
Federal and state tax credit carryforwards	\$12,274	\$11,482
Stock-based compensation expense	6,160	5,830
Depreciation	1,798	1,950
Acquired completed technologies and other intangible assets	1,519	1,870
Unrealized investment gains and losses	891	934
Correlative tax relief and deferred interest related to reserves	609	655
Capital loss carryforward	373	373
Acquired in-process technology	178	303
Other	1,928	1,430
Gross noncurrent deferred tax assets	25,730	24,827
Nondeductible intangible assets	(6,244)	(7,543)
Other	(1,045)	
		(1,356)
Gross noncurrent deferred tax liabilities	<u>(7,289</u> )	(8,899)
Valuation allowance	(2,522)	(373)
Net noncurrent deferred tax assets	\$15,919	\$15,555

As of December 31, 2011, the Company had \$2,200,000 of alternative minimum tax credits and \$6,077,000 of foreign tax credits. The Company recorded a valuation allowance of \$2,457,000 resulting from foreign tax credits generated in 2010 that were not considered to be realizable. The Company also recorded a valuation allowance of \$570,000 for current-year state research and experimentation tax credits that were not considered to be realizable. These credits may 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 2018 and 2021. In addition, the Company had \$3,997,000 of state research and experimentation tax credit carryforwards as of December 31, 2011, 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 \$609,000 as of December 31, 2011, which represents this correlative tax relief and deferred interest.

## **NOTE 16: Taxes (continued)**

The Company sold its lane departure warning business to Takata Holdings, Inc. in July 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 May 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 \$6,244,000 as of December 31, 2011.

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 \$2,003,000 of other income in 2009 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. This amount was included in "Other income" on the Consolidated Statements of Operations.

Cash paid for income taxes totaled \$18,389,000 in 2011, \$8,019,000 in 2010, which includes a payment of \$2,526,000 to conclude the Japan Competent Authority case, and \$2,242,000 in 2009.

#### **NOTE 17: Restructuring Charges**

In November 2008, the Company announced the closure of its MVSD facility in Duluth, Georgia. In April 2009, the Company implemented a variety of cost-cutting measures at MVSD intended to more closely align the Company's cost structure with the lower levels of business at that time. Finally, on October 1, 2009, which was part of the Company's fiscal September, the Company announced the closure of its SISD facility in Kuopio, Finland.

The restructuring charges from these actions have been included in "Restructuring charges" on the Consolidated Statements of Operations. A reconciliation of the costs incurred in 2009 associated with these restructuring programs was as follows (in thousands):

	2	vember 2008 ogram	oril 2009 rogram	2	tember 2009 ogram	 Total
One-time termination benefits	\$	298	\$ 2,775	\$	301	\$ 3,374
Contract termination costs		372	167		153	692
Other associated costs		306	103		51	460
	\$	976	\$ 3,045	\$	505	\$ 4,526

## **NOTE 17: Restructuring Charges (continued)**

One-time termination benefits primarily included severance and retention bonuses for employees who were terminated. Contract termination costs primarily included rental payments and lease termination costs for facilities that were closed. Other associated costs included legal costs for employee termination actions, travel and transportation expenses to close facilities, relocation costs for employees transferred to other locations, and outplacement services for terminated employees.

In 2010, the Company recorded \$75,000 related to these restructuring programs, of which \$79,000 of expense related to the September 2009 program and \$4,000 represented a reversal of the previous year's expense related to the April 2009 program. All obligations related to these programs were fully paid as of the third quarter of 2010.

## **NOTE 18: Weighted Average Shares**

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

	Year Ended December		
	2011	2010	2009
Basic weighted-average common shares outstanding	•	39,924 <u>373</u>	39,659
Diluted weighted-average common and common-equivalent shares outstanding	42,762	40,297	39,659

Stock options to purchase 1,001,500, 1,640,327, and 10,226,411 shares of common stock, on a weighted-average basis, were outstanding in 2011, 2010, and 2009, respectively, but were not included in the calculation of dilutive net income per share because they were anti-dilutive. Additionally, because the Company recorded a net loss in 2009, potential common stock equivalents of 1,043 were not included in the calculation of diluted net loss per share for this period.

## NOTE 19: 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 that are used to control the manufacture of discrete items by locating, identifying, inspecting, and measuring them during the manufacturing 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.

## **NOTE 19: Segment and Geographic Information (continued)**

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

	 MVSD	 SISD		nciling ems	Cor	nsolidated
Year Ended December 31, 2011 Product revenue Service revenue Depreciation and amortization Goodwill and intangibles Operating income	\$ 264,956 8,717 8,445 94,322 94,201	\$ 32,354 15,887 908 6,617 10,301	<b>\$</b> (1	403 - 9,147)	\$	297,310 24,604 9,756 100,939 85,355
Year Ended December 31, 2010 Product revenue Service revenue Depreciation and amortization Goodwill and intangibles Operating income Year Ended December 31, 2009	\$ 234,052 13,362 8,683 98,252 88,342	\$ 29,411 13,866 757 7,082 5,064	\$ <sup>-</sup> (1	369 - 7,693)	\$	263,463 27,228 9,809 105,334 75,713
Product revenue	\$ 133,741 5,542 9,843 103,281 4,226	\$ 24,638 11,806 361 7,660 2,801	\$ (1	376 - 9,695)	\$	158,379 17,348 10,580 110,941 (12,668)

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 2011, 2010, or 2009.

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

	United States	 Europe	 Japan	 Other	Co	nsolidated
Year Ended December 31, 2011 Product revenue	\$ 98,833 10,965 121,178	\$ 100,984 6,343 10,811	\$ 45,295 4,147 2,773	\$ 52,198 3,149 948	\$	297,310 24,604 135,710
Year Ended December 31, 2010						
Product revenue	\$ 83,128	\$ 83,432	\$ 55,269	\$ 41,634	\$	263,463
Service revenue	12,702	7,611	3,986	2,929	,	27,228
Long-lived assets	122,765	10,387	2,457	880		136,489
Year Ended December 31, 2009						
Product revenue	\$ 53,803	\$ 54,559	\$ 30,674	\$ 19,343	\$	158,379
Service revenue	6,657	5,261	3,513	1,917		17,348
Long-lived assets	127,317	19,617	2,037	268		149,239

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

### **NOTE 20: Acquisition of Web Monitoring Business**

On September 30, 2009, the Company acquired the web monitoring business of Monitoring Technology Corporation (MTC), a manufacturer of products for monitoring industrial equipment and processes. The acquired SmartAdvisor Web Monitoring System (WMS) is complementary to Cognex's Smart View Web Inspection System (WIS), which is sold by the Company's Surface Inspection Systems Division (SISD). 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. The Company recorded goodwill of \$1,692,000 related to this acquisition.

The Company paid \$5,000,000 in cash, with \$4,500,000 paid upon closing and \$500,000 paid into an escrow account during the fourth quarter of 2009. There were no contingent payments. The purchase price was subject to a working capital adjustment of \$59,000, which was paid to Cognex during the fourth quarter of 2009, thereby reducing the purchase price to \$4,941,000. Transaction costs, which were expensed as incurred in the third quarter of 2009, totaled \$40,000.

The purchase price was allocated as follows (in thousands):

	Estimated Fair Value	Weighted-Average Amortization Period (in years)
Inventories	\$ 259	
Intangible assets		
Completed technology	670	7
Customer relationships	1,950	9
Trademark	140	8
Non-compete agreements	230	5
Goodwill	1,692	
Total assets acquired	4,941	
Total liabilities assumed		
Total purchase price	\$ 4,941	

The acquired goodwill has been assigned to the SISD segment. The acquired intangible assets, including goodwill, are deductible for tax purposes.

#### NOTE 21: 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 \$0.08 per share in the first quarter of 2011, \$0.09 per share in the second and third quarters of 2011, and \$0.10 per share in the fourth quarter of 2011 that amounted to \$15,114,000 for the year ended December 31, 2011. On February 8, 2012, the Company's Board of Directors declared a cash dividend of \$0.10 per share payable in the first quarter of 2012.

# COGNEX CORPORATION - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

		Quar	ter Ended	
	April 3, 2011	July 3, 2011	October 2, 2011	December 31, 2011
the state of the s	(In th	ousands, exc	ept per share	amounts)
Revenue	\$74,394	\$83,393	\$80,085	\$84,042
Gross margin	56,011	64,014	61,132	62,838
Operating income	17,368	24,042	22,389	21,556
Net income		19,097	18,037	19,099
Basic net income per share	0.33	0.46	0.43	0.45
Diluted net income per share		0.45	0.42	0.44
•		Qua	rter Ended	
	April 4, 2010	Quar July 4, 2010	October 3, 2010	December 31, 2010
n de particular de la companya de l La companya de la co	April 4, 2010	July 4, 2010	October 3,	2010
<ul> <li>Compared to the control of the control</li></ul>	April 4, 2010 (In th	July 4, 2010	October 3, 2010	2010
Revenue	April 4, 2010 (In th \$58,967	July 4, 2010 nousands, exc	October 3, 2010 cept per share	amounts)
Revenue	April 4, 2010 (In th \$58,967 43,026	July 4, 2010 nousands, exc \$71,811	October 3, 2010 cept per share \$74,993	2010 amounts) \$84,920
Revenue	April 4, 2010 (In th \$58,967 43,026	July 4, 2010 nousands, exc \$71,811 53,094	October 3, 2010 cept per share \$74,993 56,080	2010 amounts) \$84,920 60,903
Revenue	April 4, 2010 (In th \$58,967 43,026 11,252	July 4, 2010 nousands, exc \$71,811 53,094 19,241	October 3, 2010 Dept per share \$74,993 56,080 22,275	2010 amounts) \$84,920 60,903 22,945

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON FINANCIAL STATEMENT SCHEDULE

## 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 statements of Cognex Corporation and subsidiaries referred to in our report dated February 9, 2012, which is included in the 2011 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 in 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 as a whole, presents fairly, in all material respects, the information set forth.

/s/ Grant Thornton LLP

Boston, Massachusetts February 9, 2012

# 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	thousands)				
Reserve for Uncollectible Accounts:						
2011	\$1,235	\$173	\$ -	\$(154) (a)	\$(14) (b)	\$ 1,240
2010	\$1,358	\$322	\$ -	\$(411) (a)	\$(34) (b)	\$ 1,235
2009	\$1,290	\$373	\$ -	\$(258) (a)	\$(47) (b)	\$ 1,358

<sup>(</sup>a) Specific write-offs

<sup>(</sup>b) Collections of previously written-off accounts and 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 2011 or 2010.

#### 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, 2011.

# 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, 2011 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, 2011 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 controls 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 Cognex Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Cognex Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying management's report on internal control over financial reporting. Our responsibility is to express an opinion on Cognex Corporation'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, Cognex Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, 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 2011 consolidated financial statements of Cognex Corporation and subsidiaries and our report dated February 9, 2012 expressed an unqualified opinion.

/s/ Grant Thornton LLP

Boston, Massachusetts February 9, 2012

#### **ITEM 9B: OTHER INFORMATION**

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 2012 Annual Meeting of Shareholders to be held on April 26, 2012 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 and Other Members of the Management Team 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, <a href="www.cognex.com">www.cognex.com</a>. The Company intends to disclose any amendments to or waivers of the Code of Business Conduct and Ethics on behalf of the Company's Chief Executive Officer, Chief Financial Officer, Controller, and persons performing similar functions on the Company's website.

#### **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 2012 Annual Meeting of Shareholders to be held on April 26, 2012 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 2012 Annual Meeting of Shareholders to be held on April 26, 2012 and is incorporated herein by reference.

The following table provides information as of December 31, 2011 regarding shares of common stock that may be issued under the Company's existing equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	
	(a)		
Equity compensation plans approved by shareholders	2,360,856 (1)	\$ 21.6633	6,272,762 (2)
Equity compensation plans not approved by shareholders	2,112,454 (3)	27.6231	0
	4,473,310	\$ 24.4778	6,272,762

- (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, 1998 Non-Employee Director Stock Option 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.

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. 2,320,335 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 2012 Annual Meeting of Shareholders to be held on April 26, 2012 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 2012 Annual Meeting of Shareholders to be held on April 26, 2012 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 9, 2012
/s/ Robert J. Willett Robert J. Willett	President, Chief Executive Officer, and Director (principal executive officer)	February 9, 2012
/s/ Richard A. Morin Richard A. Morin	Executive Vice President of Finance and Chief Financial Officer (principal financial and accounting officer)	February 9, 2012
/s/ Patrick Alias	Director	February 9, 2012
Patrick Alias		
/s/ Jerald Fishman	Director	February 9, 2012
Jerald Fishman		
/s/ Theodor Krantz	Director	February 9, 2012
Theodor Krantz		
/s/ Jeffrey Miller	Director	February 9, 2012
Jeffrey Miller		
/s/ Anthony Sun	Director	February 9, 2012
Anthony Sun		-
/s/ Reuben Wasserman Reuben Wasserman	Director	February 9, 2012

# **EXHIBIT INDEX**

EXHIBIT NUM	MBER	LAIRDII INDEX
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 (incorporated by reference to Exhibit 3A of Cognex's Annual Report on Form 10-K for the year ended December 31, 2007 [File No. 0-17869])
<b>3B</b>		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 (incorporated by reference to Exhibit 3B of Cognex's Annual Report on Form 10-K for the year ended December 31, 2007 [File No. 0-17869])
<b>3</b> D		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])
4 <b>A</b>		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	et d'	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])
10 <b>A*</b>		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 (incorporated by reference to Exhibit 10.2 of Cognex's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007 [File No. 0-17869])
% (10 <b>D*</b>		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])
10 <b>E</b> *,		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 (filed herewith)
10G*		Amendment to Cognex Corporation 1998 Stock Incentive Plan, effective as of July 26, 2007 (incorporated by reference to Exhibit 10.1 of Cognex's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007 [File No. 0-17869])
10H*		Cognex Corporation 2000 Employee Stock Purchase Plan (incorporated by reference to Exhibit 4 to the Registration Statement on Form S-8 [Registration No. 333-44824])

## **EXHIBIT NUMBER** 101\* First Amendment to 2000 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.I of Cognex's Annual Report on Form 10-K for the year ended December 31, 2010 [File No. 1-34218]) 10J\* 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]) Cognex Corporation 2001 General Stock Option Plan, as amended and 10K\* restated (incorporated by reference to Appendix to the Company's Proxy Statement filed on October 19, 2011 [File No. 001-34218]) 10L\* Cognex Corporation 2007 Stock Option and Incentive Plan (incorporated by reference to Exhibit 1 to the Company's Proxy Statement for the Special Meeting in lieu of the 2007 Annual Meeting of Shareholders, filed on March 14, 2007 [File No. 0-17869]) 10M\* Form of Letter Agreement between Cognex Corporation and each of Robert J. Shillman, Patrick A. Alias, Jerald G. Fishman, Anthony Sun and Reuben Wasserman (incorporated by reference to Exhibit 10R of Cognex's Annual Report on Form 10-K for the year ended December 31, 2007 [File No. 0-178691) 10N\* Form of Stock Option Agreement (Non-Qualified) under 1998 Stock Incentive Plan (incorporated by reference to Exhibit 10T of Cognex's Annual Report on Form 10-K for the year ended December 31, 2007 [File No. 0-17869]) Form of Stock Option Agreement (Non-Qualified) under 1998 Non-Employee 100\* 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]) 10P\* 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]) 10Q\* Summary of Annual Bonus Program (filed herewith) 10R\* Summary of Director Compensation (filed herewith) 10S\* Report on Form 8-K filed on March 3, 2008 [File No. 0-17869]) 10T\* Current Report on Form 8-K filed on June 19, 2008 [File No. 0-17869]) Amendment to Employment Agreement with Robert Willett. 10U\* 1-342181) 10V\*

Form of Indemnification Agreement with each of the Directors of Cognex Corporation (incorporated by reference to Exhibit 10.1 of Cognex's Current Employment Agreement, dated June 17, 2008, by and between Cognex Corporation and Robert Willett (incorporated by reference to Exhibit 10.1 of Cognex's 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. 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]) 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]) 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])

10W\*

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# **EXHIBIT NUMBER**

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 Cogney Corner

The following materials from Cognex Corporation's Annual Report on Form 10-K for the period ended December 31, 2011, formatted in xBRL: (i) Consolidated Statements of Operations for the years ended December 31, 2011, December 31, 2010, and December 31, 2009; (ii) Consolidated Balance Sheets as of December 31, 2011 and December 31, 2010; (iii) Consolidated Condensed Statements of Cash Flows for the years ended December 31, 2011, December 31, 2010, and December 31, 2009; (iv) Consolidated Statement of Shareholders' Equity and Comprehensive Income (Loss) for the years ended December 31, 2011, December 31, 2010, and December 31, 2009; and (v) 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.

# Locations

#### **AMERICAS**

## **Cognex Headquarters**

Cognex Corporation One Vision Drive Natick, MA 01760-2059

#### California

2060 Challenger Drive Alameda. CA 94501-1037

465 North Whisman Road, Suite 200 Mountain View, CA 94043

11512 El Camino Real, Suite 360 San Diego, CA 92130

#### Illinois

Midwest Regional Technology Center 800 East Diehl Road, Suite 125 Naperville, IL 60563

#### Indiana

13295 Illinois Street, Suite 209 Carmel, IN 46032

## Michigan

44191 Plymouth Oaks Blvd., Suite 800 Plymouth, MI 48170

#### Missouri

17295 Chesterfield Airport Road Suite 200 Chesterfield, MO 63005

## **North Carolina**

Arboretum Building 1208 Eastchester Drive High Point, NC 27265

#### Oregon

15865 SW 74<sup>th</sup> Avenue, Suite 105 Portland, OR 97224

#### Pennsylvania

502 West Germantown Pike Suite 400 Plymouth Meeting, PA 19462

### **AMERICAS**

#### **Tennessee**

318 Seaboard Lane, Suite 314 Franklin, TN 37067

#### Texas

6044 Gateway East, Suite 229 El Paso, TX 79905

#### Wisconsin

10150 West National Ave., Suite 202 West Allis. WI 53227

#### Canada

5169 Beaubien Est App. 6 Montreal, QC H1T 1V9

#### **ASIA**

#### China

Room 1306, 13th Floor North Star Times Tower E. Beicheng Road Chao Yang District, Beijing, PRC

Room 1308 Jin Jiang International Office Building W. Lin' Jiang Road Chengdu, PRC

Room 13A05 Winner Plaza B Block, No. 100 Huangpu Road West Tianhe District, Guangzhou 510627 Guangdong Province, PRC

Room 1603, Yangguang Taiding Tower No. 16, Shandong Road Shinan District, Qingdao 266071 Shandong Province, PRC

Hong Qiao Office Room 2510, Shanghai Mart No. 2299, West Yanan Road Shanghai 200336, PRC

#### **ASIA**

Stand D1 – First Floor No. 207 Tai Gu Road Wai Gao Qiao Free Trade Zone Shanghai, PRC

Room 2508-E The Headquarters Building 168 Xi Zang Road Middle Shanghai 200001, PRC

Room 1701 Liantai Building Shen Nan Road, Futian District Shenzhen, Guangdong Province, PRC

Room 1311 New World International Trade Tower 568 Jian'She Avenue Jiang'Han District Wuhan, PRC

#### India

Millenia, Room 107, Level 1, Tower B No. 1 & 2 Murphy Road Ulsoor, Bangalore 560008, India

Sixth Floor, Pentagon P-2 Magarpatta City Hadapsar, Pune, India

#### Korea

Room 704, City Air Terminal 159-6 Samseong-Dong Gangnam-gu, Seoul 135-728 Korea

### Singapore

10 Anson Road, #30-06 International Plaza Singapore 079903

#### **Taiwan**

10F-1, No. 25, Pudding Road Hsin-Chu City 300 Taiwan, R.O.C.

#### **EUROPE**

## **EUROPE**

### **Austria**

Mooslackengasse 17 1190 Vienna, Austria

#### France

Immeuble "Le Patio" 104 Avenue Albert 1er 92563 Rueil Malmaison France

Immeuble Orient 10 Place Charles Beraudier 69428 Lyon France

### Germany

Emmy-Noether-Strasse 11 Karlsruhe, Germany 76131

Vaalser Strasse 259 D-52074 Aachen, Germany

## Hungary

East-West Business Center Rakoczi ut 1-3 1088 Budapest, Hungary

#### Ireland

Gateway Business Park 2008-2014 Block 2000 Mallow Road Cork, Ireland

## Italy

Via Gaetano Crespi, 12 Milano, Italy 20134

## **Poland**

Silver Forum Strzegomska 2-4 Ave Wroclaw, Poland

#### Spain

Via Augusta, number 2 bis, Fifth Floor Barcelona, Spain 08006

#### Sweden

Skrapan 1830 Kopparbergsvagen 10 Vasteras, Sweden 722 10

### **Switzerland**

Kornhausstrasse, 3 CH-90000 St. Gallen Switzerland

### **United Kingdom**

Silverstone Innovation Centre Silverstone Circuit, Silverstone Northhamptonshire, NN12 8GX United Kingdom

Unit 7, First Quarter Bleinheim Road Epsom, KT19 9QN United Kingdom

#### **JAPAN**

#### **Fukuoka**

5F, Dai-5 Hakata-Kaisei Building 1-18-25, Hakataeki-Higashi, Hakata-ku Fukuoka, Japan, 812-0013

#### Nagoya

4F, IT Meieki Building 3-11-22, Meieki, Nakamura-ku Nagoya-shi, Aichi, Japan, 450-0002

## Osaka

10F, Central Shin-Osaka Building 4-5-36, Miyahara, Yodogawa-ku Osaka, Japan, 532-0003

#### Tokyo

23F, Bunkyo Green Court Building 2-28-8, Honkomagome, Bunkyo-ku Tokyo, Japan, 113-6591