Seeing is believing: How any product can be made better with Cognex machine vision

Reading scores worldwide improve dramatically thanks to Cognex ID readers

Are manufacturing defects really a thing of the past?



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Washington, DC 20549

**Special Report** 

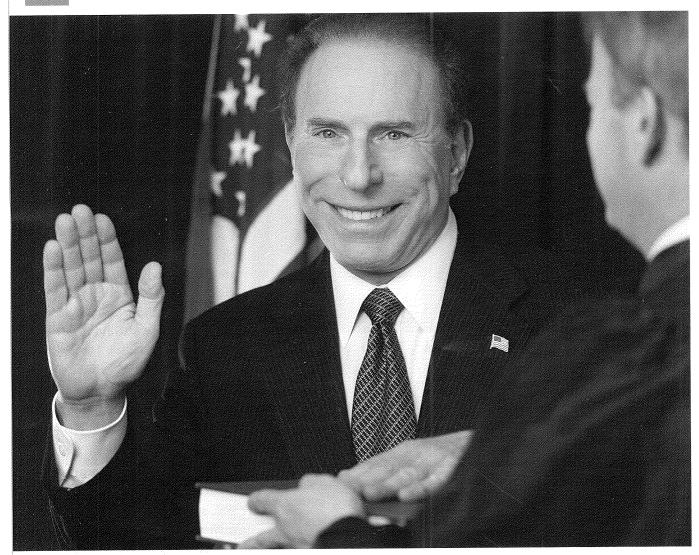
White House Appoints Vision Czar

Just in case it isn't completely clear from the disclaimer on the cover and from the contents of this publication, Cognex Corporation and Dr. Robert J. Shillman have no official status as representatives of the federal government of the United States, and none of the statements contained in this publication are really from the President of the United States.

This report, including the letter to shareholders, contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934. Please see Part II – Item 7 of the Annual Report on Form 10-K within the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations – Forward-Looking Statements" for a discussion regarding risks associated with these statements.

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# A New West Section 1988 For America

President Barack Obama has surprised the nation by announcing the appointment of America's first Vision Czar. Following is the prepared text of the President's speech to a joint session of Congress explaining why Doctor Robert J. Shillman of Cognex Corporation is his choice for the job. adame Speaker, Vice
President Biden, Members of Congress, and
the American people:
Why does America need a Vision Czar?

The answer is easy to see (pun intended!). In government, a czar is a person who monitors a situation and takes care of problems that arise. Well, machine vision products are used around the world to monitor situations and eliminate problems. It's a perfect fit!

Here are just some of the problems that can be solved with machine vision:



An unsuspecting Vision Czar gets his wrist watch lifted amid a crowd of well-wishers.

#### **Ensuring Manufacturing Quality**

Manufacturers use machine vision to inspect products as they are being made to ensure that automation equipment is functioning properly. Is the safety seal present on the bottle? Is the print on the label legible? Instead of having people inspect a random sample of products at the end of the line, machine vision can inspect 100% of products...even at high production speeds...and ensure that no defective items ever make it out of the factory and into the hands of consumers.

#### **Reducing Manufacturing Costs**

Vision systems can detect when an automated process has started to drift out of tolerance and then automatically alert factory personnel or other equipment to take corrective action. Manufacturing equipment can then be adjusted *before* mistakes are made, eliminating both scrap and the need for costly rework or downtime on the production line.

# Helping the Environment by Reducing Waste

Everyone today is concerned with saving the planet...using machine vision is one of the most effective ways for companies to "go green" in their manufacturing processes, while at the same time saving money. (If only it were so easy to reduce waste and inefficiency in Congress!) Imagine a machine that makes paper at speeds of up to sixty miles an hour...a mile of paper every minute. A small, undetected tear in the paper can cause the web to rip during production. In just one minute a mile of paper is strewn all over the plant and will have to be scrapped. Surface

'Using machine vision is one of the most effective ways for companies to 'go green' in their manufacturing processes."

inspection systems (also called web inspection systems) are machine vision systems that can detect these defects and reduce the risk of serious production errors.

#### Ensuring greater control over manufacturing by providing a detailed audit trail

Vision systems collect lots of useful data that factory floor managers can use to evaluate production and keep track of important quality metrics. Machine vision systems called ID readers are used to read 1-D and 2-D identifying codes on items as they go through production in order to track information about how, where and when an item has been handled. The ability to track unique items using vision enables greater customization in manufacturing and can help to dramatically reduce costs in the event of a product recall.

#### A Leader in Vision

Clearly, there are many benefits to be gained by a greater use of machine vision, both here and abroad.

Now let me tell you why I chose Cognex Corporation and its CEO, Doctor Robert J. Shillman, to oversee vision for America. As the world leader in machine vision, Cognex is best suited for the job of providing machine vision products to help companies... not just in our country, but around the world...improve their quality and reduce their manufacturing costs. Cognex products have a well-earned reputation as the most reliable, cost-effective and easiest to use in the industry.

Since 1981 when the company was founded, Cognex has been the technology leader in the machine vision industry...and Cognex engineers around the world work hard to maintain the company's reputation for technical excel-

lence. The 281 patents that have been granted to Cognex for machine vision technology provide proof of their creativity. Their innovations have not only made Cognex vision systems more capable, but they have also made Cognex products easy to set up and to use.

Cognex prides itself on having a strong corporate culture that encourages creativity in every department, especially in product design. With nearly three decades of experience applying machine vision in a large variety of factory settings, Cognex has both the products and the expertise to help companies achieve the results they are looking for: higher production quality at lower manufacturing costs.

And, as a financially stable company with no debt, Cognex has the clout to continue investing in the R&D necessary to advance the technology so that its products will be able to solve even more problems in the future.

#### **Bold and Decisive Management**

Tough times provide the best test of management's skill. Starting in the fall of 2008 and throughout most of 2009, virtually every company was put to the test by rapidly declining revenues. For an organization to survive in times of adversity, it must be willing to take bold and decisive action...even if that action is difficult, and that is what Cognex did.

In November of 2008 Cognex reduced expenses by approximately \$6 million (on an annualized basis). Unfortunately, as the recession deepened those cuts proved to be insufficient, and in 2009 Cognex cut expenses by another \$15 million (on an annualized basis). As a result of these actions, Cognex eliminated a total of 150 positions, closed its offices in Kuoppio, Finland and Duluth, Georgia, and moved its North American

Distribution Center from Georgia to its corporate headquarters in Massachusetts. Cognex also reduced certain executive salaries, decreased the company contribution to employee 401(k) plans, and implemented mandatory shutdown days for its employees.

The bottom line is that Cognex finished 2009 with \$175.7 million in revenue, a decrease of 28% compared to the revenue reported in 2008, and it recorded a loss of \$4.9 million (\$0.12 per share) for the year...a loss that would have been considerably larger if Cognex had been slower to take action.

These cuts were painful...but they did not stop the company from continuing to invest in...and to make progress in...strategic areas that are likely to position the company for future growth. This investment included continued development of key products and new technology, as well as the acquisition of a new product line for the company's Surface Inspection Systems Division.

In October of 2009, Cognex purchased Monitoring Technology Corporation's SmartAdvisor™ web monitoring product line (a product used in paper manufacturing that is complementary to Cognex's existing SmartView® surface inspection system) which strengthens the company's offering in the paper industry.

And, although the world has not yet emerged from the recession, Cognex has already begun to see the rewards of its efforts: Orders have been increasing sequentially every quarter starting with the second quarter of 2009, and in the fourth quarter of 2009 orders increased year-on-year for the first time since the beginning of the global economic downturn, and that increase enabled the company to report a profit in Q4!

#### **A Winning Team**

The number of highly-educated, creative, productive and self-motivated candidates for employment worldwide



Cognex Annual Report 2009

is limited, and Cognex prides itself on its ability to attract and retain more than its fair share of them. Every Cognoid is carefully chosen, trained and motivated to work hard and to work smart for the continued success of Cognex. And it is because of them that Cognex has become the world's largest and most successful machine vision company.

Management fully recognizes that in order to stay #1 in the vision indus-

success through the years.

Unfortunately, however, due to a number of factors in recent years having nothing to do with the efforts of Cognex employees, officers or directors, such as the recent precipitous downturn in the worldwide economy, the vast majority of Cognex's outstanding stock options...more than 99% of them... were "underwater" (meaning the stock option exercise price exceeded the mar-

appreciation from its work force, and I want to add my own thanks to Doctor Shillman for implementing Cognex's very own economic stimulus package which put some cash in the pockets of its hard-working employees during these difficult economic times.

Although the offering did cost the company a lot of money, \$9.2 million to be exact, it is important to note that the tender offer did not result in any material incremental expenses on Cognex's P&L. In addition, the tender offer had the benefit of reducing the company's outstanding stock options by 4.9 million shares, or 43%.

#### **Vision for Success**

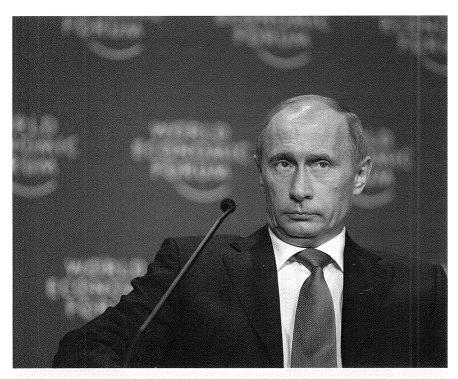
So far I've been talking in detail about the benefits of machine vision....but companies also need plenty of the other kind of vision to succeed. By this I mean that they need both the ability to look into the future to see where opportunities lie and the power to lead the their organizations in that direction.

Cognex has been focusing on opportunities for growing its business both by targeting new and potentially large markets for its existing products, and by developing new vision technologies and products to increase its lead over the competition and to expand the market for machine vision.

Here are some of the strategic initiatives that Cognex has undertaken recently to increase the use of its products worldwide:

#### Partnering with Mitsubishi

Japan is one of the largest markets for factory automation in the world, and, therefore, you would think that Cognex should have a large presence in the factory automation market in Japan. Unfortunately, that has not been the case because there are two very large and well-known local automa-



Russian Prime Minister Vladimir Putin gave lukewarm support to Obama's choice for Vision Czar. "We have had plenty of czars in Russia...it is not such a big thing."

try, Cognex must invest a significant amount of time and energy to find ways to continue to motivate its employees. This effort is the most important investment that management can make.

Until recently, the company has relied on the power of stock options to recruit, retain and motivate the best employees. Since the company's founding in 1981, stock options have always been a core element of Cognex's compensation philosophy, and they have played an instrumental role in Cognex's

ket price of Cognex stock). As a result, these options were not providing either the incentive or the retention value that was originally intended.

To rectify this situation Cognex's Board of Directors decided to purchase, for cash, all stock options that were significantly underwater. That program was completed on December 15th; the vast majority of Cognoids participated, with 95% of the eligible options being tendered. Cognex management received many, many notes of

"The number of highly educated, creative, productive and self-motivated candidates for employment world-wide is limited, and Cognex prides itself on its ability to attract and retain more than its fair share of them."

tion companies in Japan that happen to also sell machine vision. Although Cognex believes that the machine vision products offered by these competitors are not as capable as Cognex products, both of these companies have extensive distribution networks, and, as a direct result, they each have a significantly larger share of their domestic market than does Cognex.

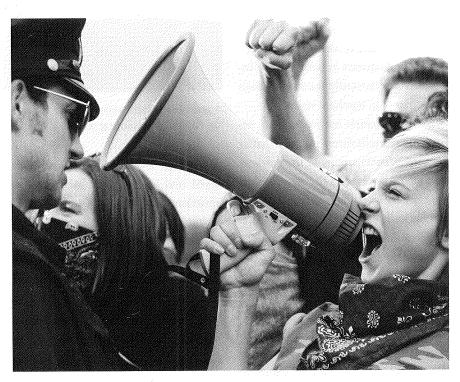
But, Cognex is not settling for the status quo. In August of 2008 Cognex entered a strategic partnership with Mitsubishi Electric Corporation. Mitsubishi is the largest supplier of automation products in Japan, and, coincidentally, it is a direct competitor of the two Japanese automation companies that Cognex competes with in the machine vision market. Working closely with Mitsubishi, Cognex launched a new version of its In-Sight® vision system called In-Sight EZ in the first quarter of 2009. In-Sight EZ is designed to integrate seamlessly with Mitsubishi's factory automation products, and Cognex is currently working with Mitsubishi and its distributors to promote this product to factory automation customers throughout Japan.

As a result of this partnership,

Mitsubishi has gained a strong vision partner to serve its customers, and Cognex has gained direct access to an extensive new channel for selling Cognex products to factories throughout Japan. Since announcing this partnership, Cognex has qualified, trained and signed eighteen of Mitsubishi's largest distributors, and bookings from this channel are already meeting the company's expectations.

information about the production of each item to reduce errors in manufacturing and handling, and to track the item throughout the supply chain.

Today many best-in-class manufacturing companies are implementing traceability or track-and-trace programs using image-based ID readers such as Cognex DataMan® in order to improve their own efficiency or to meet regulatory requirements.



Mistakenly concerned about the impact a Vision Czar would have on their business, a group of angry optometrists protests President Obama's decision.

#### **ID** and Traceability

ID readers are specialized machine vision sensors that are used to read codes off of a wide variety of different items at various stages during their manufacture. These codes can be either one-dimensional codes (often called barcodes) or the newer two-dimensional codes that contain more information to enable unique item traceability. The process of automatically reading these codes allows companies to track useful

ID has been a fast-growing business for Cognex as more and more manufacturers invest in track-and-trace projects. In 2009, Cognex won a number of projects in industries including mail fulfillment, solar cell manufacturing, pharmaceutical manufacturing and medical device manufacturing. The company expects that this segment of its business will continue to grow at a very rapid pace in the future.

#### "Ladies and gentlemen, our moment in history is a moment that calls for vision."

#### **Vertical Markets**

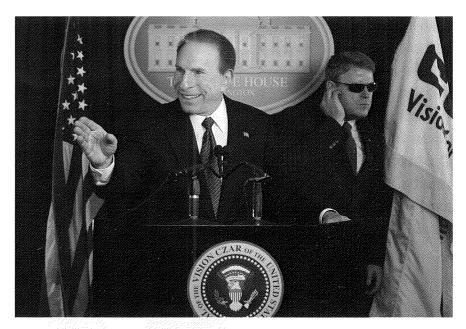
Cognex is also focused on expanding the use of general machine vision by targeting key vertical markets where the company believes there will be a growing demand for vision in the long term. Two of these markets are solar energy production and pharmaceuticals; manufacturers in both of these industries are currently increasing their investments in machine vision.

Solar cell panels are made from silicon, and manufacturers in this industry are now adopting many of the automation processes used in the semiconductor industry to manufacture silicon wafers, including the use of machine vision for identification, alignment, handling, inspection and sortation.

In the pharmaceutical industry, traceability and safety issues are key drivers for using machine vision. In particular, there's a strong need for inspection and traceability throughout the pharmaceutical supply chain to combat counterfeiting and diversions as well as to comply with the new GS1 standards for traceability which many countries will be requiring for pharmaceutical manufacturers.

#### **New Technology**

For the past several years, Cognex has been working on a new technology known as VSoC™ (Vision System on a Chip). VSoC technology will make it possible to build customized CMOS sensors and co-processors that are optimized for machine vision applications. These customized devices or "vision chips" can then be integrated into a



A possible threat from the anti-automation lobby is phoned in during Dr. Shillman's meeting with the White House press corps.

wide range of devices to improve their speed and performance in vision applications. Cognex plans to use VSoC technology first to enhance the performance of its own products, and it may also make specialized vision chips available for purchase by third parties. The company is on target to launch its first product featuring VSoC technology in the second half of 2010.

#### In Conclusion

Sensors of all kinds are becoming increasingly important in many areas of our lives. Cognex remains committed to expanding the use of its machine vision sensors and systems in order to enable all Americans...and people everywhere...to raise their standard of living by giving them the opportunity to purchase high-quality products at the lowest-possible prices...all made possible because of factory automation, of which machine vision is a key element.

As Cognex enters its thirtieth year in business, it continues to operate with energy and an entrepreneurial spirit, to successfully adapt to changes in the machine vision market and to find opportunities to expand its business in new applications, new industries and new regions around the world. And I am confident Cognex will continue to do so, because of its dedicated team of Cognoids who are passionate about machine vision and who are committed to keeping the company on a path of growth and profitability.

Ladies and gentlemen, our moment in history is a moment that calls for vision. I ask you all to join me in supporting the efforts of Cognex, and our new Vision Czar, Doctor Shillman, in his efforts to bring more vision...and better vision...to wherever it is needed in America and the world.



Thank you, God bless you, and may God bless the United States of America!

Barack H. Obama President of the United States

# **10 Questions.** The new Vision Czar thinks the world would be a better place with more machine vision.

#### Dr. Bob Shillman will now take your questions.

### What is your platform as Vision Czar?

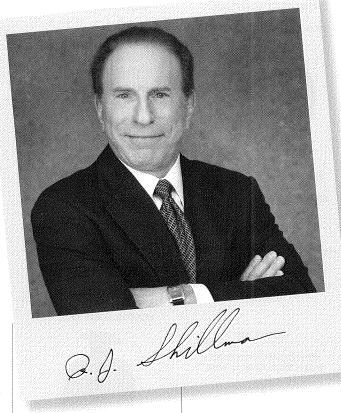
My platform is to encourage more companies to benefit from the advantages of machine vision. Machine vision can reduce errors in manufacturing, and it also drives down manufacturing costs by reducing waste and scrap. Higher production quality and lower manufacturing cost...who doesn't like that?

# Are you going to have to give up the corporate jet now that you work for the government?

I am absolutely *not* going to give up the corporate jet because Cognex never had one! And we don't believe in other expensive executive perks, either.

# You claim that you can improve reading scores in America...isn't that a job for an Education Czar?

Cognex already has improved reading scores...
not just in America, but around the world. Cognex ID readers offer unmatched performance for reading codes such as bar codes and 2D Data Matrix codes that are used to track items during manufacturing and throughout the entire distribution or supply chain.



These readers not only read better....they can read faster too.

#### As a graduate of M.I.T., do you keep up with the football team?

No, but I do follow the nano-robotics team. It's a very small team, by the way.

#### Could a Cognex vision system have caught the gate crashers who got into a White House state dinner without an invitation?

That is a question you will have to address with the new Party Invitation Czar.

### What are the perks of being the Vision Czar?

Free eye exams and unlimited saline solution.

## Has Cognex ever accepted a government bailout?

I've never been out on bail myself, and I don't anticipate that Cognex will ever need bail either.

# Are you a tweeter or a blogger?

Actually, I'm an Aries.

## What makes you qualified for this position?

My own vision is 20/20! Way back in 1981...30

years ago...I had the foresight to see the potential for machine vision, and I founded Cognex to develop the technology and bring products to market. That company is now the world leader and offers a wide range of products from low-cost vision sensors and ID readers to large surface inspection systems.

# What are the key elements of your strategic plan for expanding the use of machine vision in America...and the world?

It's a very simple plan. As the economy improves, people will increase their consumption of products. And, that increased consumption can only be filled by increasing production, which itself can only be achieved by increased use of automation. And, increased reliance on automation can often be achieved by increased use of machine vision systems!



VIDEO AT INVESTOR.COGNEX.COM To watch an

To watch an interview with Bob Shillman

go to http://investor.cognex.com

# **Numbers**

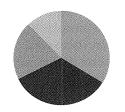
2009 RESULTS

REVENUE

\$175.7 million

NET INCOME (LOSS)
(\$4.9 million)

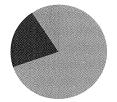
REVENUE BY GEOGRAPHY



- Americas 34% Japan 20%
- Europe 34%

  Asia 12%

REVENUE BY MARKET SEGMENT



- Factory Automation 70%
- Surface Inspection 21%
- SEMI 9%

HISTORY

YEAR COGNEX WAS FOUNDED 1981

VISION SYSTEMS SHIPPED SINCE 1981



CUMULATIVE REVENUE SINCE 1981

>\$2.5 billion

GLOBAL PRESENCE

COUNTRIES WORLDWIDE WHERE COGNEX HAS AN OFFICE OR A DISTRIBUTOR



SYSTEM INTEGRATORS AND DISTRIBUTORS THAT ARE SELLING COGNEX VISION

400

ADDITIONAL FEET ON THE STREET ADDED IN JAPAN THROUGH MITSUBISHI PARTNERSHIP

850

TECHNOLOGY

COGNEX ISSUED PATENTS WORLDWIDE AS OF 12/31/09



2009 REVENUE INVESTED IN R&D

18%

CODES PER SECOND THAT CAN BE READ BY COGNEX DATAMAN ID READERS



445

BUSINESS

STOCK PRICE ON 12/31/09

\$17.71

FIRST YEAR ON NASDAQ STOCK MARKET

1989

STOCK SPLITS SINCE 1989

3

SHARES OUTSTANDING AS OF 12/31/09

39,665,514

CASH & INVESTMENT BALANCE AS OF 12/31/09

\$202 Million

DIVIDENDS PAID TO SHAREHOLDERS SINCE 2003



CONSECUTIVE QUARTERLY DIVIDENDS PAID

26

CASH USED TO BUY BACK COGNEX STOCK

\$292 Million

ACQUISITIONS COMPLETED



CULTURE

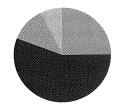
SUM OF MONEY COGNOIDS ARE GRANTED TO DONATE TO CHARITY IN RECOGNITION OF THEIR 25TH ANNIVERSARY WITH COGNEX

\$25,000

COGNEX WORLDWIDE EMPLOYEES (AS OF 12/31/09)



EMPLOYEES BY GEOGRAPHY AS OF 12/31/09



- Americas 56% Japan 12%
- Europe 25%

  Asia 7%

MAJOR COMPANY MILESTONES MARKED BY CHAMPAGNE BOTTLES DISPLAYED ON COGNEX WALL OF FAME



PINBALL GAMES IN COGNEX GAME ROOM



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

FORM 1	0-K
(Mark One)	
[X] Annual report pursuant to Section 13 or 15(d) of the Section 14 or 15(d) of the Section 15(d) o	urities Exchange Act of 1934 for the fiscal year ended
[ ] Transition report pursuant to Section 13 or 15(d) of the Se	ourities Evolungs Act of 1004 for the transition navis d
from to	curilies Excriange Actor 1954 for the transition period
Commission File Number	er 001-34218
COGNEX CORPO	<u> </u>
(Exact name of registrant as spe	
<u>Massachusetts</u>	<u>04-2713778</u>
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Vision Dri	•
Natick, Massachusetts	
(508) 650-300	
(Address, including zip code, and including area code, of principal	
Securities registered pursuant to Section 12(b) of the Act:	executive offices)
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 issued	r, as defined in Rule 405 of the Securities Act.
Yes	NoX
Indicate by check mark if the registrant is not required to file reports pur	suant to Section 13 or Section 15(d) of the Act.
Yes	No X
Indicate by check mark whether the registrant (1) has filed all reports re Exchange Act of 1934 during the preceding 12 months (or for such shorter and (2) has been subject to such filing requirements for the past 90 day	period that the registrant was required to file such reports),
YesX	No
Indicate by check mark whether the registrant has submitted electroni Interactive Data File required to be submitted and posted pursuant to Rule preceding 12 months (or for such shorter period that the registrant was	405 of Regulation S-T (§232.405 of this chapter) during the
Yes	No
Indicate by check mark if disclosure of delinquent filers pursuant to Item 40 contained, to the best of the registrant's knowledge, in definitive proxy or inf this Form 10-K or any amendment to this Form 10-K. [ ]	05 of Regulation S-K is not contained herein, and will not be formation statements incorporated by reference in Part III of
Indicate by check mark whether the registrant is a large accelerated filer reporting company. See the definitions of "large accelerated filer," "accelerated Exchange Act. (Check one):	r, an accelerated filer, a non-accelerated filer, or a smaller ated filer" and "smaller reporting company" in Rule 12b-2 of
□ Large accelerated filer □ Accelerated filer □ Nor	n-accelerated filer    Smaller reporting company
	smaller reporting company)
Indicate by check mark whether the registrant is a shell company (as de Yes	No X
Aggregate market value of voting stock held b	
as of July 5, 2009: \$ <u>507</u> \$.002 par value common stock outstanding as of July	

Documents incorporated by reference:

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, 2009. 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, 2009

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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," 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 IA 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 ("Cognex" or the "Company," each of which includes, unless the context indicates otherwise, Cognex Corporation and its subsidiaries) was incorporated in Massachusetts in 1981. Its corporate headquarters are located at One Vision Drive, Natick, Massachusetts 01760 and its 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 direct 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 metals, paper, non-wovens, plastics, 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 79% of total revenue in 2009. Financial information about 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		
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: discrete factory automation, semiconductor and electronics capital equipment, and surface inspection.

Discrete factory automation customers 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 segment includes a broad base of customers across a variety of industries, including automotive, consumer electronics, food and beverage, health and beauty, medical devices, packaging, and pharmaceutical. Sales to discrete factory automation customers represented approximately 70% of total revenue in 2009, compared to 68% of total revenue in 2008.

Semiconductor and electronics capital equipment manufacturers 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 has been in a prolonged downturn since early 2006. In recent years, the competitive landscape in this market has also changed, 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, Cognex has 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. Sales to semiconductor and electronics capital equipment manufacturers represented approximately 9% of total revenue in 2009, compared to 17% of total revenue in 2008.

Surface inspection customers are manufacturers of materials processed in a continuous fashion, such as metals, paper, non-wovens, 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 21% of total revenue in 2009, compared to 15% of total revenue in 2008.

No customer accounted for greater than 10% of total revenue in 2009, 2008, or 2007.

#### **Business Strategy**

Our goal is to expand our position as a leading worldwide provider of machine vision products. Sales to customers in the discrete 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 discrete 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 sales offices in regions, such as China 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 May 2005, we completed our largest acquisition when Cognex purchased DVT Corporation for \$112 million. This business is included in the Company's MVSD segment. Over the past several years, we have expanded our product line by adding low-cost, easy-to-use vision sensors. However, reaching the many prospects for these products in factories around the world requires a large third-party distribution channel to supplement our direct sales force. With the acquisition of DVT Corporation, we immediately gained a worldwide network of distributors, fully trained in selling and supporting machine vision products. We believe that we can accelerate our growth in the factory automation market by selling our expanding line of low-cost, easy-to-use products through this worldwide distribution network.

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 SmartView Web Inspection System (WIS). When used together, WIS will automatically identify and classify defects and the WMS will then provide 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 will allow SISD to provide a fully-integrated system to paper manufacturers. SISD will serve SmartAdvisor's established customer base, primarily in North America, and plans to expand the sales of SmartAdvisor globally through its existing worldwide sales and service organization. Additional information about acquisitions and divestitures may be found in Notes 20 and 21 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 machine vision 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 the user the most flexibility for 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 inspection, error proofing, part detection, and gauging. 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 or two-dimensional barcodes) 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 is also pursuing applications for ID outside of the manufacturing sector, such as integrating ID products into document processing equipment. 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, classify, and analyze defects on the surfaces of materials processed in a continuous fashion at high production speeds, such as metals, paper, non-wovens, plastics, and glass. Cognex's SmartView<sup>®</sup> Web Inspection System identifies and classifies defects on surfaces, while Cognex's recently-acquired SmartAdvisor<sup>™</sup> Web Monitoring System then provides the customer with the ability to determine the root causes of each of those defects so that they can be quickly eliminated.

#### 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, 2009, Cognex employed 168 professionals in RD&E, many of whom are software developers. Cognex's RD&E expenses totaled \$31,132,000 in 2009, \$36,262,000 in 2008, and \$33,384,000 in 2007, or approximately 18%, 15%, and 15% 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, and therefore, we expect to continue to make significant RD&E investments in the future in strategic areas, such as the ID products business and the development of a "Vision System on a Chip." In addition, we consider our ability to accelerate time to market for new products critical to our revenue growth. Although we target our RD&E spending to be between 10% and 15% of total revenue, this percentage is impacted by revenue levels.

At any point in time, we have numerous research and development projects underway. Among these projects is the development of a vision system (i.e., imager, analog to digital converter, vision processing, and camera peripherals) on a semiconductor chip ("Vision System on a Chip" or VSoC). This technology is expected to make it possible to build customized CMOS (complementary metal-oxide semiconductor) sensors that are optimized for machine vision applications. These customized CMOS sensors or "vision chips" can then be integrated into a wide range of devices to improve the speed and performance of vision applications. Cognex plans to use VSoC technology to enhance the performance of its own products, and may also make specialized devices using VSoC technology available for purchase by third parties. We expect to launch our first product featuring VSoC technology in the second half of 2010.

#### 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 and 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 one of the Company's two distribution locations: Cork, Ireland or Natick, Massachusetts, USA. At these locations, Cognex's software is loaded onto the product, final quality control is performed, and the product is kitted for shipment to our customers. Orders for customers in the Americas are shipped from our Natick, Massachusetts facility, while orders for customers in Japan, Europe, and Southeast Asia are shipped from our Cork, Ireland facility.

Cognex's SISD products are manufactured at its Alameda, California facility. The manufacturing process at the Alameda facility consists of component procurement, system assembly, quality control, and shipment of product to customers worldwide. During the fourth quarter of 2009, Cognex closed its Kuopio, Finland facility and transferred the manufacturing activities that were previously performed at this location to the Alameda facility. Activities that were previously performed at the Kuopio facility included integration of the sub-assembly with the frames on which the cameras and lights used to illuminate the surface are mounted, as well as quality control, and shipment of product to customers within Europe and Asia. With the closure of the Kuopio facility, all SISD products are now assembled at and shipped from the Alameda facility.

#### 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, 2009, Cognex's sales force consisted of 234 professionals, and our partner network consisted of approximately 213 active integrators and 197 authorized distributors. Sales engineers call directly on targeted accounts and manage the activities of our partners within their territories in order to implement the most advantageous sales model for our products. The majority of our sales force holds engineering or science degrees. Cognex has sales and support offices located throughout the Americas, Japan, Europe, and Southeast Asia. In recent years, the Company opened sales offices in China (which the Company currently includes in its Southeast Asia region) and Eastern Europe, where we believe many manufacturers can benefit from incorporating machine vision into their production processes.

During 2008, Cognex announced a partnership with Mitsubishi Electric Corporation, a leading worldwide 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 the fast-growing markets throughout Asia.

Sales to customers based outside of the United States represented approximately 66% of total revenue in 2009, compared to approximately 70% of total revenue in 2008. In 2009, approximately 34% of the Company's total revenue came from customers based in Europe, 20% from customers based in Japan, and 12% from customers based in Southeast Asia. Sales to customers based in Europe are predominantly denominated in Euro, sales to customers based in Japan are predominantly denominated in Yen, and sales to customers based in Southeast Asia are predominantly denominated in U.S. Dollars. 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, 2009, Cognex had been granted, or owned by assignment, 281 patents issued and had another 133 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 service-mark portfolio includes various registered marks, including, among others, Cognex®, In-Sight®, Checker®, DataMan®, VisionPro®, and SmartView®, as well as many common-law marks, including, among others, Cognex VSoC™ and SmartAdvisor™.

#### **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 highly 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, Cognex competes with the internal engineering departments of current or prospective customers. In the direct part mark identification 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 system include vendor reputation, product functionality and performance, ease of use, price, and post-sales support. In addition, in the semiconductor and electronics capital equipment market, the flexibility of purchasing hardware from other vendors has become an important factor in recent years. The importance of each of these factors varies depending upon the specific customer's needs.

#### **Backlog**

As of December 31, 2009, backlog totaled \$31,459,000, compared to \$30,423,000 as of December 31, 2008. 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. 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, 2009, Cognex employed 729 persons, including 349 in sales, marketing, and service activities; 168 in research, development, and engineering; 89 in manufacturing and quality assurance; and 123 in information technology, finance, and administration. Of the Company's 729 employees, 325 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 Information" section under the caption "Investor Information – Annual Reports & 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, pharmaceuticals, metals, and paper industries. These spending levels are, in turn, impacted by global economic conditions, as well as industry-specific economic conditions.

The credit market crisis and slowing global economies have 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 the fourth quarter of 2009 was the third quarter in a row that order levels increased on a sequential basis, demand is still lower than the levels we reported through the third quarter of 2008, when our business first began to be impacted by the worldwide economic slowdown. Our 2010 business plan assumes that the worldwide economy will continue its recovery. If global economic conditions do not continue to improve, or if they 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, 2009, the Company had approximately \$194,161,000 in either cash or investments 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, together with the cost-

cutting measures we implemented over the past several months, put us in a relatively good position to weather a prolonged 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.

# Our restructuring programs may result in disruption to our business and may negatively impact our operating results.

Late in 2008 and again during 2009, the Company implemented various restructuring actions which will result in long-term cost savings. These actions, which included work force reductions, office closures, mandatory shutdown days, and decreases in discretionary spending, were intended to more closely align our cost structure with the lower levels of business resulting from worldwide economic conditions. Although operating expenses before restructuring charges were down by 15% in 2009 from the prior year, these actions were not sufficient for the Company to generate a profit for 2009. Furthermore, these lower expense levels may not be sufficient for the Company to generate a profit in 2010 depending upon revenue levels. Although we expect to continue to make investments in strategic areas throughout this downturn, these restructuring actions may nevertheless negatively impact programs we believe are crucial to the long-term success of the Company, such as the ability to accelerate time to market for new products. In addition, our ability to provide a high level of service to our customers may be negatively impacted by these actions, particularly in regions where we have significantly downsized our operations.

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

In 2009, approximately 9% of our revenue was derived from semiconductor and electronics capital equipment manufacturers. This concentration was as high as 61% in 2000 during its revenue peak. The semiconductor and electronics industries are highly cyclical and have historically experienced periodic downturns, which have often had a severe effect on demand for production equipment that incorporates our products. While we have been successful in diversifying our business beyond OEM customers who serve the semiconductor and electronics industries, our business is still impacted by capital expenditures in these industries, which, in turn, are dependent upon the market demand for products containing computer chips. As a result, our operating results in the foreseeable future could be significantly and adversely affected by further 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.

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

In 2009, 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 may expand our presence in international markets, such as our expansion into China and Eastern Europe, which will 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 requirements.
- 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.

The only foreign currencies in which a significant portion of our revenues and expenses are denominated are the Euro and the Japanese Yen. Our predominant currency of sale is the U.S. Dollar in the Americas and Southeast Asia, the Euro in Europe, and the Yen in Japan. We estimate that approximately 54% of our sales in 2009 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. Furthermore, our U.S. Dollar based pricing in Southeast Asia may put us at a competitive disadvantage with Asian vendors that offer local currency based pricing.

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

In 2009, our top five customers accounted for approximately 9% 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 Chief Executive Officer, and Robert J. Willett, our Chief Operating Officer and President, 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. Furthermore, the decline in the stock market has made stock options a less effective means of retaining our employees. Accordingly, we may find it difficult to attract, retain, and motivate employees, and any such difficulty 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. As a result, 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. In addition, a variety of components used in our products are only available from a single source. The announcement by a single-source supplier of a last-time component buy could result in our purchase of a significant amount of inventory that, in turn, could lead to an increased risk of inventory obsolescence. Although we are taking certain actions to mitigate sole-source supplier risk, an interruption in, termination of, or material change in the purchase terms of any single-source components could have a material adverse effect on our operating results.

Our inventory levels have declined over the past year, as we have reduced our purchase requirements in response to the lower level of demand from our customers. Likewise, many of our vendors have reduced their inventory levels and manufacturing capacity during the economic slowdown. As a result, if demand from our customers 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. Furthermore, the global economic slowdown has resulted in lower forecasted demand for our products, which may result in excess or obsolete inventory if we are unable to sell inventory that either is already on hand or committed to purchase. 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 develop new products and to respond to technological changes 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. We may not be able to introduce and market new products successfully, including our proposed "Vision System on a Chip," and respond effectively to technological changes or new product introductions by competitors. 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.

# 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 of demand and pricing issues. Cognex expects its partnership with Mitsubishi Electric Corporation to grow its 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.

We compete with other vendors of machine vision systems, the internal engineering efforts of our current or prospective customers, and the manufacturers of image processing systems, automatic identification systems, and sensors. Any of these competitors may have greater financial and other resources than we do. In recent years, ease-of-use and product price have become 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.

The recent global economic slowdown has resulted in lower forecasted revenue, which may result in lower estimated future cash flows from acquired assets and increase the likelihood of impairment. 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, 2009, we had \$202 million in cash and investments, and approximately \$194 million of this balance represented either cash or investments in municipal bonds that could be converted into cash. The remaining balance represented an \$8 million limited partnership interest in a venture capital fund.

The limited partnership's investments consist of a mix of young and emerging companies. The worldwide economic slowdown and the 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 slowdown as would a more mature company. These factors will likely impact the fair value of the companies in the partnership's

portfolio. As of December 31, 2009, the carrying value of this investment was \$7,866,000 compared to an estimated fair value, as determined by the General Partner, of \$8,025,000. 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.

As of December 31, 2009, we had \$28 million in acquired intangible assets, of which \$23 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. We have reviewed the expected cash flows from these acquired assets and believe their carrying values are recoverable; however, 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, 2009, we had \$83 million in acquired goodwill, \$78 million of which is assigned to our Modular Vision Systems Division and \$5 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 out 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 effect on our income tax provision, net income, or cash flows in the period in which the determination is made.

#### 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 headquarters. This building is currently occupied with tenants who have lease agreements that expire at various dates through 2017. Cognex also uses a portion of this space for storage. A portion of this space is currently unoccupied.

In 1997, Cognex purchased a three and one-half acre parcel of land situated on Vision Drive, 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 a tenant who has a lease agreement that expires in 2012. A portion of this space is also currently unoccupied.

Cognex conducts certain of its operations in leased facilities. These lease agreements expire at various dates through 2016. Certain of these leases contain renewal options, escalation clauses, rent holidays, and leasehold improvement incentives.

#### **ITEM 3: LEGAL PROCEEDINGS**

In May 2008, Microscan Systems, Inc. filed a complaint against the Company in the United States District Court for the Western District of Washington alleging infringement of U.S. Patent No. 6.105.869 owned by Microscan Systems, Inc. The complaint alleges that certain of the Company's DataMan 100 and 700 series products infringe the patent in question. In November 2008, the Company filed an answer and counterclaim alleging that the Microscan patent was invalid and not infringed, and asserting a claim for infringement of U.S. Patent No. 6.636.298. A trial date of June 2010 has been scheduled by the court.

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 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. These settlements did not have a material impact on the Company's financial results. This matter is ongoing.

The Company cannot predict the outcome of the above-referenced 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: SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters submitted during the fourth quarter of the year ended December 31, 2009 to a vote of security holders through solicitation of proxies or otherwise.

### 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, 2009:

Name	Age	<u>Title</u>
Robert J. Shillman	63	Chief Executive Officer and Chairman of the Board of Directors
Richard A. Morin	60	Executive Vice President of Finance and Administration, Chief Financial Officer, and Treasurer
Robert J. Willett	42	Executive Vice President and President, Modular Vision Systems Division

In January 2010, Mr. Willett was promoted to President and Chief Operating Officer of the Company. 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 Chief Operating Officer and President, and he now oversees both MVSD and the Surface Inspection Systems Division (SISD). 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 31, 2010, 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 2009 and 2008 are as follows:

	1 1 1		First	Second	Third	Fourth
2009					<b>*</b>	<b>440.47</b>
High		 	\$15.30	\$14.85	\$17.87	\$18.17
•			9.46	12.41	13.58	15.64
2008						
High		 	\$22.16	\$28.10	\$25.00	\$21.23
			14.67	21.25	16.57	10.82

The Company declared and paid a cash dividend of \$0.085 per share in the first and second quarters of 2008. The quarterly dividend was increased to \$0.150 per share in the third and fourth quarters of 2008 and the first quarter of 2009. The quarterly dividend was reduced to \$0.050 per share in the second, third, and fourth quarters of 2009. Future dividends will be declared at the discretion of the Company's Board of Directors and will depend upon such factors as the Board deems relevant including, among other things, the Company's ability to generate positive cash flow from operations.

In April 2008, the Company's Board of Directors authorized the repurchase of \$50,000,000 of the Company's common stock. As of December 31, 2009, the Company had repurchased 1,038,797 shares at a cost of \$20,000,000 under this program. The Company did not purchase any shares under this program during 2009. The Company may repurchase shares under this program in future periods depending upon a variety of factors, including, among other things, the stock price level, 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:

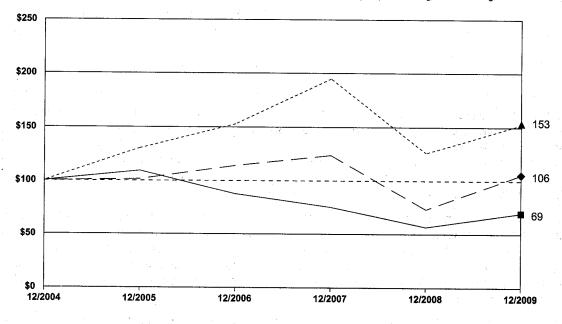
	\$ Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	that May Yet Be
October 5 – November 1, 2009	 -	-	-	\$30,000,000
November 2 – November 29, 2009		-		\$30,000,000
November 30 – December 31, 200		-	-	\$30,000,000
Total			-	\$30,000,000

<sup>(1)</sup> In April 2008, the Company's Board of Directors authorized the repurchase of up to \$50,000,000 of the Company's common stock.

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 12/31/04 in stock or index-including reinvestment of dividends Fiscal year ending December 31.

	12/2004	12/2005	12/2006	12/2007	12/2008	12/2009
Cognex Corporation	100.00	109.10	87.50	75.13	56.69	69.49
NASDAQ Composite	100.00	101.33	114.01	123.71	73.11	105.61
NASDAQ Stocks	100.00	130.33	152.91	194.83	125.99	152.60

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

#### ITEM 6: SELECTED FINANCIAL DATA

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	2009	2008 (In thousands	2007 s, except per sh	2006 nare amounts)	2005
Statement of Operations Data:				•	
Revenue	\$175,727	\$242,680	\$225,683	\$238,318	\$216,875
Cost of revenue (1)	56,387	68,427	64,350	64,838	62,899
Gross margin Research, development, and engineering	119,340	174,253	161,333	173,480	153,976
expenses (1) Selling, general, and administrative	31,132	36,262	33,384	32,332	27,640
expenses (1)	96,350	112,629	99,813	96,675	82,332
Restructuring charges	4,526	258			" ————————————————————————————————————
Operating income (loss) Nonoperating income	(12,668) 2,292	25,104 10,264	28,136 7,986	44,473 6,104	44,004 4,242
Income (loss) from continuing operations before income tax expense (benefit) Income tax expense (benefit) on continuing	(10,376)		36,122	50,577	48,246
operations	(5,507)	4,869	8,575	10,549	12,544
Income (loss) from continuing operations Loss from operations of discontinued	(4,869)	30,499	27,547	40,028	35,702
business, net of tax	-	(3,224)	(648)	(173)	<u> </u>
Net income (loss)	<u>\$. (4,869</u> )	\$ 27,275	\$ 26,899	\$ 39,855	\$ 35,702
Basic earnings (loss) per weighted-average common and common-equivalent share: Income (loss) from continuing operations Loss from discontinued operations	\$ (0.12) \$ 0.00	\$ 0.74 \$ (0:08)	\$ 0.63 \$ (0.01)	\$ 0.88 \$ (0.01)	\$ 0.76 \$ 0.00
Net income (loss)	\$ (0.12)	\$ 0.66	\$ 0.62	\$ 0.87	\$ 0.76
	<del>ψ (0.12</del> )	<u>Ψ 0.00</u>	Ψ 0.02	Ψ 0.07	Ψ 0.70
Diluted earnings (loss) per weighted-average common and common-equivalent share: Income (loss) from continuing operations Loss from discontinued operations	\$ (0.12) \$ 0.00	\$ 0.73 \$ (0.07)	\$ 0.63 \$ (0.02)	\$ 0.86 \$ (0.01)	\$ 0.74 \$ 0.00
Net income (loss)	\$ (0.12)	\$ 0.66	\$ 0.61	\$ 0.85	\$ 0.74
Weighted-average common and common equivalent shares outstanding: Basic	39,659	41,437	43,725	45,559	46,709
Diluted	39,659	41,554	44,063	46,648	47,935
Cash dividends per common share	\$ 0.30	\$ 0.47	\$ 0.34	\$ 0.33	\$ 0.32
(1) Amounts include stock-based compensation expense, as follows:	<u> </u>	-			<u> </u>
Cost of revenue Research, development, and engineering Selling, general, and administrative	\$ 774 2,163 6,286	\$ 1,116 3,067 6,048	\$ 1,215 3,239 7,261	\$ 1,596 3,627 8,401	\$ - - -
Total stock-based compensation expense	\$ 9,223	\$ 10,231	\$ 11,715	\$ 13,624	\$ -
			locombox 21		
the second of th	2222	The second secon	ecember 31,	0000	
	2009	2008(	2007 In thousands)	2006	2005
Balance Sheet Data:					
Working capital	\$210,674	\$213,374	\$269,528	\$266,647	\$268,612
Total assets	439,869	474,047	539,546	528,651	564,562
Long-term debt	-100,000	-,-,0-,	-	-	-
Shareholders' equity	394,448	413,075	476,365	473,850	506,521

# 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," 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, strategic plans, and the impact of the Company's cost-cutting measures, 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) potential disruption to the Company's business from its restructuring programs; (3) the cyclicality of the semiconductor and electronics industries; (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; and (18) exposure to additional tax liabilities. 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 manufacturing 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: discrete factory automation, semiconductor and electronics capital equipment, and surface inspection.

Discrete factory automation customers 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 segment includes a broad
base of customers across a variety of industries, including automotive, consumer electronics, food
and beverage, health and beauty, medical devices, packaging, and pharmaceutical. Sales to

discrete factory automation customers represented approximately 70% of total revenue in 2009, compared to 68% of total revenue in 2008.

- Semiconductor and electronics capital equipment manufacturers 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 has been in a prolonged downturn since early 2006. Sales to semiconductor and electronics capital equipment manufacturers represented approximately 9% of total revenue in 2009, compared to 17% of total revenue in 2008.
- Surface inspection customers are manufacturers of materials processed in a continuous fashion, such as metals, paper, non-wovens, 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 21% of total revenue in 2009, compared to 15% of total revenue in 2008.

Revenue for the year ended December 31, 2009 totaled \$175,727,000, representing a 28% decrease from the prior year. This decrease was primarily due to lower sales to customers in the discrete factory automation and semiconductor and electronics capital equipment markets of the Company's MVSD segment, which has been impacted by the worldwide economic slowdown. Late in 2008 and again during 2009, the Company implemented a number of cost-cutting measures intended to reduce expenses in response to lower revenue expectations. Although operating expenses prior to restructuring charges were down 15% from the prior year, the significantly lower revenue, as well as the impact of restructuring charges, resulted in an operating loss of \$12,668,000 for 2009, compared to operating income of \$25,104,000 for 2008.

Although the Company recorded lower revenue in 2009 than 2008, the fourth quarter of 2009 was the third quarter in a row that demand from customers increased on a sequential basis. Order levels also increased over the prior year in the fourth quarter of 2009 for the first time since the third quarter of 2008. While we anticipate revenue growth and a profit from continuing operations in 2010, our business plan assumes that the worldwide economy will continue its recovery and our financial results are subject to this assumption and other risks as more fully described in Part I – Item 1A of this Annual Report on Form 10-K.

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

	Year ended Decembe	r 3	1	,
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	2009	2008	2007
Revenue	100%	100%	100%
Cost of revenue	32	_28	_29
Gross margin	68	72	71
Research, development, and engineering expenses	18	15	15
Selling, general, and administrative expenses	54	47	44
Restructuring charges	3		
Operating income (loss)	(7)	10	12
Nonoperating income	1	5	4
Income (loss) from continuing operations before income tax expense (benefit)	(6)	15	16
Income tax expense (benefit) on continuing operations	<u>(3</u> )	2	4
Income (loss) from continuing operations	(3)	13	12
Loss from operations of discontinued business, net of tax	<u>-</u>	2	
Net income (loss)	<u>(3</u> )%		<u>12</u> %

#### STOCK-BASED COMPENSATION

The total stock-based compensation expense and the related income tax benefit recognized was \$9,223,000 and \$3,070,000, respectively, in 2009 and \$10,231,000 and \$3,345,000, respectively in 2008. No compensation expense was capitalized as of December 31, 2009 or December 31, 2008. Stock-based compensation expense decreased in 2009 from the prior year as a result of a declining trend in the number of stock options granted, as well as lower grant-date fair values primarily due to a lower stock price. Stock-based compensation expense was relatively high in the fourth quarter of 2009 due to the acceleration of the expense related to unvested stock options that were tendered by employees in the Company's cash tender offer for certain underwater options (\$2,657,000), in particular in MVSD SG&A (refer to Note 13 to the Consolidated Financial Statements in Part II – Item 8 of this Annual Report on Form 10-K). We expect stock-based compensation expense to be relatively low in the first quarter of 2010 due to the declining trend in the number of stock options granted, the accelerated expense taken in 2009 related to unvested stock options tendered by employees, as well as an anticipated credit related to forfeited stock options.

As of December 31, 2009, total unrecognized compensation expense related to non-vested stock options was \$4,714,000, which is expected to be recognized over a weighted-average period of 1.4 years.

#### **RESULTS OF OPERATIONS**

#### Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

#### Revenue

Revenue for the year ended December 31, 2009 decreased by \$66,953,000, or 28%, from the prior year due to lower sales to customers in the discrete factory automation and semiconductor and electronics capital equipment markets. Changes in foreign currency exchange rates had little impact on total revenue for the full year 2009 compared to 2008. A stronger U.S. Dollar relative to the Euro, on average, in 2009 compared to 2008 contributed to 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.

#### Discrete Factory Automation Market

Sales to manufacturing customers in the discrete factory automation area, which are included in the Company's MVSD segment, represented 70% of total revenue in 2009 compared to 68% of total revenue in 2008. Sales to these customers decreased by \$42,169,000, or 25%, from the prior year. Demand from the Company's factory automation customers has been affected by the worldwide economic slowdown, which first began to impact the Company's orders from these customers in the third quarter of 2008. While factory automation sales declined from the prior year in all of the Company's major geographic regions, the largest dollar decreases were experienced in Europe and the United States where the Company has a broad base of factory automation customers. However, the fourth quarter of 2009 was the third quarter in a row that demand from these customers increased on a sequential basis. Order levels also increased over the prior year in the fourth quarter of 2009 for the first time since the third quarter of 2008. While we anticipate demand and revenue from these customers will increase in 2010, our business plan assumes a continued worldwide economic recovery that generates factory automation projects.

#### Semiconductor and Electronics Capital Equipment Market

Sales to customers who make automation equipment for the semiconductor and electronics industries, which are included in the Company's MVSD segment, represented 9% of total revenue in 2009 compared to 17% of total revenue in 2008. Sales to these customers decreased by \$25,134,000, or 62%, from the prior year due to industry cyclicality, as well as competitive market pressures. Geographically, revenue decreased most significantly in Japan where many of the Company's semiconductor and electronics capital equipment customers are located. In recent years, the competitive landscape in this market has

changed, as price and flexibility of purchasing hardware from other vendors have become more important factors in our customers' purchasing decisions. To address this market change, the Company has introduced software-only products; however, 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. Although the fourth quarter of 2009 was the third quarter in a row that demand increased on a sequential basis and order levels increased over the prior year in the fourth quarter of 2009, demand from these customers remains at historically low levels and we have limited visibility regarding future order levels from these customers.

#### Surface Inspection Market

Sales to surface inspection customers, which comprise the Company's SISD segment, represented 21% of total revenue in 2009 compared to 15% of total revenue in 2008. Revenue from these customers increased by \$350,000, or 1%, from the prior year. While demand for the Company's surface inspection customers has not been significantly impacted by worldwide economic conditions to date, these conditions have increased competitive market pressures resulting in higher discounting of products in order to maintain and grow market share.

#### Product Revenue

Product revenue decreased by \$64,864,000, or 29%, from the prior year primarily due to a lower volume of vision systems sold to customers in the discrete factory automation and semiconductor and electronics capital equipment markets. Although average-selling prices declined from the prior year as the Company introduced new products at lower price points, including software-only products, the lower volume of units sold was the primary driver behind the decline in product revenue. Product revenue in the first quarter of 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, decreased by \$2,089,000, or 11%, from the prior year primarily due to lower maintenance and support revenue. The lower maintenance and support revenue was partially offset by higher revenue from surface inspection installation services. Maintenance and support revenue has declined due to the introduction of new products and functionality that make vision easier to use and require less maintenance and support. Service revenue increased as a percentage of total revenue to 10% in 2009 from 8% in 2008.

#### Gross Margin

Gross margin as a percentage of revenue was 68% for 2009 compared to 72% for 2008. This decrease was primarily due to lower MVSD product margins, as described below, as well as a higher percentage of total revenue from the sale of surface inspection systems, which have lower margins than the sale of modular vision systems.

#### MVSD Margin

MVSD gross margin as a percentage of revenue was 74% in 2009 compared to 76% in 2008. The decrease in MVSD margin was primarily due to a lower product margin resulting from the impact of relatively flat new product introduction costs on a lower revenue base, as well as higher provisions for excess and obsolete inventory. These negative impacts were partially offset by the higher-than-average margin achieved on a \$4,400,000 revenue arrangement recognized in the first quarter of 2009. This arrangement included the transfer of source code, as well as the delivery of product, which resulted in a

higher selling price and a higher margin on the overall arrangement. We expect our MVSD margins would improve if we are able to achieve higher revenue levels in 2010.

#### SISD Margin

SISD gross margin as a percentage of revenue was 46% in 2009 compared to 50% in 2008. The decrease in SISD margin was primarily due to higher discounting of products in response to competitive market pressures. A higher percentage of service revenue from installation services, which have lower margins than the sale of maintenance and support, spare parts, and repairs, also contributed to the decline in the SISD margin. We do not anticipate SISD margins will change significantly over the next year due to continued competitive market pressures.

#### Product Margin

Product gross margin as a percentage of revenue was 72% in 2009 compared to 75% in 2008. This decrease was primarily due to the lower MVSD product margin as described above, as well as a higher percentage of total revenue from the sale of surface inspection systems, which have lower margins than the sale of modular vision systems. This decrease was partially offset by the higher-than-average margin achieved on a \$4,400,000 revenue arrangement recognized in the first quarter of 2009.

#### Service Margin

Service gross margin as a percentage of revenue was 35% in 2009 compared to 38% in 2008. Although maintenance and support costs declined from the prior year due to improvements in product ease of use, service revenue declined at a greater rate.

#### Operating Expenses

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses decreased by \$5,130,000, or 14%, from the prior year. MVSD RD&E expenses decreased by \$4,947,000, or 15%, and SISD RD&E expenses decreased \$183,000, or 5%.

The decrease in MVSD RD&E expenses was due to lower company bonus accruals (\$317,000) and lower stock-based compensation expense (\$881,000), as well as the favorable impact of changes in foreign currency exchange rates (\$409,000). The U.S. Dollar was stronger relative to the Euro in 2009 compared to 2008, resulting in lower RD&E costs when expenses of the Company's European operations were translated into U.S. Dollars. In November 2008 and again in April 2009, the Company implemented a number of cost-cutting measures intended to reduce expenses in response to lower revenue expectations. These measures included MVSD RD&E headcount reductions, primarily in the United States, which lowered the Company's personnel-related costs, such as salaries and fringe benefits (\$1,861,000). Other cost-cutting measures, including mandatory shutdown days in the third quarter and a lower Company contribution to employees' 401(k) plans in the second half of 2009, also lowered the Company's fringe benefit costs (\$529,000). In addition, tighter controls over spending resulted in lower expenses related to outside services (\$388,000) and materials and supplies (\$186,000).

The table below illustrates the savings achieved in MVSD RD&E in 2009:

MVSD RD&E balance in 2008	•	· · · · · · · · · · · · · · · · · · ·	\$32,883
Headcount reductions		• • •	(1,861)
Stock-based compensation expense	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(881)
Outside services, materials, and supplies			(574)
Fringe benefit costs			(529)
Foreign currency exchange rate changes			(409)
Company bonus accruals		-	(317)
Other		er e	(376)
MVSD RD&E balance in 2009			\$27,936

The decrease in SISD RD&E expenses was primarily due to lower outside services (\$325,000), partially offset by an increase in personnel-related costs (\$185,000).

RD&E expenses as a percentage of revenue were 18% and 15% in 2009 and 2008, 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, and therefore, we expect to continue to make significant RD&E investments in the future in strategic areas, such as the ID products business and the development of a "Vision System on a Chip." In addition, we consider our ability to accelerate time to market for new products critical to our revenue growth. 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 decreased by \$16,279,000, or 14%, from the prior year. MVSD SG&A expenses decreased by \$14,355,000, or 16%, while SISD SG&A expenses decreased by \$308,000, or 3%. Corporate expenses that are not allocated to either division decreased by \$1,616,000, or 12%.

The decrease in MVSD SG&A expenses was due to the impact of cost-cutting measures implemented by the Company in November 2008 and again in April 2009 intended to reduce expenses in response to lower revenue expectations. These measures included headcount reductions across all regions, which lowered the Company's personnel-related costs, such as salaries, fringe benefits, commissions and travel (\$5,753,000). In addition to lower spending related to headcount levels, travel decreased due to tighter controls over discretionary spending and lower air travel rates (\$1,274,000). Other reductions in discretionary spending included lower marketing and promotional expense (\$3,094,000), lower expenses related to the Company's sales kick-off meetings (\$609,000), and lower expenses related to outside services (\$618,000) and materials and supplies (\$586,000). Lower amortization expense (\$1,778,000) and impairment charges (\$500,000 - refer to 7 to the Consolidated Financial Statements in Part II - Item 8 of this Annual Report) related to intangible assets, as well as the favorable impact of changes in foreign currency exchange rates (\$685,000) also contributed to the decrease in expenses. These savings were partially offset by higher stock-based compensation expense primarily related to the expensing of unvested stock options that were tendered by employees in the fourth quarter of 2009, net of the impact of a declining trend in the number of stock options granted, as well as lower grant-date fair values (\$1,254,000).

The table below illustrates the savings achieved in MVSD SG&A in 2009:

MVSD SG&A balance in 2008	\$88,107
Headcount reductions	(5,753)
Marketing and promotional expenses	(3,094)
Intangible asset impairment and amortization	2.5 (2,278)°
Travel expenses	(1,274)
Outside services, materials, and supplies	(1,204)
Foreign currency exchange rate changes	(685)
Sales kick-off meetings	(609)
Stock-based compensation expense	1,254
Other	(712)
MVSD SG&A balance in 2009	\$73,752

The decrease in SISD SG&A expenses was due to lower sales commissions (\$301,000).

The decrease in corporate expenses was due to lower stock-based compensation expense (\$979,000), company bonus accruals (\$164,000), and tax services primarily related to tax audits in various jurisdictions (\$494,000). In addition, fewer employees were dedicated to corporate activities in 2009 (\$743,000) and travel was reduced (\$383,000). These savings were partially offset by increased legal fees primarily for patent-infringement actions (\$1,578,000 – Refer to Note 10 to the Consolidated Financial Statements in Part II – Item 8 of this Annual Report).

# Restructuring Charges

# November 2008

In November 2008, the Company announced the closure of its facility in Duluth, Georgia, which will result in long-term cost savings. This facility included a distribution center for MVSD customers located in the Americas, an engineering group dedicated to supporting the Company's MVSD Vision Systems products, and a sales training and support group, as well as a team of finance support staff. During the second quarter of 2009, this distribution center was consolidated into the Company's headquarters in Natick, Massachusetts, resulting in a single distribution center for MVSD customers located in the Americas. Although a portion of the engineering and sales training and support positions have been transferred to other locations, the majority of these positions, and all of the finance positions, have been eliminated. The Company achieved expense savings of approximately \$2,000,000 in 2009, which were partially offset by \$976,000 of restructuring costs, and expects to achieve expense savings of approximately \$3,500,000 in 2010 related to the closure of the Duluth, Georgia facility. The Company hired fewer employees to staff the new distribution center in Natick, Massachusetts than originally planned, resulting in higher estimated cost savings than the original estimate. These savings will be realized in "Cost of revenue," "Research, development, and engineering expenses," and "Selling, general, and administrative expenses" on the Consolidated Statements of Operations.

The restructuring charge from these actions was \$1,234,000, all of which has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the MVSD reporting

segment. This restructuring plan was completed during the fourth quarter of 2009. The following table summarizes the restructuring plan (in thousands):

	Expec	Amount ted to be urred	Incurred in the Year Ended December 31, 2009	Incurre	ive Amount d through er 31, 2009
One-time termination benefits	\$	552	\$298	¢	552
	·Ψ		• • •	Ψ	
Contract termination costs		372	372		372
Other associated costs		310	306		310
× - 4	<u>\$1</u>	,234	<u>\$976</u>	\$	1,234

One-time termination benefits included severance and retention bonuses for 31 employees who were terminated. Severance and retention bonuses for those employees who continued to work after the notification date were recognized over the service period. Contract termination costs primarily included rental payments for the Duluth, Georgia facility for periods subsequent to the date the distribution activities were transferred to Natick, Massachusetts, for which the Company did not receive an economic benefit. These contract termination costs were recognized in the second quarter of 2009 when the Company ceased using the Duluth, Georgia facility. Other associated costs primarily included travel and transportation expenses between Georgia and Massachusetts related to the closure of the Georgia facility and relocation costs related to employees transferred to other locations, as well as outplacement services for the terminated employees. These costs were recognized when the services were performed.

The following table summarizes the activity in the Company's restructuring reserve, 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, 2008	\$ 207	\$ -	\$ -	\$ 207
Restructuring charges	393	374	306	1,073
Cash payments	(505)	(372)	(294)	(1,171)
Restructuring adjustments	<u>(95</u> )	(2)	<u></u>	(97)
Balance as of December 31, 2009	<u>\$ -</u>		<u>\$ 12</u>	\$ 12

Restructuring adjustments were primarily due to the forfeiture of one-time termination benefits, including severance and retention bonuses, by certain employees who voluntarily terminated their employment prior to the end of the communicated service period or who were retained as employees in another capacity. The impact of revisions to the service period for certain employees entitled to severance and retention bonuses was also included in the restructuring adjustment.

# April 2009

In April 2009, the Company implemented a variety of cost-cutting measures, including a work force reduction and office closures, intended to more closely align the Company's cost structure with the lower levels of business resulting from worldwide economic conditions. These restructuring actions achieved expense savings of approximately \$4,500,000 in 2009, which were partially offset by \$3,045,000 of restructuring costs, and are expected to achieve expense savings of approximately \$8,500,000 in 2010. These savings will be realized in "Cost of revenue," "Research, development, and engineering expenses," and "Selling, general, and administrative expenses" on the Consolidated Statements of Operations. In addition to these restructuring actions, the Company also took other steps to cut expenses in 2009, including mandatory shutdown days, a lower Company contribution to employees' 401(k) plans, cuts in certain executive salaries, and decreases in discretionary spending. Certain of these actions have been extended into 2010 as we continue to tightly control spending during a challenging business climate.

The restructuring charge from these actions was \$3,045,000, all of which has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the MVSD reporting segment. The following table summarizes the restructuring plan (in thousands):

		Incurred in the Year Ended December 31, 2009
One-time termination benefits	e de la companya de l	\$2,775
Contract termination costs		167
Other associated costs		<u>103</u>
		<u>\$3,045</u>

One-time termination benefits included severance for 72 employees who were terminated. Severance for those employees who continued to work after the notification date was recognized over the service period. Contract termination costs included early cancellation penalties for offices closed prior to the end of the lease. These contract termination costs were recognized in the second quarter of 2009 when the Company terminated these contracts. Other associated costs primarily included legal costs related to the employee termination actions. These costs were recognized in the second quarter of 2009 when the services were performed.

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

		Termi	-time nation efits	Term	ntract nination osts	Oth Assoc Co:	ciated	To	tal_
Balance as of December 31, 2008		\$	-	\$	; <u>-</u>	\$	-	\$	-
Restructuring charges		2	,830		183	1	07	3.	,120
Cash payments	-	(2	,768)	1 12	(167)	(	94)	(3	,029)
Restructuring adjustments		·	<u>(55</u> )	: -	<u>(16</u> )		<u>(4)</u>	. —	<u>(75</u> )
Balance as of December 31, 2009		\$		\$	<u>-</u>	\$	9	\$	16

Restructuring adjustments were due to the lower severance payments to terminated employees, lower lease cancellation penalties, and lower legal costs than originally estimated.

# September 2009

On October 1, 2009, which was part of the Company's fiscal September, the Company announced the closure of its facility in Kuopio, Finland, which is expected to result in long-term cost savings and production efficiencies. This facility included a SISD system assembly and integration team, a SISD spare parts depot, an engineering group dedicated to supporting the Company's SISD products, as well as finance and support staff. The expense savings were offset by the restructuring costs in 2009; however, the Company expects to achieve cost savings of approximately \$800,000 in 2010. These savings will be realized in "Cost of revenue," "Research, development, and engineering expenses," and "Selling, general, and administrative expenses" on the Consolidated Statements of Operations.

The Company estimates the total restructuring charge from these actions to be approximately \$617,000, of which \$505,000 has been recorded to date and included in "Restructuring charges" on the Consolidated

Statements of Operations in the SISD reporting segment. The remaining cost will be recognized during the first half of 2010. The following table summarizes the restructuring plan (in thousands):

	Total Amount Expected to be Incurred	Incurred in the Year Ended December 31, 2009
One-time termination benefits	\$370	\$301.
Contract termination costs	153	153
Other associated costs	<u>94</u>	<u>. 51</u>
MARKET BOOK TO THE STATE OF THE STATE	<u>\$617</u>	<u>\$505</u>

One-time termination benefits include salary, which the Company is obligated to pay over the legal notification period, and severance for eight employees who either have been terminated or have been notified that they will be terminated at a future date. 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 is being recognized over the future service period. Contract termination costs include rental payments for the Kuopio, Finland facility during the periods for which the Company will not receive an economic benefit. These contract termination costs were recognized in the fourth quarter of 2009 when the Company ceased using the facility. Other associated costs include legal costs related to the employee termination actions, as well as travel and transportation expenses between Kuopio and other Cognex locations related to the closure of the facility. These costs are being recognized when the services are performed.

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

and the second s	One-time Termination Benefits	Contract Termination Costs	Other Associated Costs	Total
Balance as of December 31, 2008	\$ -	\$ -	\$ -	\$ -
Restructuring charges	301	153	51	505
Cash payments	(188)		(51)	(239)
Restructuring adjustments		<u> </u>	<del>-</del>	
Balance as of December 31, 2009	<b>\$ 113</b>	\$153	<u>\$ -</u>	\$ 266

# Nonoperating Income (Expense)

The Company recorded a foreign currency loss of \$1,265,000 in 2009 compared to a gain of \$2,497,000 in 2008. The foreign currency gains and losses 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 decreased by \$4,916,000, or 69%, from the prior year. This decrease was due to both lower average invested balances and declining yields on the Company's portfolio of debt securities.

The Company recorded other income of \$1,372,000 in 2009 compared to \$666,000 in 2008. The Company recorded \$2,003,000 and \$425,000 of other income in the first quarter of 2009 and 2008, respectively, upon the expiration of the applicable statutes 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. Net rental income decreased from the prior year due to vacancies resulting from the current economic climate.

# Income Tax Expense (Benefit) on Continuing Operations

The Company's effective tax rate on continuing operations was a benefit of 53% in 2009, compared to an expense of 14% in 2008.

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 tax uncertainties, (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 for 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%.

The effective tax rate for 2008 included the impact of the following discrete events: (1) a decrease in tax expense of \$4,439,000 from the expiration of the statutes of limitations and the final settlement with the Internal Revenue Service for an audit of tax years 2003 through 2006, (2) an increase in tax expense of \$237,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, (3) an increase in tax expense of \$136,000 for a capital loss reserve, and (4) an increase in tax expense of \$17,000 resulting from a reduction of certain deferred state tax assets reflecting a tax rate change in Massachusetts. These discrete events decreased the effective tax rate in 2008 from an expense of 25% to an expense of 14%.

The effective tax rate excluding discrete tax events decreased from an expense of 25% of the Company's pre-tax income in 2008 to a benefit of 19% of the Company's pre-tax loss in 2009 due to a higher proportion of current-year losses being incurred in low-tax jurisdictions compared to high-tax jurisdictions.

# Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

# Revenue

Revenue for the year ended December 31, 2008 increased by \$16,997,000, or 8%, from the prior year due to higher sales to discrete factory automation and surface inspection customers.

#### Discrete Factory Automation Market

Sales to manufacturing customers in the discrete factory automation area, which are included in the Company's MVSD segment, represented 68% of total revenue in 2008 compared to 62% of total revenue in 2007. Sales to these customers increased by \$24,287,000, or 17%, from the prior year. A weaker U.S. Dollar compared to the prior year contributed to the higher revenue, as sales denominated in foreign currencies were translated to U.S. Dollars. Excluding the impact of foreign currency exchange rate changes on revenue, sales to factory automation customers increased by \$17,084,000, or 12%, from the prior year. Sales of the Company's In-Sight and DataMan products, which are sold to customers in a variety of industries around the world, increased from 2007. The Company invested in new product offerings and additional sales personnel, particularly in China and Eastern Europe, for the factory automation market with the goal of growing this business. Despite these investments, demand from the Company's factory automation customers began to be impacted by the worldwide economic slowdown in the third quarter of 2008, and revenue from this market was down 15% in the fourth quarter of 2008 from the prior quarter.

#### Semiconductor and Electronics Capital Equipment Market

Sales to customers who make automation equipment for the semiconductor and electronics industries, which are included in the Company's MVSD segment, represented 17% of total revenue in 2008 compared to 25% of total revenue in 2007. Sales to these customers decreased by \$13,813,000, or 25%, from the

prior year due to industry cyclicality as well as competitive market pressures. In recent years, the competitive landscape in this market has changed, and price and flexibility of purchasing hardware from other vendors have become more important factors in our customers' purchasing decisions. Cognex addressed this market change by introducing software-only products; however, the average selling price of these offerings is significantly lower than for a complete vision system.

# Surface Inspection Market

Sales to surface inspection customers, which comprise the Company's SISD segment, represented 15% of total revenue in 2008 compared to 13% of total revenue in 2007. Revenue from these customers increased by \$6,523,000, or 22%, from the prior year. Although some of this increase in revenue from the prior year was due to the timing of customer orders, system deliveries, and installations, as well as the impact of revenue deferrals, we also gained market share in 2008, particularly in the metals industry. In addition, the Company saw growth in revenues from emerging markets in Asia, Eastern Europe, and Latin America.

# Product Revenue

Product revenue increased by \$21,583,000, or 11%, from the prior year due to a higher volume of vision systems sold to discrete factory automation and surface inspection customers. Within the discrete factory automation market, the majority of this higher volume came from In-Sight and DataMan products. The favorable impact of the higher volume was partially offset by lower average-selling prices, primarily from the transition to software-only products.

#### Service Revenue

Service revenue, which is derived from the sale of maintenance and support, education, consulting, and installation services, decreased by \$4,586,000, or 19%, from the prior year. This decrease was due to lower maintenance and support revenue, as well as lower consulting revenue. Service revenue decreased as a percentage of total revenue to 8% in 2008 from 11% in 2007.

# Gross Margin

Gross margin as a percentage of revenue was 72% for 2008 compared to 71% for 2007. This increase was primarily due to a higher percentage of total revenue from the sale of products, which have higher margins than the sale of services.

#### MVSD Margin

MVSD gross margin as a percentage of revenue was 76% in 2008 compared to 75% in 2007 due to a greater percentage of revenue from the sale of products, which have higher margins than the sale of services. MVSD product gross margin as a percentage of revenue was relatively flat, as the favorable impact of the mix of products sold and the higher product revenue was offset by an increase in new product introduction costs that were incurred to support the release of several new products in 2008. Product mix had a positive impact on the margin in 2008 because a higher percentage of product revenue came from products with relatively higher margins including In-Sight, DataMan, and software-only products.

# SISD Margin

SISD gross margin as a percentage of revenue was 50% in 2008 compared to 46% in 2007. This increase was due to the impact of significantly higher product revenue on relatively flat manufacturing overhead costs, as well as a greater percentage of revenue from the sale of products, which have higher margins than the sale of services.

# Product Margin

Product gross margin as a percentage of revenue was consistent at 75% in both 2008 and 2007. MVSD and SISD product margins as a percentage of revenue were either flat with or higher than the prior year; however, a greater percentage of product revenue came from the sale of lower-margin surface inspection systems resulting in an overall flat margin.

# Service Margin

Service gross margin as a percentage of revenue was 38% in 2008 compared to 40% in 2007. Although support costs declined from the prior year due to improvements in product ease of use and lower reserves against MVSD service inventory, service revenue declined at a greater rate.

# Operating Expenses

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses increased by \$2,878,000, or 9%, from 2007. MVSD RD&E expenses increased by \$2,912,000, or 10%, while SISD RD&E expenses were relatively flat. The increase in MVSD RD&E expenses was due primarily to higher personnel-related costs (such as salaries, fringe benefits, and travel) to support new product initiatives (\$2,532,000). The Company has 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 in order to grow factory automation revenue. In 2008, the Company made significant RD&E investments in its ID Products business, which includes the DataMan product line, as we believe this business has high growth potential. In addition, the Company has invested in the development of a vision system (i.e., imager, analog to digital converter, vision processing, and camera peripherals) on a semiconductor chip.

# Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses increased by \$12,816,000, or 13%, from 2007. MVSD SG&A expenses increased by \$12,122,000, or 16%, while SISD SG&A expenses increased by \$1,943,000, or 21%. Corporate expenses that are not allocated to either division decreased by \$1,249,000, or 9%.

The increase in MVSD SG&A expenses was due primarily to higher personnel-related costs (such as salaries, fringe benefits, commissions, and travel) resulting from the hiring of additional sales and marketing personnel (\$4,955,000), increased expenses related to sales force training (\$647,000), and increased rental expense from opening new sales offices (\$514,000). All of these investments were intended to grow factory automation revenue. In addition, a weaker U.S. Dollar compared to the prior year resulted in higher SG&A costs when expenses of the Company's foreign operations were translated to U.S. Dollars (\$3,877,000). An intangible asset impairment charge incurred in the third quarter of 2008 (\$1,500,000) and higher amortization expense (\$947,000) on that intangible asset recorded in the fourth quarter of 2008 also contributed to the increase in expenses. These increases were partially offset by lower stock-based compensation expense (\$581,000) due to a credit recorded in the first quarter of 2008 for forfeited stock options.

The increase in SISD SG&A expenses was principally due to higher-personnel related costs (such as salaries, fringe benefits, commissions, and travel) resulting from additional sales personnel (\$1,481,000). In addition, a weaker U.S. Dollar compared to the prior year resulted in higher SG&A costs when expenses of the Company's foreign operations were translated to U.S. Dollars (\$442,000).

The decrease in corporate expenses was due primarily to lower legal fees for patent-infringement actions (\$970,000) and lower stock-based compensation expense (\$546,000) due to a credit recorded in the first quarter of 2008 for forfeited stock options, partially offset by higher tax service fees related to a Japanese tax audit (\$319,000).

# Restructuring Charges

In November 2008, the Company announced the closure of its facility in Duluth, Georgia in mid-2009 as a cost-saving measure. This facility included a distribution center for MVSD customers located in the Americas, an engineering group dedicated to supporting the Company's MVSD Vision Systems products, a sales training and support group, as well as a team of finance support staff. The distribution center was consolidated into the Company's headquarters in Natick, Massachusetts resulting in a single distribution center for MVSD customers located in the Americas. Although a portion of the engineering and sales training and support positions were transferred to another location, the majority of these positions, and all of the finance positions, will be eliminated.

The following table summarizes the spending under this restructuring plan (in thousands):

	Incurred In Year Ended December 31, 2008
One-time termination benefits	
Contract termination costs	
Other associated costs	
$= 2 (1 + \frac{1}{2} + \frac{1}{$	\$258

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

Balance as of January 1, 2008	\$ -
Restructuring charges	258
Cash payments	(51)
Balance as of December 31, 2008	\$207

# Nonoperating Income (Expense)

The Company recorded foreign currency gains of \$2,497,000 in 2008 compared to \$279,000 in 2007. The foreign currency gains in each year resulted primarily from the revaluation and settlement of accounts receivable balances that are reported in one currency and collected in another. Although the foreign currency exposure of these accounts receivable is largely hedged through the use of forward contracts, this hedging 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.

Beginning late in the third quarter of 2008, both the U.S. Dollar and the Japanese Yen strengthened considerably versus the Euro, resulting in foreign currency gains on the Company's Irish subsidiary's books when U.S. Dollar and Japanese Yen accounts receivable were revalued and collected. The Japanese Yen also strengthened versus the U.S. Dollar throughout 2008, resulting in foreign currency gains on the Company's U.S. subsidiary's books when Japanese Yen accounts receivable were revalued and collected during the year.

Gains from the revaluation and settlement of intercompany balances that are reported in one currency and collected or paid in another also contributed to the foreign currency gain in 2008. The gain in 2007 was partially offset by losses from the revaluation and settlement of intercompany balances that are reported in one currency and collected or paid in another.

Investment income decreased by \$807,000, or 10%, from the prior year. This decrease was due to declining yields on the Company's portfolio of debt securities, partially offset by more of the Company's excess cash invested in interest-bearing accounts.

The Company recorded other income of \$666,000 in 2008 compared to other expense of \$201,000 in 2007. The Company recorded \$445,000 of other income in the fourth quarter of 2008 related to the

settlement of a legal claim. The Company also recorded \$425,000 of other income in the first quarter of 2008 upon the expiration of the applicable statutes 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. Net rental income increased from the prior year due to the purchase of additional property adjacent to the Company's headquarters during the second quarter of 2007 that is generating rental income for the Company.

# Income Tax Expense (Benefit) on Continuing Operations

The Company's effective tax rate on continuing operations for 2008 was an expense of 14% compared to an expense of 24% for 2007.

The effective tax rate for 2008 included the impact of the following discrete events: (1) a decrease in tax expense of \$4,439,000 from the expiration of the statutes of limitations and the final settlement with the Internal Revenue Service for an audit of tax years 2003 through 2006; (2) an increase in tax expense of \$237,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns; (3) an increase in tax expense of \$136,000 for a capital loss reserve; and (4) an increase in tax expense of \$17,000 resulting from a reduction of certain deferred state tax assets reflecting a recent tax rate change in Massachusetts. These discrete events decreased the effective tax rate in 2008 from 25% to 14%.

The effective tax rate for 2007 included the impact of the following discrete events: (1) an increase to reserves of \$1,373,000 for identified tax exposures; (2) an increase in tax expense of \$438,000 to finalize the competent authority settlement between the United States and Japanese taxing authorities; (3) an increase in tax expense of \$191,000 for capital loss carryforwards that will not be utilized; and (4) a decrease in tax expense of \$444,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns. These discrete events increased the effective tax rate in 2007 from 19% to 24%.

The effective tax rate excluding discrete tax events increased from 19% to 25% as a result of more of the Company's profits being earned in higher tax jurisdictions, as well as less of the Company's investment income coming from tax-exempt investment vehicles.

#### **Discontinued Operations**

In July 2008, the Company sold all of the assets of its lane departure warning business to Takata Holdings Inc. for \$3,208,000 in cash. The Company entered the lane departure warning 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. After the purchase, the Company 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 reported under the Company's MVSD segment, but was never integrated into other Cognex businesses. During the second quarter of 2008, the Company determined that this business did not fit the Company's business model, primarily because car and truck manufacturers want to work exclusively with their existing Tier One suppliers and, although these suppliers have expressed interest in the Company's vision technology, they would require access to and control of the Company's proprietary software. Accordingly, the Company accepted an offer from one of these suppliers and sold the lane departure warning business.

Management concluded that the assets of the lane departure warning business met all of the criteria to be classified as "held-for-sale" as of June 29, 2008. Accordingly, the Company recorded a \$2,987,000 loss in the second quarter of 2008 to reduce the carrying amount of these assets down to their fair value less costs to sell. Management also concluded that the disposal group met the criteria of a discontinued operation, and has presented the loss from operations of this discontinued business separate from continuing operations on the Consolidated Statements of Operations.

#### 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 \$202,027,000 as of December 31, 2009. The Company has established guidelines relative to credit ratings, diversification, and maturities of its investments that maintain liquidity.

The Company's cash requirements during the year ended December 31, 2009 were met with its existing cash balances and cash from investment maturities. In addition, despite a decline in business in 2009, the Company was able to generate positive cash flows from operations. Cash requirements primarily consisted of operating activities, capital expenditures, the acquisition of the web monitoring business of Monitoring Technology Corporation, the payment of dividends, and payments for underwater stock options that were tendered by employees in the fourth quarter of 2009. Capital expenditures for 2009 totaled \$5,466,000 and consisted primarily of costs to establish a distribution center in Natick, Massachusetts, as well as expenditures for leasehold improvements at the Company's SISD headquarters, computer hardware, and manufacturing test equipment related to new product introductions. We expect our capital expenditures for 2010 to be lower than 2009, as 2009 included costs related to the Natick distribution center.

Late in 2008 and again during 2009, the Company implemented a number of cost-cutting measures intended to reduce expenses in response to lower revenue expectations. Restructuring charges for these actions are expected to total \$4,896,000, of which \$51,000 was paid out during the fourth quarter of 2008 and \$4,439,000 was paid out during 2009. The remaining \$406,000 is expected to be paid out in the first half of 2010.

In November 2009, the Company commenced a cash tender offer for certain underwater stock options held by employees, officers, and directors. 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 cash payment of \$9,158,000, of which \$9,075,000 was paid out in December 2009 and \$83,000 was paid out in January 2010. This is the first time the Company has offered to purchase outstanding stock options in exchange for cash, and there is no intent to make another such offer.

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, 2009, the Company had approximately \$194,161,000 in either cash or investments 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, together with the cost-cutting measures we implemented over the past several months, put us in a relatively good position with respect to our longer term liquidity needs.

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

Year Ended December 31,	Venrock Limited Partnership Interest	Inventory Purchase Commitments	Leases	Total
2010	\$ 614	\$ 10,643	\$ 3,708	\$ 14,965
2011	-	- ·	2,008	2,008
2012	-	-	1,507	1,507
2013	-	<u>.</u>	959	959
2014	-		713	713
Thereafter	•	<u> </u>	718	718
	\$ 614	\$ 10,643	\$ 9,613	\$ 20,870

The Company may be required to make cash outlays related to its unrecognized tax benefits. However, due to the uncertainty of the timing of future cash flows associated with its unrecognized tax benefits, the Company is unable to make reasonably reliable estimates of the period of cash settlement, if any, with the

respective taxing authorities. Accordingly, unrecognized tax benefits, including interest and penalties, of \$6,741,000 as of December 31, 2009 have been excluded from the contractual obligations table above. For further information on unrecognized tax benefits, refer to Note 16 to the Consolidated Financial Statements in Part II – Item 8 of this Annual Report.

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. 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, 2010. The Company does not have the right to withdraw from the partnership prior to December 31, 2010. As of December 31, 2009, the Company had contributed \$19,886,000 to the partnership, including \$398,000 during 2009. No distributions were received during 2009. The remaining commitment of \$614,000 can be called by Venrock at any time through 2010.

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

# **Stock Repurchase Program**

In April 2008, the Company's Board of Directors authorized the repurchase of 50,000,000 of the Company's common stock. As of December 31, 2009, the Company had repurchased 1,038,797 shares at a cost of \$20,000,000 under this program. The Company did not purchase any shares under this program during the year ended December 31, 2009. The Company may repurchase shares under this program in future periods depending upon a variety of factors, including, among other things, the stock price level, share availability, and cash reserve requirements.

#### **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 \$0.15 per share in the first quarter of 2009 and a dividend of \$0.05 per share in the second, third, and fourth quarters of 2009 that amounted to \$11,897,000 for the year ended December 31, 2009. On February 10, 2010, the Company's Board of Directors declared a cash dividend of \$0.05 per share payable in the first quarter of 2010. 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.

## **Acquisitions**

On September 30, 2009, the Company acquired the web monitoring business of Monitoring Technology Corporation (MTC). The Company paid \$5,000,000 in cash, with \$4,500,000 paid upon closing and \$500,000 paid during the fourth quarter of 2009. There are no contingent payments. The purchase price was subject to a working capital adjustment, which amounted to \$59,000 and was paid to Cognex in the fourth quarter of 2009, thereby reducing the purchase price to \$4,941,000. 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.

# **OFF-BALANCE SHEET ARRANGEMENTS**

As of December 31, 2009, 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

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 whether options to buy additional products or services in the future are substantive and should be accounted for as an element in the original arrangement, determining the probability of collecting the receivable, assessing whether the fee is fixed or determinable, 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, 2009, the Company's investment balance totaled \$82,196,000, of which \$74,330,000 consisted of municipal bonds. 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, 2009, the Company's portfolio of debt securities had net unrealized gains totaling \$375,000.

The remaining investment balance of \$7,866,000 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. 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. As of December 31, 2009, the carrying value of this investment was \$7,866,000 compared to an estimated fair value of \$8,025,000.

The fair value of the Company's limited partnership interest is based upon 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 amount determined to be fair value also incorporates 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 downturn 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 slowdown 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. If a decline in fair value is considered to be other-than-temporary, an impairment charge would be recorded to reduce the carrying value of the asset to its fair value. In considering whether a decline in fair value is other-than-temporary, we consider many factors, both qualitative

and quantitative in nature. Some of these factors include the duration and extent of the fair value decline, the length of the Company's commitment to the investment, and general economic, stock market, and interest rate trends. In the case of the Company's limited partnership investment, specific communications from the General Partner are also considered in this evaluation. If a decline in fair value is determined to be other-than-temporary, an impairment charge would be recorded in current operations. There were no other-than-temporary impairments of investments in 2009, 2008, or 2007. 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 2%, the Company may be required to record an impairment charge related to this asset.

# **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. The global economic slowdown and credit crisis 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, 2009, the Company's reserve against accounts receivable was \$1,358,000, or 4% of the gross accounts receivable balance. A 10% difference in the reserve against accounts receivable as of December 31, 2009 would have affected net income by approximately \$110,000.

## 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. The global economic slowdown 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. As of December 31, 2009, the Company's reserve for excess and obsolete inventory totaled \$5,776,000, or 26% of the gross inventory balance. A 10% difference in inventory reserves as of December 31, 2009 would have affected net income by approximately \$468,000.

#### **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, as well as discount factors and income tax rates. Current worldwide economic conditions make these assumptions and estimates more judgmental. The Company recorded an impairment loss on an intangible asset in the third quarter of 2008 and another intangible asset in the first quarter of 2009 based on lower revenue expected to be generated from the respective assets. 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. The goodwill impairment test is 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. Current worldwide economic conditions make these assumptions and estimates more judgmental. Changes in these assumptions could result in an impairment of goodwill in future periods.

The Company prepared the annual goodwill analysis as of October 5, 2009 and concluded that no impairment charge was required as of that date. The MVSD reporting unit had a goodwill balance of \$77,840,000 and the SISD reporting unit had a goodwill balance of \$4,764,000 as of December 31, 2009. At that date, the fair value of the MVSD unit exceeded its carrying value by approximately 78%, while the fair value of the SISD unit exceeded its carrying value by approximately 23%. If the Company is not able to achieve the revenue growth or cost savings assumed in its fair value calculations, it could result in an impairment of goodwill in future periods.

# **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, 2009, the Company's accrued warranty obligations amounted to \$1,377,000. A 10% difference in accrued warranty obligations as of December 31, 2009 would have affected net income by approximately \$112,000.

## Contingencies

Estimated losses from contingencies are accrued by management based upon the likelihood of a loss and 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. 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, 2009.

# **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 uncertain tax positions 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 a result of the expiration of statutes of limitations outside of the United States within the next twelve months, existing reserves could be released, which would decrease income tax expense by \$100,000.

The Company is currently under audit in Japan. The Tokyo Regional Taxation Bureau is auditing tax years 2002 through 2005 and has issued a permanent establishment finding claiming that the Company's Irish subsidiary should be subject to taxation in Japan. The Company believes it has a substantive defense against this finding and has been granted Competent Authority intervention in accordance with the Japan/Ireland tax treaty. The Company believes that the tax authorities in the Competent Authority case between Japan and Ireland are close to finalizing a settlement. Nothing has been formally communicated to the Company at this time. Any financial adjustments, if required, to the existing tax reserves will be recorded in the period when the Company receives final notification from either Japan or Ireland of actual settlement.

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 Sheet.

As of December 31, 2009, the Company had net deferred tax assets of \$22,336,000, 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 established reserves. 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. 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) 2009-13, "Multiple Deliverable Revenue Arrangements"

This ASU updates the Codification to modify the requirements for determining whether a deliverable in a multiple-deliverable revenue arrangement can be treated as a separate unit of accounting. ASU 2009-13 removes the criteria that there be objective and reliable evidence of fair value of the undelivered item(s) and requires the vendor to use its best estimate of the selling price of the deliverables to allocate arrangement consideration when vendor-specific or third-party evidence cannot be determined. The residual method of allocating arrangement consideration is no longer permitted. By providing another alternative for determining the selling price of the deliverables, this standard allows companies to allocate revenue in multiple-deliverable arrangements in a manner that better reflects the transaction's economics. ASU 2009-13 is effective for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010; however, early application is permitted as of the beginning of a fiscal year. Management is in the process of evaluating the impact of this update and whether early adoption will be elected. Management expects that the adoption of this new rule will result in earlier revenue recognition.

# Accounting Standards Update (ASU) 2009-14, "Certain Revenue Arrangements That Include Software Elements"

This ASU updates the Codification to remove tangible products containing software components and non-software components that function together to deliver the product's essential functionality from the scope of software revenue rules. Revenue recognition for transactions that meet this definition would be similar to that for other tangible products, and ASU 2009-13 (as described above) would be applicable for multiple-deliverable revenue arrangements. ASU 2009-14 is effective for fiscal years beginning on or after June 15, 2010; however, early application is permitted as of the beginning of a fiscal year. Management is in the process of evaluating the impact of this update and whether early adoption will be elected.

#### 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 Japanese Yen 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 enters into forward contracts to hedge the transactional currency/functional currency exposure of its Irish subsidiary's receivables denominated in U.S. dollars and Japanese Yen. The Company faces other transactional currency/functional currency exposures that it may hedge from time to time. These exposures include cash balances, prepayments, or payables denominated in currencies other than the functional currency of the subsidiary, receivables denominated in Euro or Japanese Yen on the books of a U.S. entity, and intercompany balances denominated in currencies other than the functional currency of the subsidiary. The Company currently has forward contracts in place to hedge a U.S. Dollar short-term intercompany loan and a Japanese Yen prepayment on its Irish subsidiary's books. The Company presently manages its other intercompany foreign currency risk by transferring cash to minimize intercompany balances at the end of each month.

Forward contracts to exchange 1,083,750,000 Japanese Yen for Euros at a weighted-average settlement price of 132.08 Yen/Euro and contracts to exchange 15,142,877 U.S. dollars for Euros at a weighted-average settlement price of 1.46 USD/Euro, both with terms between one and six months, were outstanding as of December 31, 2009. These instruments at fair value had a loss of \$190,000 as of December 31, 2009.

These forward contracts are used to minimize foreign currency gains or losses, as the gains or losses on these contracts are intended to offset the losses or gains on the underlying exposures. These forward contracts do not qualify for hedge accounting. Both the underlying exposures and the forward contracts are recorded at fair value on the Consolidated Balance Sheets and changes in fair value are reported as "Foreign currency gain (loss)" on the Consolidated Statements of Operations. The Company does not engage in foreign currency speculation. The success of this hedging program depends upon forecasts of sales and collections denominated in U.S. Dollars and Japanese Yen. 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. The only foreign currencies in which a significant portion of our revenues and expenses are denominated are the Euro and the Japanese Yen. The Company's predominant currency of sale is the U.S. Dollar in the Americas and Southeast Asia, the Euro in Europe, and the Yen in Japan. We estimate that approximately 54% of our sales in 2009 were invoiced in currencies other than the U.S. Dollar, and we expect sales denominated in foreign currencies to continue to represent a significant portion of our total revenue. While we also have expenses denominated in these same foreign currencies, the impact on revenues has historically been, and is expected to continue to be, greater than the offsetting impact on expenses. Therefore, in times when the U.S. Dollar strengthens in relation to these foreign currencies, we would expect to report a net decrease in operating income. Conversely, in times when the U.S. Dollar weakens in relation to these foreign currencies, we would expect to report a net increase in operating income.

#### **Interest Rate Risk**

The Company's investment portfolio includes municipal 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, 2009, the fair value of the Company's portfolio of debt securities amounted to \$74,330,000, with principal amounts totaling \$75,391,000, maturities that do not exceed three years, and a yield to maturity of 0.52%. 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 at the balance sheet date.

Given the relatively short maturities and investment-grade quality of the Company's portfolio of debt securities as of December 31, 2009, 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 securities given an interest rate decrease		No change in interest rates		of securities given est rate increase
	(100 BP)	(50 BP)		50 BP	100 BP
Municipal Bonds	\$74,811	\$74,571	\$74,330	\$74,091	\$73,851

#### **Other Market Risks**

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 is based upon 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 amount determined to be fair value also incorporates 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 downturn 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 slowdown 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, 2009, the carrying value of this investment was \$7,866,000 compared to an estimated fair value, as determined by the General Partner, of \$8,025,000. 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

# INDEX TO FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

	solidated Financial Statements:
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Co	onsolidated Statements of Operations for the Years Ended December 31, 2009, 2008, and 2007
Co	onsolidated Balance Sheets as of December 31, 2009 and 2008
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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, 2009 and 2008, 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, 2009. 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, 2009 and 2008, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2009 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, 2009, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 11, 2010 expressed an unqualified opinion thereon.

/s/ Grant Thornton LLP

Boston, Massachusetts February 11, 2010

# COGNEX CORPORATION - CONSOLIDATED STATEMENTS OF OPERATIONS

Year Ended December 31,

	2000	and a second	0007
	2009	2008 ds, except per sha	2007 re amounts)
Revenue	(iii tiiododiii	do, oxoopi po. ona	io amounio,
Product	\$ 158,379	\$ 223,243	\$ 201,660
Service	17,348	19,437	24,023
	175,727	242,680	225,683
Cost of revenue	170,727	2-12,000	220,000
Product	45,026	56,423	49,945
Service	11,361	12,004	14,405
	56,387	68,427	64,350
Gross margin	00,007	00,427	<del></del>
Product	113,353	166,820	151,715
Service	5,987	7,433	9,618
	119,340	174,253	161,333
Research, development, and engineering expenses	31,132	36,262	33,384
Selling, general, and administrative expenses	96,350	112,629	99,813
Restructuring charges (Note 17)	4,526	258	
Operating income (loss)		25,104	28,136
Foreign currency gain (loss)	(1,265)	·	279
Investment income	2,185	7,101	7,908
Other income (expense)		666	(201)
Income (loss) from continuing operations before income tax			
expense (benefit)	(10,376)	35,368	36,122
Income tax expense (benefit) on continuing operations	(5,507)		8,575
Income (loss) from continuing operations	(4,869)	30,499	27,547
Loss from operations of discontinued business, net of tax	( , ,		
(Note 20)		(3,224)	(648)
Net income (loss)	<u>\$ (4,869)</u>	\$ 27,275	\$ 26,899
Basic earnings (loss) per weighted-average common and			
common-equivalent share: Income (loss) from continuing operations	\$ (0.12)	\$ 0.74	\$ 0.63
Loss from discontinued operations		\$ (0.08)	\$ (0.01)
Net income (loss)	<del></del>	<u> </u>	\$ 0.62
• •	<u> </u>	<u> </u>	<u> </u>
Diluted earnings (loss) per weighted-average common and common-equivalent share:			
Income (loss) from continuing operations			\$ 0.63
Loss from discontinued operations	\$ 0.00	<u>\$ (0.07)</u>	\$ (0.02)
Net income (loss)	\$ (0.12)	\$ 0.66	\$ 0.61
Weighted-average common and common-equivalent shares outstanding:			
Basic	39,659	41,437	43,725
Diluted	39,659	41,554	44,063
Cash dividends per common share	\$ 0.30	\$ 0.47	\$ 0.34

The accompanying notes are an integral part of these consolidated financial statements.

# COGNEX CORPORATION - CONSOLIDATED BALANCE SHEETS

		Decemb	er 3	1,
		2009		2008
		(In thous	and	s)
ASSETS				
Current assets:			_	
Cash and cash equivalents	\$	119,831	\$	127,138
Short-term investments		55,563		52,559
Accounts receivable, less reserves of \$1,358 and \$1,290 in 2009		30,964		30,510
and 2008, respectively		16,832		25,063
Inventories		7,693		10,231
Deferred income taxes		18,471		18,923
Prepaid expenses and other current assets	<del>-</del> -			
Total current assets		249,354		264,424 41,389
Long-term investments		26,633	*	27,764
Property, plant, and equipment, net		28,576		27,764 17,673
Deferred income taxes		14,643 28,337		31,278
Intangible assets, net		82,604		80,765
Goodwill		9,722		10,754
Other assets	_			<del></del>
	<u>\$</u>	439,869	\$	474,047
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	4,959	\$	6,780
Accrued expenses		18,811		21,855
Accrued income taxes		2		2,986
Deferred revenue and customer deposits		14,908		19,429
Total current liabilities		38,680		51,050
Reserve for income taxes		6,741		9,922
Commitments and contingencies (Notes 9 and 10)				
Shareholders' equity:				
Common stock, \$.002 par value -				
Authorized: 140,000 shares, issued: 39,665 and 39,655 shares in		. 70		70
2009 and 2008, respectively		79		79
Additional paid-in capital		69,271 328,459		73,280 345,225
Retained earnings				(5,509)
Accumulated other comprehensive loss, net of tax	_	(3,361)		
Total shareholders' equity		394,448	·.	413,075
	\$	439,869	\$	474,047

The accompanying notes are an integral part of these consolidated financial statements.

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

Year Ended December 31,

	2009	2008	2007
		(In thousands)	
Cash flows from operating activities:			. *
Net income (loss)	\$ (4,869)	\$ 27,275	\$ 26,899
Adjustments to reconcile net income (loss) to net cash provided by			
operations:			
Impairment loss related to discontinued business (Note 20)	-	2,987	T = -
Intangible asset impairment charge (Note 7)	1,000	1,500	- · · · · · · -
Stock-based compensation expense	9,223	10,231	11,715
Depreciation of property, plant, and equipment	4,701	4,742	4,271
Amortization of intangible assets	4,879	6,633	5,648
Amortization of premiums or discounts on investments	1,512	1,320	1,439
Provision for excess and obsolete inventory	3,478	2,779	4,672
Reversal of accrued inventory purchase commitments	-	<u>-</u> .	(1,400)
Tax effect of stock option exercises	472	(1,671)	, , ,
Deferred income tax	1,985	(441)	(5,460)
Changes in operating assets and liabilities:		3	
Accounts receivable	(287)	8,551	3,198
Inventories	5,140	(959)	124
Accrued expenses	(3,208)	2,405	(8,122)
Income taxes	(6,611)	(10,476)	4,118
Deferred revenue and customer deposits	(4,532)	6,142	5,458
Other	(600)	(2,081)	(3,846)
Net cash provided by operating activities	12,283	58,937	48,473
Cash flows from investing activities:			
Purchase of investments	(33,779)	(120,622)	(277,876)
Maturity and sale of investments	43,720	189,375	292,213
Purchase of property, plant, and equipment	(5,466)	(6,012)	(4,635)
Cash paid for business acquisitions, net of cash acquired (Note 21)	(4,941)	(1,000)	(1,002)
Cash received related to discontinued business (Note 20)		2,797	
Net cash provided by (used in) investing activities	(466)	64,538	8,700
Cash flows from financing activities:			
Issuance of common stock under stock option and stock purchase			the second second
plans	146	15,052	6,819
Stock option buyback	(9,075)	· · · · · · · · · · · ·	
Repurchase of common stock		(92,969)	(32,663)
Payment of dividends	(11,897)	(19,281)	(14,898)
Tax effect of stock option exercises	(472)	1,671	241
Net cash used in financing activities	(21,298)	(95,527)	(40,501)
Effect of foreign exchange rate changes on cash	2,174	(4,954)	111
Net change in cash and cash equivalents	(7,307)	22,994	16,783
Cash and cash equivalents at beginning of year	127,138	104,144	87,361
Cash and cash equivalents at end of year		\$ 127,138	\$ 104,144
Casil and Casil equivalents at end of year	Ψ 113,001	Ψ 127,100	Ψ 107,174

The accompanying notes are an integral part of these consolidated financial statements.

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

				( )		Accumulated		
		Common Stock	1 4	Additional Paid-in	Retained (	Other Comprehensive Income (Loss)	Comprehensive Income (Loss)	Total Shareholders' Equity
	and a sector		\$ 89	\$155,136	\$329,251	\$(10,626)		\$473,850 6,819
		, 5		11,715			, ,	11,715
	Excess tax benefit from stock option exercises  Reduction of previously-recognized tax benefit from stock option exercises	(2)	''@	(307)			• '	(32.663)
	Hepurichase of common stock.	() ( ) ()	<u>)</u> ' '	(2) 1 . 1 (2) 1 . 1	(14,898)			(14,898) (4,021)
	Reduction in retained earlinings related to the adoption of the to		•		26.899	1	\$26,899	26,899
	Net income.  Gains on long-term intercompany loans, net of losses on currency swaps, net of tax of	,			'	. 54B	546	546
	\$321  Net unrealized gain on available-for-sale investments, net of tax of \$245.  Exercise enreases translation adjustment					7,768	416 7,768	416 7,768
	Comprehensive income					5	\$35,629	
		43,347	\$ 87	\$140,943	\$337,231	\$ (1,896)		\$476,365
	Issuance of common stock under stock option and stock purchase plans	351	ų i	10,231			1	10,231
Δ	Excess tax benefit from stock option exercises		' '.	1,671 (1,656)				1,671 (1,656)
LQ.	Repurchase of common stock.	(4,619)	(10)	(92,959)	(19.281)		10 ° 16	(92,969) (19,281)
	Payment of dividends				(10,501)		: 1	
	Net income  Net unrealized loss on available-for-sale investments, net of tax of \$102  Focus authorised selfuctment not of tax expense of \$240			i i i	27,275	175 (3,788)	\$27,275 175 (3,788)	27,275 175 (3,788)
	Comprehensive income		İ				\$23,662	
	Balance as of December 31, 2008	39,655	\$ 79	\$ 73,280	\$345,225	\$ (5,509)		\$413,075
	Issuance of common stock under stock option and stock purchase plans	2 '	. ,	9,223	•	•	· 1 - 1	9,223
	Stock option buyback	1 -1		(3,748)			· • ', ;	(3,748)
	Excess tax benefit from stock option exercises			(472)	(11,897)			(11,897)
	Comprehensive income (loss):	•	ď	i i	(4,869)		\$ (4,869)	(4,869)
	s on available-for		180	•	. •	(189) 2,337	(189) 2,337	(189) 2,337
	Comprehensive loss		1		-		\$ (2,721)	
	Balance as of December 31, 2009	39,665	\$ 79	\$ 69,271	\$328,459	\$ (3,361)		\$394,448

The accompanying notes are an integral part of these consolidated financial statements.

# **NOTE 1: Summary of Significant Accounting Policies**

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

The Company has evaluated and disclosed subsequent events through the date of this filing.

## 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 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 the 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

Debt securities 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 three 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.

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 a decline in fair value is determined to be other-than-temporary, an impairment charge related to that specific investment is recorded in current operations. There were no other-than-temporary impairments of investments in 2009, 2008, or 2007.

## Accounts Receivable

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

For certain customers in Japan, as part of its customary business practice, the Company accepts promissory notes of up to 180 days after the original credit terms expire. Promissory notes receivable totaled \$1,227,000 and \$3,723,000 as of December 31, 2009 and 2008, respectively.

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

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

# Property, Plant, and Equipment

Property, plant, and equipment are stated at cost and depreciated using the straight-line method over the assets' estimated useful lives. Buildings' useful lives are 39 years, building improvements' useful lives are ten years, and the useful lives of computer hardware and software, manufacturing test equipment, and furniture and fixtures range from two to five years. Leasehold improvements are depreciated over the shorter of the estimated useful lives or the remaining terms of the leases. Maintenance and repairs are expensed when incurred; additions and improvements are capitalized. Upon retirement or disposition, the

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

cost and related accumulated depreciation of the assets disposed of 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 on 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. The Company evaluates the potential impairment of goodwill by comparing the fair value of the reporting unit to its carrying value, including goodwill. If the fair value is less than the carrying value, the Company determines the amount of such impairment by comparing the implied fair value of the goodwill to its carrying value.

In 2009, the Company changed the date as of which its annual goodwill impairment analysis is performed from the last day of fiscal October to the first day of fiscal October, which is also the first day of the fourth quarter. This change in timing is considered a change in accounting principle. The Company believes the new date is preferable because the timing coincides with the Company's forecasting process and it allows the Company more time to complete the analysis prior to the date the Company reports its results for the fourth quarter.

# 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, The boundary of the second of the control of the second are expensed as incurred.

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

# Revenue Recognition

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. If the arrangement contains customer-specified acceptance criteria, then revenue is deferred until the Company can demonstrate that the customer's criteria have been met.

Certain of the Company's arrangements include multiple elements that provide the customer with a combination of product or service deliverables. The fee from the arrangement is allocated to each of the undelivered elements based upon vendor-specific objective evidence (VSOE) of fair value, which is limited to the price charged when the same element 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 element is then recognized as revenue when the criteria for revenue recognition have been met with respect to that element. If VSOE of fair value does not exist for all of the undelivered elements, then all revenue from the arrangement is deferred until all of the elements have been delivered to the customer or we have VSOE of fair value for the remaining obligations.

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.

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

#### Research and Development

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

# Advertising Costs

Advertising costs are expensed as incurred and totaled \$856,000 in 2009, \$1,354,000 in 2008, and \$1,770,000 in 2007.

#### Stock-Based Compensation

The Company's share-based payments that result in compensation expense consist solely of stock option grants. The fair values of stock options granted after January 1, 2006 were 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 on triggering events, tying

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

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, considered 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 should be recognized over the requisite service period. These rates are revised in subsequent periods if actual forfeitures differ from these estimates. Ultimately, compensation expense will only be recognized over the vesting period for those options that actually vest.

# Taxes

The Company recognizes a tax position in its financial statements when that tax position, based solely on its technical merits, is more likely than not to be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard, or are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statutes of limitations. Derecognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

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

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

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

# Net Income (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. 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.

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

# 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 of \$2,326,000 and \$4,663,000 as of December 31, 2009 and 2008, respectively; net of unrealized gains on available-for-sale investments, net of tax, of \$236,000 and \$425,000 as of December 31, 2009 and 2008, respectively; and losses on currency swaps, net of gains on long-term intercompany loans, net of tax, of \$1,271,000 as of December 31, 2009 and 2008.

# 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 international 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 municipal obligations of state and local government entities. The Company has established guidelines relative to credit ratings, diversification, and maturities of its debt securities that maintain safety and liquidity. The Company has not experienced any significant realized losses on its debt securities.

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

A significant portion of the Company's MVSD inventory is manufactured by third-party contractors. The Company is dependent upon these contractors to provide quality product and meet delivery schedules. The Company engages in extensive product quality programs and processes, including actively monitoring the performance of its third-party manufacturers.

#### **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.

#### **NOTE 2: New Pronouncements**

# Accounting Standards Update (ASU) 2009-13, "Multiple Deliverable Revenue Arrangements"

This ASU updates the Codification to modify the requirements for determining whether a deliverable in a multiple-deliverable revenue arrangement can be treated as a separate unit of accounting. ASU 2009-13 removes the criteria that there be objective and reliable evidence of fair value of the undelivered item(s) and requires the vendor to use its best estimate of the selling price of the deliverables to allocate arrangement consideration when vendor-specific or third-party evidence cannot be determined. The residual method of allocating arrangement consideration is no longer permitted. By providing another alternative for determining the selling price of the deliverables, this standard allows companies to allocate revenue in multiple-deliverable arrangements in a manner that better reflects the transaction's economics. ASU 2009-13 is effective for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010; however, early application is permitted as of the beginning of a fiscal

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

year. Management is in the process of evaluating the impact of this update and whether early adoption will be elected. Management expects that the adoption of this new rule will result in earlier revenue recognition.

Accounting Standards Update (ASU) 2009-14, "Certain Revenue Arrangements That Include Software Elements"

This ASU updates the Codification to remove tangible products containing software components and non-software components that function together to deliver the product's essential functionality from the scope of software revenue rules. Revenue recognition for transactions that meet this definition would be similar to that for other tangible products, and ASU 2009-13 (as described above) would be applicable for multiple-deliverable revenue arrangements. ASU 2009-14 is effective for fiscal years beginning on or after June 15, 2010; however, early application is permitted as of the beginning of a fiscal year. Management is in the process of evaluating the impact of this update and whether early adoption will be elected.

# **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, 2009:

190 - A	en de genador en la selfonación de la selfonació	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets  Municipal bond investments.			\$74,330
Currency forward contracts			
Liabilities	amente de la casa de l La casa de la casa del la casa de la casa d	\$111	\$74,330
Currency forward contracts .		<u>\$301</u>	
•		\$301	

The Company's municipal bond investments 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. In prior periods, the Company held level 3 investments related to student loan auction rate securities. As of December 31, 2008, the Company had been unable to corroborate the fair value with observable market data, and therefore, classified these investments as long-term on the Consolidated Balance Sheets. During the first quarter of 2009, the Company recorded a \$400,000 unrealized loss on these investments. This loss was determined to be temporary, and therefore, was included in "Accumulated other comprehensive loss" on the Consolidated Balance Sheets as of April 5, 2009. During the second quarter of 2009, the Company sold these investments for their par value plus all outstanding interest.

The changes in the Level 3 municipal bond investments were as follows (in thousands):

Balance as of December 31, 2008	\$ 2,000
Unrealized loss recorded in the first quarter of 2009	(400)
Reversal of unrealized loss due to sale of investments in the second quarter of 2009	
Sale of investments in the second quarter of 2009	
Balance as of December 31, 2009	\$

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

The Company's forward contracts are reported at fair value based upon quoted U.S. Dollar foreign currency exchange rates, and are therefore classified as Level 1.

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

The Company's limited partnership interest is accounted for using the cost method and is measured at fair value on a non-recurring basis. Management monitors the carrying value of this investment compared to its fair value to determine if an other-than-temporary impairment has occurred. If a decline in fair value is considered to be other-than-temporary, an impairment charge would be recorded to reduce the carrying value of the asset to its fair value. The fair value of this investment is based upon valuations of the partnership's investments as determined by the General Partner. 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 charge during 2007, 2008 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. In the first quarter of 2009, the Company determined that the Siemens Customer Relationship was impaired, which required the Company to measure the asset at fair value. 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.

The following table presents the Company's fair value hierarchy for the Siemens Customer Relationships as of April 5, 2009 (in thousands):

	Significant Unobservable Inputs (Level 3)	Total	Total Loss
Siemens Customer Relationships	\$300	\$300	\$(1,000)

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 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 factor 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.

In the third quarter of 2008, the Company determined that the DVT OEM Customer Relationship was impaired, which required the Company to measure the asset at fair value. The Company estimated the fair value of the DVT OEM Customer Relationships using the income approach on a discounted cash flow basis. The fair value test indicated the DVT OEM Customer Relationships had a fair value of \$1,900,000 as of September 28, 2008 compared to a carrying value of \$3,400,000 resulting in an impairment charge of \$1,500,000.

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

The following table presents the Company's fair value hierarchy for the DVT OEM Customer Relationships as of September 28, 2008 (in thousands):

	Significant Unobservable Inputs (Level 3)	Total	Total Loss
DVT OEM Customer Relationships	<u>\$1,900</u>	\$1,900	<u>\$(1,500</u> )

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 stream. The estimate of revenue streams from the customers obtained in the acquisition was based upon historical revenue streams from these customers, 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.

# NOTE 4: Cash, Cash Equivalents, and Investments

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

	Decem	ber 31,
	2009	2008
Cash	\$ 119,831 	\$ 124,339 2,799
Cash and cash equivalents	119,831	127,138
Municipal bonds	55,563	52,559
Short-term investments	55,563	52,559
Municipal bonds	18,767 7,866	33,921 7,468
Long-term investments	26,633	41,389
	\$ 202,027	\$ 221,086

The Company's cash balance included foreign bank balances totaling \$108,114,000 and \$113,538,000 as of December 31, 2009 and 2008, respectively.

The following is a summary of the Company's available-for-sale investments as of December 31, 2009 (in thousands):

	Ar	nortized Cost	Unr	ross ealized ains	Unre	oss alized sses	Fa	ir Value
Short-term municipal bonds		55,318 18,637	\$	247 132	\$	(2) (2)	\$	55,563 18,767
	\$	73,955	\$	379	\$	<u>(4</u> )	<u>\$</u>	74,330

The Company recorded gross realized gains on the sale of debt securities totaling \$19,000 in 2009, \$121,000 in 2008, and \$1,000 in 2007. The Company recorded gross realized losses on the sale of debt securities totaling \$5,000 in 2007. There were no losses on the sale of debt securities in 2009 or in 2008.

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

These gains and losses represent the amounts transferred out of other comprehensive income (loss) in the periods presented.

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, 2010. As of December 31, 2009, the Company had contributed \$19,886,000 to the partnership, including \$398,000 during 2009. No distributions were received during 2009. As of December 31, 2009, the carrying value of this investment was \$7,866,000 compared to an estimated fair value, as determined by the General Partner, of \$8,025,000.

The Company's limited partnership interest is accounted for using the cost method. Management monitors the carrying value of this investment compared to its fair value to determine if an other-than- temporary impairment has occurred. If a decline in fair value is considered to be other-than-temporary, an impairment charge would be recorded to reduce the carrying value of the asset to its fair value. The fair value of this investment is based upon valuations of the partnership's investments as determined by the General Partner. The Company did not record an other-than-temporary impairment charge during 2007, 2008, or 2009. However, changes in market conditions could result in an impairment of this investment in future periods.

# **NOTE 5: Inventories**

Inventories consisted of the following (in thousands):

				Decem	ber 31,
				2009	2008
Raw materials.			 	 \$10,405	\$14,722
Work-in-proces	s		 	 652	976
Finished goods			 	 5,775	9,365
		•		\$16,832	\$25,063

# NOTE 6: Property, Plant, and Equipment

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

	December 31,		
	2009	2008	
Land	\$ 3,951	\$ 3,951	
Buildings	18,371	18,371	
Building improvements	10,021	8,183	
Leasehold improvements	3,259	3,945	
Computer hardware and software	21,642	22,619	
Manufacturing test equipment	9,744	9,169	
Furniture and fixtures	3,545	3,889	
	70,533	70,127	
Less: accumulated depreciation	(41,957	(42,363)	
	\$ 28,576	\$ 27,764	

# NOTE 6: Property, Plant, and Equipment (continued)

The cost and related accumulated depreciation of certain fully-depreciated property, plant, and equipment totaling \$4,327,000 and \$6,401,000 were removed from the accounts during 2009 and 2008, respectively.

Buildings include rental property with a cost basis of \$5,750,000 as of December 31, 2009 and 2008, and accumulated depreciation of \$1,890,000 and \$1,743,000 as of December 31, 2009 and 2008, respectively.

# **NOTE 7: Intangible Assets**

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

	Gross Carrying Value		Accumulated Amortization		Net Carrying Value	
Year Ended December 31, 2009						
Distribution networks	\$	38,060	\$	15,334	\$	22,726
Customer contracts and relationships		15,432		11,639		3,793
Completed technologies		4,350		2,886		1,464
Other		750		396		354
	\$	58,592	\$	30,255	\$	28,337
Year Ended December 31, 2008						
Distribution networks	\$	38,060	\$	12,049	\$	26,011
Customer contracts and relationships		13,300		9,556		3,744
Completed technologies		3,680		2,249		1,431
Other		1,110	_	1,018	_	92
	\$	56,150	\$	24,872	\$	31,278

The cost and related amortization of certain fully-amortized non-compete agreements totaling \$730,000 were removed from the accounts during 2009. The Company recorded \$2,990,000 of intangible assets during the third quarter of 2009 related to the acquisition of the web monitoring business of Monitoring Technology Corporation (refer to Note 21).

Aggregate amortization expense was \$5,879,000 in 2009, \$8,133,000 in 2008, and \$5,648,000 in 2007. Amortization expense included impairment charges of \$1,000,000 and \$1,500,000 in 2009 and 2008, respectively. No impairment charges were recorded in 2007. Estimated amortization expense for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

Year Ended December 31,	Amount
2010	\$ 4,953
2011	4,442
2012	4,172
2013	3,796
2014	3,650
Thereafter	7,324
	\$ 28,337

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

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

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. Although the Company's wafer identification business began to decline in the second half of 2008, the Company previously believed this business would recover during 2009 based upon industry information, as well as input from the Company's sales force. The Company determined that this significant decrease in business in the first quarter of 2009 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 which resulted in an impairment charge of \$1,000,000, which was included in "Selling, general, and administrative expenses" on the Consolidated Statements of Operations. The Company is amortizing the remaining \$300,000 asset over its estimated remaining life of two years on a straight-line basis.

In May 2005, the Company acquired all of the outstanding shares of DVT Corporation, a provider of low-cost, easy-to-use vision sensors. A portion of the purchase price was allocated to an intangible asset for relationships with a group of original equipment manufacturers (DVT OEM Customer Relationships) reported under the MVSD segment. In the third quarter of 2008, the Company was notified by a significant OEM customer of its plans to discontinue its relationship with the Company. The Company determined the loss of this customer was a "triggering event" that required the Company to perform an impairment test of the DVT OEM Customer Relationships. The Company estimated the fair value of the DVT OEM Customer Relationships had a fair value of \$1,900,000 as of September 28, 2008 compared to a carrying value of \$3,400,000 resulting in an impairment charge of \$1,500,000, which was included in "Selling, general, and administrative expenses" on the Consolidated Statements of Operations. Due to the receipt of a contract termination payment from an OEM customer included in the discounted cash flow analysis used to estimate the fair value of the DVT OEM Customer Relationships, the Company recorded approximately \$1,046,000 of amortization expense in the fourth quarter of 2008.

### 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		Consolidated		
Balance as of December 31, 2007	\$	77,899	\$	3,133	\$	81,032	
Foreign currency exchange rate changes	91	(132)		(135)		(267)	
Balance as of December 31, 2008	\$	77,767	\$	2,998	\$	80,765	
Acquisition of web monitoring business (Note 21)		-		1,692		1,692	
Foreign currency exchange rate changes		73		74		147	
Balance as of December 31, 2009	\$	77,840	\$	4,764	\$	82,604	

The Company prepared its annual goodwill analysis as of October 5, 2009 and concluded that no impairment charge was required as of that date. At that date, the fair value of the MVSD unit exceeded its carrying value by approximately 78%, while the fair value of the SISD unit exceeded its carrying value by approximately 23%. The Company estimates the fair value of its reporting units using the income approach based upon a discounted cash flow model. The income approach requires the use of many

### NOTE 8: Goodwill (continued)

assumptions and estimates including future revenues, expenses, capital expenditures, and working capital, as well as discount factors and income tax rates. Current worldwide economic conditions make these assumptions and estimates more judgmental. Changes in these assumptions could result in an impairment of goodwill in future periods.

### NOTE 9: Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	Dece	mber 31,
	2009	2008
Salaries, commissions, and payroll taxes	\$ 5,346	\$ 4,355
Vacation	3,347	4,232
Japanese retirement allowance	2,626	2,813
Warranty obligations	1,377	1,657
Consumption taxes	809	3,606
Bonuses	439	1,429
Other	4,867	3,763
	\$ 18,811	<u>\$ 21,855</u>
	and the second second	

The changes in the warranty obligation were as follows (in thousands):

Balance as of December 31, 2007 \$	1,462
Provisions for warranties issued during the period	1,828
Fulfillment of warranty obligations	(1,593)
Foreign exchange rate changes	(40)
Balance as of December 31, 2008	1,657
Provisions for warranties issued during the period	1,212
Fulfillment of warranty obligations	
Foreign exchange rate changes	31
Balance as of December 31, 2009	1,377

### NOTE 10: Commitments and Contingencies

### Commitments

As of December 31, 2009, the Company had outstanding purchase orders totaling \$10,643,000 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 2010.

The Company conducts certain of its operations in leased facilities. These lease agreements expire at various dates through 2016 and are accounted for as operating leases. Certain of these leases contain renewal options, escalation clauses, rent holidays, and leasehold improvement incentives. Annual rental

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

expense totaled \$6,574,000 in 2009, \$6,705,000 in 2008, and \$5,950,000 in 2007. Future minimum rental payments under these agreements are as follows (in thousands):

Year Ended December 31,	to .	Amount	
2010		\$	3,708
2011			2,008
2012			1,507
2013			959
2014			713
Thereafter			718
		\$	9,613

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 \$645,000 in 2009, \$1,104,000 in 2008, and \$779,000 in 2007. Rental income and related expenses are included in "Investment and other income" on the Consolidated Statements of Operations. Future minimum rental receipts under non-cancelable lease agreements are as follows (in thousands):

Year Ended December 31,		A	mount
2010		\$	592
2011			578
2012			572
2013			306
2014			328
Thereafter	e e e e e e e e e e e e e e e e e e e	- '	792
		\$	3,168

<u>Contingencies</u> In May 2008, Microscan Systems, Inc. filed a complaint against the Company in the United States District Court for the Western District of Washington alleging infringement of U.S. Patent No. 6.105.869 owned by Microscan Systems, Inc. The complaint alleges that certain of the Company's DataMan 100 and 700 series products infringe the patent in question. In November 2008, the Company filed an answer and counterclaim alleging that the Microscan patent was invalid and not infringed, and asserting a claim for infringement of U.S. Patent No. 6.636.298. A trial date of June 2010 has been scheduled by the court.

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 same infringe, and respondents directly infringe and/or actively induce and/or contribute to

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

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. These settlements did not have a material impact on the Company's financial results. This matter is ongoing.

The Company cannot predict the outcome of the above-referenced 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 if it has been adjudicated that the person did not act in good faith in the reasonable belief that the action was in the best interests of the Company. The maximum potential amount of future payments the Company could be required to make under these provisions is unlimited. The Company has never incurred significant costs related to these indemnification provisions. As a result, the Company believes the estimated fair value of these provisions is minimal.

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

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

### **NOTE 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.

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

The Company faces exposure to 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 Japanese Yen 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 Japanese Yen, as well as the Irish subsidiary's tax prepayment denominated in Japanese Yen and the Irish subsidiary's loan to the parent company denominated in U.S. dollars. These forward contracts are used to minimize foreign currency gains or losses, as the gains or losses on these contracts are intended to offset the losses or gains on the underlying exposures.

These forward contracts do not qualify for hedge accounting. Both the underlying exposures and the forward contracts are recorded at fair value on the Consolidated Balance Sheets and changes in fair value are reported as "Foreign currency gain (loss)" on the Consolidated Statements of Operations. The Company recorded a net foreign currency loss of \$1,265,000 as of December 31, 2009 and net foreign currency gains of \$2,497,000 and \$279,000 as of December 31, 2008 and 2007, respectively.

As of December 31, 2009, the Company had the following outstanding forward contracts that were entered into to mitigate foreign currency exchange rate risk:

Currency of the end of the order of the control of	Amount
Japanese Yen/Euro	1,083,750 Japanese Yen
U.S. Dollar/Euro	15,142,877 U.S. Dollars

Information regarding the fair value of the forward contracts outstanding as of December 31, 2009 and December 31, 2008 was as follows (in thousands):

	Ass	et Derivatives		L	iability Derivatives	3
	Balance	Fair Value		ue Balance Fair Valu		Value
		December 31, 2009	December 31, 2008	Sheet Location	December 31, 2009	December 31, 2008
0	Prepaid		, 13 ·			· ·
Currency forward	expenses and other current			Accrued		
contracts	assets	\$111	\$207	expenses	\$301	\$255

The following table provides 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 (in thousands):

	Location of Gain (Loss) Recognized in Income on Derivative	Amount of Gain (Loss) Recognized in Income on Derivative Year ended December 31, 2009 2008 2007						
Currency	Foreign		$\mathcal{L} = \{1, 2, 3, 5\}$					
forward			eri (m. 1					
contracts		\$(526)	\$1,317	174				

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### 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 Director's 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 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 \$50,000,000 of the Company's common stock. As of December 31, 2009, the Company had repurchased 1,038,797 shares at a cost of \$20,000,000 under this program. The Company did not purchase any shares under this program during the year ended December 31, 2009. The Company may repurchase shares under this program in future periods depending upon a variety of factors, including, among other things, the stock price level, share availability, and cash reserve requirements.

## Stock Option Plans

As of December 31, 2009, the Company had 9,111,910 shares available for grant under two stock option plans: the 2001 General Stock Option Plan (7,054,800) and the 2007 Stock Option and Incentive Plan (2,057,110). Each of these plans expires ten years from the date the plan was approved. Generally, stock options are granted with an exercise price equal to the market value of the Company's common stock at

# NOTE 13: Shareholders' Equity (continued)

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 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. This is the first time the Company has offered to purchase outstanding stock options in exchange for cash, and there is no intent to make another such offer.

The following table summarizes the Company's stock option activity for the year ended December 31, 2009:

	Shares (in thousands)		Veighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2008	11,406	\$	25.10		e de la companya de l
Granted	93		14.73		
Exercised			1.00		f(x) = f'(x) + c(x)
Forfeited or expired	(1,769)		25.56		
Options tendered under buyback	(4,901)		29.37		
Outstanding as of December 31, 2009	4,828	9	20.41	6.0	<b>\$ 1,032</b>
Exercisable as of December 31, 2009	<u>2,639</u>	\$	20.89	<u>4.3</u>	<u>\$ 849</u>

# Employee Stock Purchase Plan

Under the Company's Employee Stock Purchase Plan (ESPP), employees who have completed six months of continuous employment with the Company may 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 are 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, 9,695 in 2008, and 9,056 in 2007. The Company's ESPP expired on December 31, 2009 and the Company does not intend to renew the ESPP.

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## NOTE 14: Stock-Based Compensation

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

	Year En	ber 31,	
	2009	2008	2007
Risk-free rate	3.3%	3.9%	4.9%
Expected dividend yield	1.4%	1.7%	1.5%
Expected volatility	43%	42%	40%
Expected term (in years)	4.8	6.0	5.4

## Risk-free rate

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

### Expected dividend yield

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

### Expected volatility

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

### Expected term

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

The weighted-average grant-date fair value of stock options granted during 2009, 2008, and 2007 was \$5.42, \$7.77, and \$8.17, respectively

Effective January 1, 2009, the Company revised its estimated forfeiture rates and the cumulative effect of this change resulted in a reduction in compensation expense of approximately \$480,000 in the first quarter of 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 71% of its stock options granted to senior management and 65% of its options granted to all other employees will actually vest. Therefore, the Company currently applies an estimated forfeiture rate of 10% to all unvested options for senior management and a rate of 14% for all other employees.

The total stock-based compensation expense and the related income tax benefit recognized was \$9,223,000 and \$3,070,000, respectively, in 2009 and \$10,231,000 and \$3,345,000, respectively, in 2008, and \$11,715,000 and \$3,845,000, respectively, in 2007. No compensation expense was capitalized as of December 31, 2009 or December 31, 2008.

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

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

Year Ended December	r 31.	
---------------------	-------	--

		2009	2008		2007	
Product cost of revenue	\$	532	\$	599	\$	624
Service cost of revenue		242		517		591
Research, development, and engineering		2,163		3,067		3,239
Selling, general, and administrative		6,286		6,048	_	7,261
	\$	9,223	\$	10,231	\$	11,715

The total intrinsic value of stock options exercised for 2009, 2008, and 2007 was \$3,000, \$6,207,000, and \$1,681,000, respectively. The total fair value of stock options vested for 2009, 2008, and 2007 was \$14,177,000, \$16,920,000, and \$20,275,000, respectively.

As of December 31, 2009, total unrecognized compensation expense related to non-vested stock options was \$4,714,000, which is expected to be recognized over a weighted-average period of 1.4 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. Historically, the Company has contributed fifty cents for each dollar an employee contributes, with a maximum contribution of 3% of an employee's pre-tax salary. Beginning July 1, 2009, 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 in April 2009. This lower contribution level is expected to continue into 2010. 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 \$874,000 in 2009, \$1,192,000 in 2008, and \$1,176,000 in 2007. 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) from continuing operations before taxes was a loss of \$5,555,000 in 2009 and income of \$12,831,000 and \$8,706,000 in 2008 and 2007, respectively. Foreign income before taxes was a loss of \$4,821,000 in 2009 and income of \$22,537,000 and \$27,416,000 in 2008 and 2007, respectively.

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

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

	Year Ended December 31,			
	2009	2008	2007	
Current:				
Federal	\$(12,771)	\$ 2,047	\$10,343	
State	(774)	1,227	<sup>23</sup> 1,341	
Foreign	1,053	5,356	5,381	
	(12,492)	8,630	17,065	
Deferred:				
Federal	6,434	(2,878)	(7,768)	
State	57	(518)	(660)	
Foreign	494	(365)	(62)	
and the second of the second o	6,985	(3,761)	_(8,490)	
	<u>\$ (5,507)</u>	<u>\$ 4,869</u>	\$ 8,575	

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,		
	2009	2008	2007	
Income tax provision at federal statutory rate	(35)%	35%	35%	
State income taxes, net of federal benefit	(2)	2	2	
Tax-exempt investment income	(5)	(3)	(6)	
Foreign tax rate differential	22	(10)	(13)	
	(3)	(1)	, <b>(1)</b> ,	
Discrete tax events	(34)	(11)	5	
Other	_4	_2	_2	
Income tax provision (benefit)	<u>(53</u> )%	<u>14</u> %	24%	

Income tax benefit allocated to discontinued operations was \$143,000 and \$389,000 in 2008 and 2007, respectively. There was no benefit from discontinued operations in 2009.

Total U.S. estimated taxable losses of approximately \$9,975,000 will be carried back three years to 2006. This loss will offset all taxable income in 2006 and will be carried forward to 2007 and fully utilized. As a result of this carryback claim, the Company has estimated that a cash refund of \$2,955,000 will be received in 2010 with a net increase to available tax credits of \$438,000.

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 tax uncertainties, (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 for 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.

### NOTE 16: Taxes (continued)

The effective tax rate for 2008 included the impact of the following discrete events: (1) a decrease in tax expense of \$4,439,000 from the expiration of the statutes of limitations and the final settlement with the Internal Revenue Service for an audit of tax years 2003 through 2006, (2) an increase in tax expense of \$237,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns, (3) an increase in tax expense of \$136,000 for a capital loss reserve, and (4) an increase in tax expense of \$17,000 resulting from a reduction of certain deferred state tax assets reflecting a tax rate change in Massachusetts. These discrete events decreased the effective tax rate in 2008 from an expense of 25% to an expense of 14%. Interest and penalties included in these amounts was a decrease in tax expense of \$733,000.

The effective tax rate for 2007 included the impact of the following discrete events: (1) an increase to reserves of \$1,373,000 for identified tax exposures, (2) an increase in tax expense of \$438,000 to finalize the competent authority settlement between the United States and Japanese taxing authorities, (3) an increase in tax expense of \$191,000 for capital loss carryforwards that will not be utilized, and (4) a decrease in tax expense of \$444,000 from the final true-up of the prior year's tax accrual upon filing the actual tax returns. These discrete events increased the effective tax rate in 2007 from an expense of 19% to an expense of 24%. Interest and penalties included in these amounts was an increase in tax expense of \$306,000.

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, 2007	\$16,401
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in prior periods	2,466
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in the current period	541
Gross amounts of decreases in unrecognized tax benefits as a result of tax positions taken in prior periods that are effectively settled	(3,442)
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	(4,891)
Gross amounts of decreases in unrecognized tax benefits as a result of the expiration of the applicable statutes of limitations	(2,904)
Balance of reserve for income taxes as of December 31, 2008	\$ 8,171
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in prior periods	-
Gross amounts of increases in unrecognized tax benefits as a result of tax positions taken in the current period	697
Gross amounts of decreases in unrecognized tax benefits as a result of tax positions taken in prior periods that are effectively settled	-
Gross amounts of decreases in unrecognized tax benefits relating to settlements with taxing authorities	(5)
Gross amounts of decreases in unrecognized tax benefits as a result of the expiration of the applicable statutes of limitations	(3,508)
Balance of reserve for income taxes as of December 31, 2009	\$ 5,355

The Company's reserve for income taxes, including gross interest and penalties, was \$6,741,000 and \$9,922,000 at December 31, 2009 and December 31, 2008, respectively. The amount of gross interest and penalties included in these balances was \$1,386,000 and \$1,751,000 as of December 31, 2009 and

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

December 31, 2008, respectively. As a result of statutes of limitations expirations outside of the United States, there is a potential that existing reserves could be released, which would decrease income tax expense by under \$100,000. The total amount of gross unrecognized tax benefits as of December 31, 2009 of \$5,355,000, if recognized, would affect the Company's tax rate.

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 2002 through 2008 remain open to examination by various taxing authorities in the jurisdictions in which the Company operates. The Company is currently under audit in Japan. The Tokyo Regional Taxation Bureau is auditing tax years 2002 through 2005 and has issued a permanent establishment finding claiming that the Company's Irish subsidiary should be subject to taxation in Japan. The Company believes it has a substantive defense against this finding and has been granted Competent Authority intervention in accordance with the Japan/Ireland tax treaty. The Company believes that the tax authorities in the Competent Authority case between Japan and Ireland are close to finalizing a settlement. Nothing has been formally communicated to the Company at this time. Any financial adjustments, if required, to the existing tax reserves will be recorded in the period when the Company receives final notification from either Japan or Ireland of actual settlement. To avoid further interest and penalties, the Company has paid tax, interest, and penalties through the date of assessment of 766,257,300 Yen (or approximately \$8,232,000) to the Japanese tax authorities. This amount is included in "Other assets" on the Consolidated Balance Sheets.

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

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

	Decen	nber 31,
ng ang a	2009	2008
Current deferred tax assets:		The second secon
Inventory and revenue related	\$ 5,575	\$ 8,167
Bonus, commission, and other compensation	1,128	1,373
Other	990	691
Gross current deferred tax assets	7,693	10,231
Valuation allowance		
Net current deferred tax assets	\$ 7,693	\$ 10,231
and the control of th		4 1
Noncurrent deferred tax assets:	\$ 10,709	\$ 9,356
Federal and state tax credit carryforwards	7,064	11,435
Acquired completed technologies and other intangible assets	2,241	2,626
Depreciation	1,784	1,750
Unrealized investment gains and losses	1,007	1,102
Correlative tax relief and deferred interest related to reserves	976	1,733
Acquired in-process technology	427	551
Capital loss carryforward	373	373
Other	1,027	1,107
Gross noncurrent deferred tax assets	25,608	30,033
Noncurrent deferred tax liabilities:		
Nondeductible intangible assets	(9,149)	(10,712)
Other	(1,443)	<u>(1,275</u> )
Gross noncurrent deferred tax liabilities	(10,592)	(11,987)
Valuation allowance	(373)	(373)
Net noncurrent deferred tax assets	\$ 14,643	\$ 17,673

As of December 31, 2009, the Company had \$2,453,000 of alternative minimum tax credits, \$4,206,000 of foreign tax credits, and \$733,000 or research and development tax credits which may be available to offset future federal income tax liabilities. The alternative minimum tax credits have an unlimited life and the foreign tax credits will begin to expire in 2015. In addition, the Company had \$3,317,000 of state research and experimentation tax credit carryforwards, 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 \$976,000 as of December 31, 2009, which represents this correlative tax relief and deferred interest.

The Company recorded a valuation allowance of \$373,000 as of December 31, 2008 for the tax effect of a capital loss on the books of its Irish subsidiary resulting from the sale of its lane departure warning business to Takata Holdings, Inc. in July 2008. There was no change in valuation allowances between 2008 and 2009. 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

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

deducting the acquisition-related amortization expenses. The balance of this liability was \$9,149,000 as of December 31, 2009.

While the deferred tax assets 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 and \$425,000 of other income in the first quarter of 2009 and 2008, respectively. These amounts were recorded 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. These amounts are included in "Other income" on the Consolidated Statements of Operations.

Cash paid for income taxes totaled \$2,242,000 in 2009, \$15,318,000 in 2008, which includes a payment of \$3,456,000 to conclude an Internal Revenue Service examination, and \$7,030,000 in 2007.

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

### November 2008

In November 2008, the Company announced the closure of its facility in Duluth, Georgia, which will result in long-term cost savings. This facility included a distribution center for MVSD customers located in the Americas, an engineering group dedicated to supporting the Company's MVSD Vision Systems products, and a sales training and support group, as well as a team of finance support staff. During the second quarter of 2009, this distribution center was consolidated into the Company's headquarters in Natick, Massachusetts, resulting in a single distribution center for MVSD customers located in the Americas. Although a portion of the engineering and sales training and support positions have been transferred to other locations, the majority of these positions, and all of the finance positions, have been eliminated.

The restructuring charge from these actions was \$1,234,000, all of which has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the MVSD reporting segment. This restructuring plan was completed during the fourth quarter of 2009. The following table summarizes the restructuring plan (in thousands):

	Total Amount Incurred in Expected to the Year Ended be Incurred December 31, 2009		Cumulative Amount Incurred through December 31, 2009		
One-time termination benefits	\$ 552	\$298	\$ 552		
Contract termination costs	372	372	372		
Other associated costs	<u>310</u>	306	310		
and the state of t	<u>\$1,234</u>	<u>\$976</u>	<u>\$1,234</u>		

# NOTE 17: Restructuring Charges (continued)

One-time termination benefits included severance and retention bonuses for 31 employees who were terminated. Severance and retention bonuses for those employees who continued to work after the notification date were recognized over the service period. Contract termination costs primarily included rental payments for the Duluth, Georgia facility for periods subsequent to the date the distribution activities were transferred to Natick, Massachusetts, for which the Company did not receive an economic benefit. These contract termination costs were recognized in the second quarter of 2009 when the Company ceased using the Duluth, Georgia facility. Other associated costs primarily included travel and transportation expenses between Georgia and Massachusetts related to the closure of the Georgia facility and relocation costs related to employees transferred to other locations, as well as outplacement services for the terminated employees. These costs were recognized when the services were performed.

The following table summarizes the activity in the Company's restructuring reserve, 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, 2008	\$ 207	\$ -	\$ -	\$ 207
Restructuring charges	393	374	306	1,073
Cash payments	(505)	(372)	(294)	(1,171)
Restructuring adjustments	<u>(95</u> )	(2)		(97)
Balance as of December 31, 2009	<u>\$ -</u>	<u>\$ -</u>	\$ 12	\$ 12

Restructuring adjustments were primarily due to the forfeiture of one-time termination benefits, including severance and retention bonuses, by certain employees who voluntarily terminated their employment prior to the end of the communicated service period or who were retained as employees in another capacity. The impact of revisions to the service period for certain employees entitled to severance and retention bonuses was also included in the restructuring adjustment.

### April 2009

In April 2009, the Company implemented a variety of cost-cutting measures, including a work force reduction and office closures, intended to more closely align the Company's cost structure with the lower levels of business resulting from worldwide economic conditions.

The restructuring charge from these actions was \$3,045,000, all of which has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the MVSD reporting segment. The following table summarizes the restructuring plan (in thousands):

and the second of the second o	the Year Ended December 31, 2009
One-time termination benefits	\$2,775
Contract termination costs	167
Other associated costs	400
and the first of the same of t	\$3,045

One-time termination benefits included severance for 72 employees who were terminated. Severance for those employees who continued to work after the notification date was recognized over the service period. Contract termination costs included early cancellation penalties for offices closed prior to the end of the lease. These contract termination costs were recognized in the second quarter of 2009 when the

# NOTE 17: Restructuring Charges (continued)

Company terminated these contracts. Other associated costs primarily included legal costs related to the employee termination actions. These costs were recognized in the second quarter of 2009 when the services were performed.

The following table summarizes the activity in the Company's restructuring reserve, 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, 2008	\$ -	\$ -	\$ -	\$ -
Restructuring charges	2,830	183	107	3,120
Cash payments	(2,768)	(167)	(94)	(3,029)
Restructuring adjustments	(55)	<u>(16</u> )	(4)	(75)
Balance as of December 31, 2009	<u>\$ 7</u>	<u>\$</u>	<u>\$ 9</u>	<u>\$ 16</u>

Restructuring adjustments were due to lower severance payments to terminated employees, lower lease cancellation penalties, and lower legal costs than originally estimated.

### September 2009

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

The Company estimates the total restructuring charge from these actions to be approximately \$617,000, of which \$505,000 has been recorded to date and included in "Restructuring charges" on the Consolidated Statements of Operations in the SISD reporting segment. The remaining cost will be recognized during the first half of 2010. The following table summarizes the restructuring plan (in thousands):

	Total Amount Expected to be incurred	Incurred in the Year Ended December 31, 2009
One-time termination benefits	\$370	\$301
Contract termination costs	153	153
Other associated costs	94	<u>51</u>
	\$617	\$505

One-time termination benefits include salary, which the Company is obligated to pay over the legal notification period, and severance for eight employees who have either been terminated or have been notified that they will be terminated at a future date. 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 is being recognized over the future service period. Contract termination costs include rental payments for the Kuopio, Finland facility during the periods for which the Company will not receive an economic benefit. These contract termination costs were recognized in the fourth quarter of 2009 when the Company ceased using the facility. Other associated costs include legal costs related to the employee termination actions, as well as travel and transportation expenses between Kuopio and other Cognex

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

locations related to the closure of the facility. These costs are being recognized when the services are performed.

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

ing the second of the second o	One-time Termination Benefits	Contract Termination Costs	Other Associated Costs	Total
Balance as of December 31, 2008	\$ -	\$ -	\$ -	\$ -
Restructuring charges	301	153	51	505
Cash payments	(188)	-	(51)	(239)
Restructuring adjustments	-			
Balance as of December 31, 2009	<u>\$ 113</u>	<u>\$153</u>	<u>\$</u>	<u>\$ 266</u>

# **NOTE 18: Weighted Average Shares**

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

		ear Ended December 31,		
egg, in the contract of the co	2009_	2008	2007_	
Basic weighted-average common shares outstanding	39,659	41,437	43,725	
Effect of dilutive stock options		117	338	
Diluted weighted-average common and common-equivalent shares outstanding	39,659	41,554	44,063	

Stock options to purchase 10,226,411, 11,293,656, and 9,229,253, shares of common stock were outstanding in 2009, 2008, and 2007, respectively, but were not included in the calculation of diluted net income per share because they were anti-dilutive. Additionally, because the Company recorded a net loss for the year ended December 31, 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 manufacturing 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 that are processed in a continuous fashion, such as metals, paper, non-wovens, 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 segments (in thousands):

	MVSD	SISD	Reconciling Items	Consolidated
Year Ended December 31, 2009	· · · · · · · · · · · · · · · · · · ·		y State of the sta	
Product revenue	\$133,741	\$24,638	-	\$158,379
Service revenue	5,542	11,806	-	17,348
Depreciation and amortization	9,843	361	\$ 376	10,580
Goodwill and intangibles	103,281	7,660	· · · · · ·	110,941
Operating income (loss)	4,226	2,801	(19,695)	(12,668)
Year Ended December 31, 2008		· · · · · · · · · · · · · · · · · · ·		,
Product revenue	\$197,211	\$26,032	.* -	\$223,243
Service revenue	9,375	10,062	· · · ·	19,437
Depreciation and amortization	12,234	247	\$ 394	12,875
Goodwill and intangibles	109,045	2,998	. 1 . 1	112,043
Operating income	42,366	4,078	(21,340)	25,104
Year Ended December 31, 2007		-		
Product revenue	\$182,755	\$18,905	- -	\$201,660
Service revenue	13,357	10,666		24,023
Depreciation and amortization	9,310	252	\$ 357	9,919
Goodwill and intangibles	117,374	3,133	was sure	120,507
Operating income	49,736	1,927	(23,527)	28,136

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 divisions share assets and resources in a number of locations around the world.

No customer accounted for greater than 10% of revenue in 2009, 2008, or 2007.

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

1 ·	United States	Europe	_Japan_	Other	Consolidated
Year Ended December 31, 2009					1.
Product revenue	\$ 53,803	\$54,559	\$30,674	\$19,343	\$158,379
Service revenue	6,657	5,261	3,513	1,917	
Long-lived assets	127,317	19,617	2,037	268	149,239
Year Ended December 31, 2008					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Product revenue	\$ 66,172	\$82,024	\$48,508	\$26,539	\$223,243
Service revenue	7,469	6,468	4,328	1,172	19,437
Long-lived assets	127,061	20,799	2,447	254	150,561
Year Ended December 31, 2007			ŕ		,
Product revenue	\$ 68,487	\$65,835	\$47,535	\$19,803	\$201,660
Service revenue	10,159	7,187	4,783	1,894	24,023
Long-lived assets	134,776	18,999	1,894	171	155,830

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

# NOTE 20: Loss from Operations of a Discontinued Business

In May 2006, the Company acquired all of the outstanding shares of AssistWare Technology, Inc., a privately-held developer of Lane Departure Warning Systems, for \$2,998,000 in cash paid at closing, with additional cash payments of \$1,002,000 in 2007 and \$1,000,000 in 2008 that were dependent upon the achievement of certain performance criteria that the Company determined had been met and were allocated to goodwill.

For two years after the acquisition date, the Company 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, management determined that this business did not fit the Company's business model, primarily because car and truck manufacturers prefer to work exclusively with their existing Tier One suppliers and, although these suppliers have expressed interest in the Company's vision technology, they would require access to and control of the Company's proprietary software. Accordingly, in July 2008, the Company sold all of the assets of its lane departure business to Takata Holdings, Inc. for \$3,208,000 in cash (less \$38,000 of costs to sell), of which \$2,835,000 was received in 2008 and the remaining \$373,000 (representing an amount held in escrow) was received in January 2010.

Management concluded that the assets of the lane departure warning business met all of the criteria to be classified as "held-for-sale" as of June 29, 2008. Accordingly, the Company recorded a \$2,987,000 loss in the second quarter of 2008 to reduce the carrying amount of these assets down to their fair value less costs to sell. Management also concluded that the disposal group met the criteria of a discontinued operation, and has presented the loss from operations of this discontinued business separate from continuing operations on the Consolidated Statements of Operations for the year ended December 31, 2008. Revenue reported in discontinued operations was not material in any of the periods presented.

# NOTE 21: 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 SmartView Web Inspection System (WIS), which is sold by the Company's Surface Inspection Systems Division (SISD). When used together, the WIS will automatically identify and classify defects and the WMS will then provide 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 will allow SISD to provide a fully-integrated system to paper manufacturers. SISD will serve SmartAdvisor's established customer base, primarily in North America, and plans to expand the sales of SmartAdvisor globally through its existing worldwide sales and service organization. The Company recorded goodwill of \$1,692,000 related to the synergies resulting from 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 are no contingent payments. The purchase price was subject to a working capital adjustment, which amounted to \$59,000, and was paid to Cognex during the fourth quarter, thereby reducing the purchase price to \$4,941,000. Transaction costs, which were expensed as incurred during the third quarter of 2009, totaled \$40,000.

### NOTE 21: Acquisition of Web Monitoring Business (continued)

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	the second second
Total liabilities assumed		0	
Total purchase price	<i>,</i>	\$ 4,941	

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

The historical results of operations of the acquired business were not material compared to the consolidated results of operations of the Company; therefore, pro forma results are not presented. Additionally, the amount of revenue and earnings related to this acquisition since the acquisition date are considered to be immaterial to the consolidated results of operations of the Company for the year ended December 31, 2009.

### NOTE 22: 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 \$0.15 per share in the first quarter of 2009 and a dividend of \$0.05 per share in the second, third, and fourth quarters of 2009 that amounted to \$11,897,000 for the year ended December 31, 2009. On February 10, 2010, the Company's Board of Directors declared a cash dividend of \$0.05 per share payable in the first quarter of 2010.

# COGNEX CORPORATION - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	Quarter Ended			
	April 5, 2009	July 5, 2009	October 4, 2009	December 31, 2009
	(In	thousands, ex	cept per share amo	unts)
Revenue	\$42,287	\$40,968	\$41,178	\$51,294
Gross margin	28,823	25,992	29,140	35,385
Operating income (loss)	(6,450)	(7,854)	880	756
Net income (loss)	(3,410)	(6,419)	4,501	459
Basic net income (loss) per share	(0.09)	(0.16)	0.11	0.01
Diluted net income (loss) per share	(0.09)	(0.16)	0.11	0.01
		Qu	arter Ended	
	March 30, 2008	June 29, 2008	September 28, 2008	December 31, 2008
	(	In thousands, e	except per share am	ounts)
Revenue	\$60,513	\$67,089	\$63,256	\$51,822
Gross margin	43,458	48,064	45,848	36,883
Operating income (loss)	8,003	10,726	7,987	(1,612)
Income from continuing operations	8,590	8,762	11,333	1,814
Net income	8,475	5,653	11,333	1,814
Basic income from continuing operations per share	0.20	0.21	0.27	0.05
Diluted income from continuing operations per share	0.20	0.21	0.27	0.05
Basic net income per share	0.20	0.13	0.27	0.05
Diluted net income per share	0.20	0.13	0.27	0.05

# 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 11, 2010, which is included in the 2009 Annual Report on Form 10-K of Cognex Corporation. Our audit of the basic financial statements included the financial statement schedule listed 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 financial statements as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ Grant Thornton LLP

Boston, Massachusetts February 11, 2010

# **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)		1.2
Reserve for Uncolled	ctible Accounts	:				
2009	\$1,290	\$373	\$ -	\$(258) (a)	\$ (47) (b)	\$1,358
2008	\$1,317	\$153	\$ -	\$ (77) (a)	\$(103) (b)	\$1,290
2007	\$1,662	\$ 34	\$ -	\$(407) (a)	\$ 28 (b)	\$1,317

<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 2009 or 2008.

### **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, 2009.

The Company's internal control over financial reporting as of December 31, 2009 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, 2009 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, 2009, 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, 2009, 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 2009 consolidated financial statements of Cognex Corporation and subsidiaries and our report dated February 11, 2010 expressed an unqualified opinion thereon.

/s/ Grant Thornton LLP

Boston, Massachusetts February 11, 2010

ITEM 9B: OTHER INFORMATION

None<sup>-</sup>

### **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 2010 Annual Meeting of Shareholders to be held on April 22, 2010 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 2010 Annual Meeting of Shareholders to be held on April 22, 2010 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 2010 Annual Meeting of Shareholders to be held on April 22, 2010 and is incorporated herein by reference.

The following table provides information as of December 31, 2009 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	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))	
	(a)	(b)	(c)	
Equity compensation plans approved by shareholders	4,641,875 (1)	\$ 20.44	2,057,110 (2)	
Equity compensation plans not approved by shareholders	186,053 (3)	19.54	7,054,800 (4)	
	4,827,928	\$ 20.41	9,111,910	

- (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. Does not include purchase rights accruing under the Employee Stock Purchase Plan (ESPP) because the purchase price (and therefore the number of shares to be purchased) will not be determined until the end of the purchase period.
- (2) Includes shares remaining available for future issuance under the Company's 2007 Stock Option and Incentive Plan. Includes 240,237 shares available for future issuance under the ESPP.
- (3) Includes shares to be issued upon the exercise of outstanding options under the Company's 2001 Interim General Stock Incentive Plan and the 2001 General Stock Option Plan.
- (4) Includes shares remaining available for future issuance under the Company's 2001 General Stock Option Plan.

The 2001 General Stock Option Plan was adopted by the Board of Directors on December 11, 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 the 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 fifteen years from the grant date. 55,200 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 on July 17, 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 the 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 2010 Annual Meeting of Shareholders to be held on April 22, 2010 and is incorporated herein by reference.

# ITEM 14: PRINCIPAL ACCOUNTANT 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 2010 Annual Meeting of Shareholders to be held on April 22, 2010 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.

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# **SIGNATURES**

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

# **COGNEX CORPORATION**

By: /s/ Robert J. Shillman

Robert J. Shillman Chief Executive Officer and Chairman of the Board of Directors

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	Chief Executive Officer and Chairman of the Board of Directors (principal executive officer)	February 11, 2010
/s/ Richard A. Morin Richard A. Morin	Executive Vice President of Finance and Administration, Chief Financial Officer, and Treasurer (principal financial and accounting	February 11, 2010
	officer)	1
/s/ Patrick Alias	Director	February 11, 2010
Patrick Alias		
/s/ Jerald Fishman	Director	February 11, 2010
Jerald Fishman	en e	
/s/ Theodor Krantz	Director	February 11, 2010
Theodor Krantz		· · · · · · · · · · · · · · · · · · ·
/s/ Edward Smith	Director	February 11, 2010
Edward Smith		
/s/ Anthony Sun	Director	February 11, 2010
Anthony Sun		
/s/ Reuben Wasserman	Director	February 11, 2010
Reuben Wasserman		

# **EXHIBIT INDEX**

EXHIBIT NUMBER	
3A	Restated Articles of Organization of Cognex Corporation effective June 27, 1989, as amended April 30, 1991, April 21, 1992, April 25, 1995, April 23, 1996, and May 8, 2000 (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])
3B	Articles of Amendment to the Articles of Organization of Cognex Corporation establishing Series E Junior Participating Preferred Stock (incorporated by reference to Exhibit 3.1 to Cognex's Registration Statement on Form 8-A filed on December 5, 2008 [File No. 1-34218])
3C	By-laws of Cognex Corporation, as amended and restated through November 21, 2007 (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])
3 <b>D</b>	Amendment to By-laws of Cognex Corporation, dated March 1, 2008 (incorporated by reference to Exhibit 3.1 of Cognex's Current Report or Form 8-K filed on March 3, 2008 [File No. 0-17869])
4A	Specimen Certificate for Shares of Common Stock (incorporated by reference to Exhibit 4 to the Registration Statement on Form S-1 [Registration No. 33-29020])
4B	Shareholder Rights Agreement, dated December 4, 2008, between Cognex Corporation and National City Bank (incorporated by reference to Exhibit 4.1 to Cognex's Registration Statement on Form 8-A filed on December 5, 2008 [File No. 1-34218])
10A*	1991 Isys Controls, Inc. Long-Term Equity Incentive Plan (incorporated by reference to Exhibit 4A to the Registration Statement on Form S-8 [Registration No. 333-02151])
10B*	Cognex Corporation 1998 Non-Employee Director Stock Option Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10C*	Amendment to Cognex Corporation 1998 Non-Employee Director Stock Option Plan, effective as of July 26, 2007 (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])
10D*	Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10E*	First Amendment to the Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-8 [Registration No. 333-60807])
10F*	Second Amendment to the Cognex Corporation 1998 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 of Cognex's Quarterly Report on Form 10-Q for the quarter ended July 2, 2006 [File No. 0-17869])
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])
101*	First Amendment to 2000 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 of Cognex's Quarterly Report on Form 10-Q for the quarter ended July 3, 2005 [File No. 0-17869])

# **EXHIBIT NUMBER**

HIBIT NUMBER	
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])
10K*	Cognex Corporation 2001 General Stock Option Plan (incorporated by reference to Exhibit 1 to the Registration Statement on Form S-8 [Registration No. 333-100709])
10L*	Amendment to Cognex Corporation 2001 General Stock Option 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])
10M*	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])
10N*	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. 0-17869])
100*	Form of Letter Agreement between Cognex Corporation and Eric A. Ceyrolle (incorporated by reference to Exhibit 10S of Cognex's Annual Report on Form 10-K for the year ended December 31, 2007 [File No. 0-17869])
10P*	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])
10Q*	Form of Stock Option Agreement (Non-Qualified) under 1998 Non-Employee Director Stock Plan (filed herewith)
10R*	Separation Agreement by and between Cognex Corporation and James F. Hoffmaster (incorporated by reference to Exhibit 10.1 of Cognex's Current Report on Form 8-K/A, filed on April 12, 2007 [File No. 0-17869])
10S*	Supplemental Retirement and Deferred Compensation Plan effective April 1, 1995 (filed herewith)
10T*	Summary of Annual Bonus Program (filed herewith)
10U*	Summary of Director Compensation (filed herewith)
10V*	Form of Indemnification Agreement with each of the Directors of Cognex Corporation (incorporated by reference to Exhibit 10.1 of Cognex's Current Report on Form 8-K filed on March 3, 2008 [File No. 0-17869])
10W*	Employment Agreement, dated June 17, 2008, by and between Cognex Corporation and Robert Willett (incorporated by reference to Exhibit 10.1 of Cognex's Current Report on Form 8-K filed on June 19, 2008 [File No. 0-17869])
10X*	Amendment to Employment Agreement with Robert Willett, dated November 14, 2008 (incorporated by reference to Exhibit 10X of Cognex's Annual Report on Form 10-K filed on February 17, 2009 [File No. 1-34218])
10Y*	Form of Stock Option Agreement 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])
10Z*	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])
10AA*	Memorandum to Eric Ceyrolle regarding separation, dated April 24, 2009 (filed herewith)
18.1	Letter from Grant Thornton, LLP regarding change in Accounting Principles, dated October 29, 2009 (incorporated by reference to Exhibit 18.1 of Cognex's Quarterly Report on Form 10-Q for the quarter ended October 4, 2009 [File No. 1-34218])

## **EXHIBIT NUMBER**

14	Code of Business Conduct and Ethics as amended March 12, 2004 (filed herewith)
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)

<sup>\*</sup> Indicates management contract or compensatory plan or arrangement

# Locations

**AMERICAS** 

AMERICAS

ASIA

## **Cognex Headquarters**

Cognex Corporation
One Vision Drive
Natick, MA 01760-2059

### California

2060 Challenger Drive Alameda, CA 94501

Western Regional Technology Center 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 209/211 Carmel, IN 46032

### Michigan

46850 Magellan Drive, Suite 150 Novi, MI 48377

### Missouri

17295 Chesterfield Airport Road, Suite 200 Chesterfield, MO 63005

### Oregon

15865 SW 74th Avenue, Suite 105 Portland, OR 97224

### **North Carolina**

Arboretum Building 1208 Eastchester Drive High Point, NC 27265

### Pennsylvania

502 West Germantown Pike Plymouth Meeting, PA 17462

### **Tennessee**

318 Seaboard Lane, Suite 314 Franklin, TN 37067

### Wisconsin

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

#### Canada

5169 Beaubien #6 Montreal, QC H1T 1V9

ASIA

### China

Room 1703 & 1705 The Headquarters Building 168 Xi Zang Road Middle Shanghai 200001, PRC

Room 58-59, 9B1, Block AB TianXiang Building, TianAn Cyber Park FuTian District, Shenzhen 518000, PRC

Room B930, 9th Floor New Poly Plaza No. 1 Beida Street Chao Yang Gate DongCheng District, Beijing 100010 PRC

### India

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

### Korea

Room #704 City Air Terminal 159-6 Samsung-dong Gangnam-gu, Seoul 135–728 Korea

### Taiwan

10F-1, No. 25, Puding Road Hsin Chu City 300 Taiwan, ROC

### **Singapore**

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

6 Marina Blvd #04-20 The Sail @ Marina Bay Singapore 01895

**EUROPE** 

#### France

Immeuble "Le Patio" 104 Avenue Albert 1er 4th Floor – B42, B43 92563 Rueil Malmaison Cedex, France

Immeuble Orient 10 Place Charles Beraudier 69428 Lyon Cedex 03 Lyon, France

### Germany

Emmy-Noether-Strasse 11 D-76131 Karlsruhe, Germany

Vaalser Strasse 259 D-52074 Aachen, Germany

### Hungary

East-West Business Center Rákóczi út 1-3. 1088 Budapest, Hungary

### Ireland

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

# **Locations**

### **EUROPE**

### Italy

Via Gaetano Crespi, 12 20134 Milano, Italy

### Sweden

Skrapan 1830 Kopparbergsvagen 10 722 10 Västerås, Sweden

### **United Kingdom**

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Epsom Branch, LTD. Unit 7, First Quarter Blenheim Road, Epsom Surrey, KT19 9QN, UK United Kingdom

### JAPAN

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

3F, Central Shin-Osaka Bldg., 4-5-36, Miyahara, Yodogawa-ku, Osaka, Japan, 532-0003

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

3F, Nihon-Seimei-Toyota Bldg., 8-137, Yamanote, Toyota, Aichi, Japan, 471-0833

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

# **Information**

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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 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 on-line at http://www.cognex.com.

Department of Investor Relations Cognex Corporation One Vision Drive Natick, Massachusetts 01760 BOARD OF DIRECTORS

Robert J. Shillman
Chairman and Chief Executive Officer
Cognex Corporation

Patrick A. Alias Senior Vice President Cognex Corporation

Jerald G. Fishman
Chief Executive Officer and President
Analog Devices

Theodor Krantz
President
Airmar Technology, Inc.

Edward J. Smith

President
Barnegat Bay Capital

Anthony Sun
Former Managing General Partner
Venrock Associates

Reuben Wasserman Business Consultant

CORPORATE OFFICERS

Robert J. Shillman
Chairman and Chief Executive Officer

Robert Willett
President and Chief Operating Officer

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

SENIOR MANAGEMENT

Patrick Alias Senior Vice President

Bhaskar Banerjee Business Unit Manager, Vision Systems

Pascal Dorster
Senior Director & Business Unit
Manager, Vision Sensors

David Gantt
Vice President of Sales,
OEM Vision Engines

SENIOR MANAGEMENT (CONT'D)

Carl Gerst

Senior Director & Business Unit Manager, ID Products

Markku Jaaskelainen

Executive Vice President & Business Unit Manager, Vision Software

Todd Keebaugh

Vice President, Legal Services

Didier Lacroix

Senior Vice President of Sales and Service, International

Herbert Lade

Vice President, Operations

Stanley Luboda
Senior Vice President,

SISD Sales and Business Development

Laura MacDonald

Vice President and Corporate Controller

John McGarry Senior Vice President, Research and Development

Thomas F. Nash
President, Surface Inspection
Systems Division (SISD)

Kris Nelson Senior Vice President of Sales, Americas

Peter Neve Vice President, Global Marketing

Kiyoshi Shima President, Cognex K.K.

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

William Silver
Senior Vice President and
Senior Fellow

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