COGNEX CORP

FORM 10-K
(Annual Report)

Filed 02/28/07 for the Period Ending 12/31/06

Address	ONE VISION DR
	NATICK, MA 01760
Telephone	5086503000
CIK	0000851205
Symbol	CGNX
SIC Code	3823 - Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products
Industry	Scientific & Technical Instr.
Sector	Technology
Fiscal Year	12/31

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

FORM 10-K

(Mark One)

☑ **Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2006 or**

☐ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from __________ to __________**

Commission File Number 0-17869

COGNEX CORPORATION
(Exact name of registrant as specified in its charter)

Massachusetts	**04-2713778**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

One Vision Drive
Natick, Massachusetts 01760-2059
(508) 650-3000
(Address, including zip code, and telephone number, including area code, of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Exchange on Which Registered
Common Stock, par value $.002 per share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☑ No ☐

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "acclerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (Check one):
Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☑

Aggregate market value of voting stock held by non-affiliates of the registrant
as of July 2, 2006: $1,081,957,000
$.002 par value common stock outstanding as of February 25, 2007: 44,465,706 shares

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, 2006. Portions of such Proxy Statement are incorporated by reference in Part III of this report. Portions of the registrant's Annual Report to Shareholders for the year ended December 31, 2006 are incorporated by reference in Part I and Part II of this report.

COGNEX CORPORATION ANNUAL REPORT ON
FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2006

INDEX

PART I	
ITEM 1.	BUSINESS
ITEM 1A.	RISK FACTORS
ITEM 1B.	UNRESOLVED STAFF COMMENTS
ITEM 2.	PROPERTIES
ITEM 3.	LEGAL PROCEEDINGS
ITEM 4.	SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS
ITEM 4A.	EXECUTIVE OFFICERS AND OTHER MEMBERS OF THE MANAGEMENT TEAM OF THE REGISTRANT
PART II	
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES
ITEM 6.	SELECTED FINANCIAL DATA
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE
ITEM 9A.	CONTROLS AND PROCEDURES
ITEM 9B	OTHER INFORMATION
PART III	
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE
ITEM 11.	EXECUTIVE COMPENSATION
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE
ITEM 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES
PART IV	
ITEM 15.	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

EX-10.S Summary of Annual Bonus Program
EX-10.T Summary of Director Compensation
EX-13 Annual Report to Shareholders
EX-21 Subsidiaries
EX-23.1 Consent of Ernst & Young LLP
EX-31.1 Section 302 Certification of C.E.O.
EX-31.2 Section 302 Certification of C.F.O.
EX-32.1 Section 906 Certification of C.E.O.
EX-32.2 Section 906 Certification of C.F.O.

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 the Company's use of the words "expects," "anticipates," "estimates," "believes," "projects," "intends," "plans," "will," "may," "shall," and similar words and other statements of a similar sense. The Company's 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. 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.

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.

The Company designs, develops, manufactures, and markets machine vision systems, or computers that can "see," which are used to automate a wide range of manufacturing processes where vision is required. Machine vision is important for applications in which human vision is inadequate to meet requirements for feature 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 feature size of items being manufactured.

The Company 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 designs, develops, manufactures, and markets modular vision systems that are used to automate the manufacture of discrete items, such as semiconductor chips, cellular phones, and light bulbs, by locating, identifying, inspecting, and measuring them during the manufacturing process. SISD designs, develops, manufactures, and markets surface inspection vision systems that are used to inspect the surfaces of materials processed in a continuous fashion, such as paper, metals, plastics, and non-wovens, 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 87% of total revenue in 2006.

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. The Company believes that virtually every manufacturer that makes products in an automated process can achieve better quality and manufacturing efficiency by using machine vision.

Machine vision systems 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 insert electronic components.
IDENTIFICATION What is it?	Identifying an object by analyzing its shape or by reading a serial number.	Identifying the serial number 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 serves a wide array of customers around the world that use the Company’s products to replace human vision in a variety of industrial applications. While machine vision systems were first widely embraced by manufacturers of electronic components who needed this technology to produce computer chips with decreasing geometries, advances in technology and easy-to-use interfaces have made machine vision available to a broader range of users. Today, the Company’s products are at work solving vision applications in many industries, including semiconductors, electronics, automotive, food and beverage, healthcare, pharmaceuticals, and high-speed inspection of materials, such as paper and metals.

The Company’s current customers can be classified into three primary markets: the semiconductor and electronics capital equipment market, the discrete factory automation market, and the surface inspection market. Semiconductor and electronics capital equipment manufacturers purchase Cognex machine vision systems and integrate them into the capital equipment that they manufacture and then sell to their customers in the semiconductor and electronics industries that either make computer chips or make printed circuit boards containing computer chips. Although the Company sells to original equipment manufacturers (OEMs) in a number of industries, these semiconductor and electronics OEMs have historically been large consumers of the Company’s products. Sales to semiconductor and electronics capital equipment manufacturers represented approximately 32% of the Company’s total revenue in 2006.

Discrete manufacturers in the factory automation area include a wide array of manufacturers who use machine vision for applications in a variety of industries, including the automotive, consumer electronics, food and beverage, healthcare, pharmaceutical, and aerospace industries. These manufacturers purchase Cognex machine vision systems and install them directly on their production lines. These customers, who typically have limited computer programming or machine vision experience, purchase Cognex products from the Company’s direct sales force, from a distributor, or from a system integrator or machine builder that is experienced in machine vision technology. System integrators are hired by end users to help them develop a vision application for their production line, whereas machine builders are hired by end users to build a complete, custom machine that incorporates machine vision. Sales to discrete factory automation customers represented approximately 55% of the Company’s total revenue in 2006.

Surface inspection customers are manufacturers of materials processed in a continuous fashion, such as paper, metals, plastics, and nonwovens. These customers need sophisticated machine vision to detect and classify defects in the surfaces of those materials as they are being processed at high speeds. Surface inspection sales represented approximately 13% of the Company's total revenue in 2006.

Business Strategy

The Company's goal is to expand its position as a leading worldwide supplier of machine vision systems for factory automation by offering a complete family of machine vision products to a broad base of manufacturers. Semiconductor and electronics equipment manufacturers have historically been large consumers of the Company's products. Over the past few years, however, the Company has diversified its customer base beyond the semiconductor and electronics capital equipment sector. Demand from these capital equipment manufacturers is highly cyclical, with periods of investment followed by temporary downturns. At its revenue peak in 2000, sales to semiconductor and electronics capital equipment manufacturers represented approximately 61% of the Company's total revenue, compared to approximately 32% in 2006.

The Company believes that long-term, sustained revenue growth will come from a broad base of manufacturers outside of the semiconductor and electronics capital equipment manufacturer sector. Accordingly, the Company has invested in expanding its product offerings to its discrete factory automation customers, who demand a wide range of easy-to-use products of varying capability and price, and in developing a strong worldwide sales and support infrastructure.

In May 2005, the Company completed its largest acquisition to date when it purchased DVT Corporation. In recent years, the Company has expanded its 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 the Company's own direct end-user sales force. With the acquisition of DVT Corporation, the Company immediately gained a worldwide network of distributors, all fully trained in selling and supporting machine vision products. The Company believes that it can accelerate its growth in the rapidly developing discrete factory automation market by selling its expanding line of low-cost, easy-to-use products, including the acquired DVT vision sensors, through this worldwide distribution channel.

In May 2006, the Company acquired AssistWare Technology, Inc., a developer of Lane Departure Warning Systems, and entered the emerging market for machine vision systems in vehicles. These highly-specialized sensors are installed in vehicles, ranging from long-haul trucks to passenger cars, where they provide driver assistance by constantly analyzing the vehicle's external environment and warning the driver of potentially dangerous situations. AssistWare's Lane Departure Warning System uses machine vision technology to watch the road ahead and alert drivers if they unintentionally leave their lane or if their driving pattern becomes erratic. The Company believes that entering this new commercial market for machine vision systems is an important strategic move to diversify into areas outside of the factory floor.

The Company intends to continue to defend its strong position in the semiconductor and electronics capital equipment sector, while selectively expanding into new industrial and commercial machine vision applications through the internal development of new products, as well as the acquisition of businesses and technologies.

Products

Cognex offers a full range of machine vision products designed to meet customer needs at virtually any stage of the manufacturing process and virtually any capability/price point.

Vision Sensors

The Company believes it is firmly positioned in the fast-growing market for vision sensors with its In-Sight ® and DVT ® product lines. Vision sensors are machine vision systems that combine a digital camera, software, vision processor, and input/output capability in a low-cost, compact, easy-to-use package. These general-purpose vision sensors are designed to be easily programmed to perform a wide range of vision tasks including part location, identification, measurement, assembly verification, and robotic guidance.

In 2006, the Company expanded the In-Sight 5000 series to include remote-head vision sensors and new software tools to address vision robotic applications, while continuing to increase processing power in a rugged, industrial-grade package that meets high standards for shock, vibration, and dust and wash-down protection. The DVT product line introduced three new models in 2006 to address the low-cost, full-function vision sensor market.

Vision sensors are sold to end users, distributors, system integrators, and machine builders located in North America, Japan, Europe, and Southeast Asia in a wide range of general manufacturing applications, such as automotive parts and assembly, consumer packaged goods, electronic components, medical devices, and pharmaceuticals.

Expert Sensors

Unlike general-purpose vision sensors that can be programmed to solve a wide variety of vision tasks, Cognex's sensor products are designed to deliver very simple, low-cost solutions for specific sensor problems. Because of their low price and ease of use, the Company expects to solve many new manufacturing problems with its Checker ® series of products.

In 2004, the Company introduced Checker 101, designed to detect the presence or absence of product features. Checker detects or inspects parts by understanding what they look like, providing high reliability and eliminating many of the drawbacks of traditional photoelectric sensors. In 2005, the Company introduced Checker 101E, which expands Checker's capability to include the tracking and rejecting of parts. This capability provides significant value to the customer since it eliminates the need for other industrial equipment, providing higher ease of use and a lower cost solution.

Checker is predominantly sold through the Company's distribution network to end users located in North America, Japan, Europe, and Southeast Asia in a wide range of general manufacturing industries.

ID Products

The Company's industrial ID products are designed to quickly and reliably read codes (e.g. one-dimensional bar codes on labels or two-dimensional marks on parts) that have been applied or directly marked on discrete items during the manufacturing process. These image-based products provide industry-leading read rates on parts regardless of the speed of the production line, marking method (i.e. pin stamped, etched, printed, or otherwise), or part material (i.e. paper, metal, plastic, glass, etc.). Manufacturers of goods ranging from automotive suppliers to pharmaceutical items to aircraft components to medical devices are increasingly looking to direct part mark (DPM) identification to ensure the appropriate manufacturing processes are performed in the correct sequence on the right parts. In addition, DPM can be used to create a history of the part from the beginning of its life to the end, and for use in supply chain management and repair.

In 2006, the Company introduced the DataMan ™ 7500 Series DPM hand-held readers for part traceability. The DataMan 7500 reads everything from the most challenging marks on parts to the easiest printed bar codes. These rugged, self-contained readers incorporate IDMax™ decoding software and UltraLight ® illumination system to optimally illuminate and read marks on any part surfaces.

In early 2007, the Company introduced the DataMan 100 fixed-mount readers. The DataMan 100 is smaller than a flip phone. Its all-in-one design includes integrated illumination, aiming, and optics and can provide six-sigma read rates at line speeds up to 45 parts per second. Like the DataMan 7500, this product also incorporates IDMax to read the most difficult direct marked parts. The DataMan 100 features a rugged aluminum housing that provides protection against dust and water, making it ideal for anything from the highest speed document handling machine to the most difficult marks on an automotive assembly line.

Industrial ID products are sold to end users, distributors, system integrators, and machine builders located in North America, Japan, Europe, and Southeast Asia in a broad range of industries, such as automotive, pharmaceuticals, aerospace, and medical devices.

The Company's wafer ID products are designed to quickly and reliably read codes (e.g. one- or two-dimensional bar codes or human-readable characters) that have been laser scribed onto semiconductor wafers. These products are sold to OEMs and integrated into semiconductor manufacturing and handling equipment. They read codes on wafers under a variety of challenging process conditions so that semiconductor manufacturers can track individual wafers through every step of the process, ensuring full traceability and closed-loop process feedback.

In 2006, the Company launched a new series of high-performance wafer readers based on a new generation of microprocessors. The In-Sight 1721 and 1722 wafer readers offer fast and powerful wafer identification. The 1721 uses fab-safe red LED lighting, while the 1722 is a specialized infrared reader designed to read wafers despite the newest ultra-thin photoresist coatings.

Wafer ID products are predominantly sold to OEMs located in North America, Japan, Europe, and Southeast Asia in the semiconductor industry.

PC-Based Vision Systems

The Company sells a full range of PC-based vision systems that combine the vision power of Cognex's most advanced vision tools with the processing power of high-speed PCs, provide the flexibility to choose from the widest range of contemporary analog and digital cameras for image acquisition, and facilitate seamless integration of vision into capital equipment.

These products offer the most extensive suite of patented and unique vision software tools featuring PatMax ®, high-accuracy pattern location software that can locate objects that vary in size and orientation or whose appearance is degraded; PatFlex ®, which enables a vision system to locate a pattern, or read or verify a code on curved objects, or warped, wrinkled, or lumpy packages; and PatInspect ®, which can accurately detect extremely small or subtle manufacturing defects.

PC-based vision is sold both to OEMs located in North America, Japan, Europe, and Southeast Asia who integrate the machine vision systems into capital equipment for the semiconductor and electronics industries, as well as to end users, system integrators, and machine builders located in North America, Japan, Europe, and Southeast Asia in a wide range of industries within the factory automation market.

VisionPro Product Family

VisionPro ® facilitates rapid application development and installation of integrated PC vision solutions, speeding time to market for OEMs, system integrators, machine builders, and advanced manufacturing engineers. VisionPro's easy-to-use application development software offers both the power and flexibility of advanced programming and the simplicity of a graphical programming environment. VisionPro's extensive suite of patented vision tools enables solving the most challenging machine vision applications. VisionPro works with both Cognex MVS-8000 ® Series frame grabbers and with direct connect FireWire PC systems.

MVS-8000 Product Family

The MVS-8000 family of programmable machine vision systems provides industrial-grade fast and reliable image capture and vision processing for the most demanding machine vision applications. Designed for high throughput, the 8000 series frame grabbers support the widest range of high-speed and high-resolution digital and analog acquisition, including CameraLink, area scan, linescan, color, and multi-camera acquisition.

Application Specific PC-based Vision Systems

The Company offers a variety of application-specific systems that combine Cognex PC-based hardware and software to create a solution that is tailored to the particular requirements of certain vision applications. A partial list of application-specific vision systems is as follows:

ProofRead™ with *OCVMax*™ and *IDMax* is a complete system for ensuring label accuracy and product traceability for the pharmaceutical, food and beverage, and personal care industries.

DisplayInspect ® inspects the small, high-resolution displays commonly found on cellular phones, pagers, medical test instruments, and other electronic devices.

SMD 4 ® guides the placement of surface mount devices onto printed circuit boards and other assemblies, as well as inspects parts prior to placement. *BGA II* ® inspects ball grid array devices for missing, misplaced, or improperly formed solder balls. *PMI* inspects probe marks after electrical testing of wafers to detect damage to bond pads or indicate damaged probe cards.

Application-specific systems are targeted to OEMs, system integrators, machine builders, and end users located in North America, Japan, Europe, and Southeast Asia in a wide range of industries, depending upon the application.

Commercial Products

The Company's commercial products currently serve two major market areas:

1) Automotive and Truck market for vehicle-based "driver assist" vision sensors that enhance vehicle safety and driver convenience, and

2) Building Automation and Security market for vision-based "people" sensing and counting.

In the Automotive and Truck market, the Company sells the SafeTRAC ™ Lane Departure Warning System, a vision sensor that watches the roadway directly ahead of the vehicle and alerts the driver if the vehicle crosses out of its lane without first activating a turn signal. SafeTRAC also warns the driver if they are exhibiting symptoms of drowsiness, so that they can stop and get rest. SafeTRAC is currently sold to commercial truck fleets located in North America.

In the Building Automation and Security market, the Company sells the CPS-1000 People Sensor ™ , a vision sensor designed for door security that detects, counts, and monitors the direction of motion of people as they pass through an access-controlled doorway. The CPS-1000 utilizes Cognex's existing vision software, as well as patented 2D and 3D vision technology that Cognex developed specifically for "people sensing" applications. The CPS-1000 is currently sold to OEMs located in North America.

Surface Inspection Systems

The SmartView ® surface and web inspection system provides reliable detection, classification, and visualization of defects and monitoring of surface quality on products that are manufactured in a continuous process. The SmartView system provides grey-scale imaging capability to visualize the defects, as well as a high-quality snapshot of the surface or web. Most advanced open data access capabilities embedded into the SmartView system ensure real-time inspection control and data access between the SmartView system and other control, business, production, and quality systems in the mill. The SmartView system is a modular and scalable system on a Microsoft ® Windows ® -based platform that enables the Company to expand into more complex vision applications in the paper, metals, plastics, and nonwovens industries.

SmartView is sold primarily to end users located in North America, Japan, Europe, and Southeast Asia in the paper, metals, plastics, and nonwovens industries. In addition, SmartView is sold to end users located in Europe and Asia in the paper industry through an OEM relationship with Honeywell International, Inc.

Research, Development, and Engineering

The Company engages in research, development, and engineering (R,D&E) to enhance its existing products and to develop new products and functionality to meet market opportunities. In addition to internal research and development efforts, the Company intends to continue its strategy of gaining access to new technology through strategic relationships and acquisitions where appropriate. The Company considers its on-going efforts in R,D&E to be a key component of its strategy.

At December 31, 2006, the Company employed 175 professionals in R,D&E, most of whom are software developers. The Company's R,D&E expenses totaled $32,607,000, $27,640,000, and $27,063,000, or approximately 13%, 13%, and 14% of revenue, in 2006, 2005, and 2004, respectively. 2006 R,D&E expenses included $3,627,000 of stock-based compensation expense that was not recorded in 2005 or 2004.

Manufacturing

The Company's MVSD products, with the exception of its DVT product line, are manufactured utilizing a turnkey operation whereby the majority of component procurement, assembly, and initial testing are performed under agreement by third-party contract manufacturers. After the completion of initial testing, the contract manufacturers deliver the products to the Company's Cork, Ireland facility for programming and quality control. For the DVT product line, components are procured by the Company, delivered to a contract manufacturer for assembly and initial testing, and returned to the Company's Duluth, Georgia facility for programming and quality control. The contract manufacturers use specified components and assembly and test documentation created and controlled by the Company. From time to time, the Company will procure large quantities of end-of-life components for strategic purposes that will not be consumed within one year. Certain components are presently available only from a single source.

The Company's SISD products are manufactured at its Alameda, California facility, with the exception of the frames on which the cameras and the lights used to illuminate the web are mounted. The manufacturing process at the Alameda facility consists of system design, configuration management and control, component procurement, and subassembly. After the completion of subassembly at the Alameda facility, some of the systems are delivered to the Company's Kuopio, Finland facility where the frames and lights are manufactured. The manufacturing process at the Kuopio facility consists of system integration, final testing, and quality control. Certain products are manufactured by third-party contract manufacturers using documentation created and controlled by the Company.

Sales and Service

The Company 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 for the Company. Orders from direct customers currently ship from the Company's Cork, Ireland facility. The Company's easy-to-use vision sensors are also sold through a worldwide distribution network. Orders from distributors currently ship from the Company's Duluth, Georgia facility. The Company's SISD products are primarily sold through a worldwide direct sales force and ship from either the Company's Alameda, California or Kuopio, Finland facility.

At December 31, 2006, the Company's sales force consisted of 244 professionals, including sales engineers, application engineers, and distribution management personnel. Sales engineers call directly on targeted accounts and coordinate the activity of the application engineers. The majority of the Company's sales force holds engineering or science degrees.

Sales to customers based outside of the United States represented approximately 65% of total revenue in 2006, compared to approximately 63% in 2005 and approximately 69% in 2004. No customer accounted for greater than 10% of revenue in 2006, 2005, or 2004. Although international sales may from time to time be subject to federal technology export regulations, to date the Company has not suffered significant delays or prohibitions in sales to any of its foreign customers. Financial information about segments and geographic areas may be found in the Notes to the Consolidated Financial Statements, appearing on pages 49 and 50 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

The Company'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 product 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 the Company's offices worldwide, at customer facilities, and on computer-based tutorials, video, and the Internet. The Company provides consulting services that range from a specific area of functionality to a completely integrated machine vision application.

The Company'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

Because the Company relies on the technical expertise, creativity, and knowledge of its personnel, it utilizes patent, trademark, copyright, and trade secret protection to maintain its competitive position and protect its proprietary rights in its products and technology. While its intellectual property rights are important to its success, the Company believes that its business as a whole is not materially dependent on any particular patent, trademark, copyright, or other intellectual property right.

At December 31, 2006, the Company had been granted, or owned by assignment, approximately 247 patents issued in the field of machine vision technology and had 189 patent applications pending. The Company has used, registered, or applied to register a number of trademark registrations in the United States and in other countries. The Company's trademark and servicemark portfolio includes various registered marks, including but not limited to, Cognex ®, DVT ®, In-Sight ®, Checker ®, PatMax ®, VisionPro ®, and SmartView ®, as well as many common-law marks, including but not limited to, DataMan ™, IDMax ™, and Proofread ™.

Compliance with Environmental Provisions

The Company'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 the Company's competitors vary depending upon market segment, geographic region, and application niche. The Company's 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, the Company competes with the internal engineering efforts of current or prospective customers. Also, in the DPM identification market, the Company competes with manufacturers of automatic identification systems. Any of these competitors may have greater financial and other resources than the Company. Although the Company considers itself 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.

The Company's ability to compete depends upon its ability to design, manufacture, and sell high-quality products, as well as its ability to develop new products 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. The importance of each of these factors varies depending upon the specific customer's needs.

Backlog

At December 31, 2006, the Company's backlog totaled $36,783,000, compared to $33,069,000 at December 31, 2005. Backlog reflects purchase orders for products scheduled for shipment primarily within three months at MVSD and primarily within six months at SISD. The level of backlog at any particular date is not necessarily indicative of future revenue of the Company. The Company's vision sensors typically ship within one week of when the order is booked. In addition, delivery schedules may be extended and orders may be canceled at any time subject to certain cancellation penalties.

Employees

At December 31, 2006, the Company employed 760 persons, including 375 in sales, marketing, and service activities; 175 in research, development, and engineering; 97 in manufacturing and quality assurance; and 113 in information technology, finance, and administration. Of the Company's 760 employees, 300 are based outside of the United States. None of the Company's employees are represented by a labor union and the Company has experienced no work stoppages. The Company believes that its employee relations are good.

Available Information

The Company maintains a website on the World Wide Web at www.cognex.com . The Company makes available, free of charge, on its website in the section captioned "Investors — SEC FiIings" its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, 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. The Company's reports filed with, or furnished to, the SEC are also available at the SEC's website at www.sec.gov . Information contained on the Company's 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; you should read the explanation of the qualifications and limitations on such forward-looking statements found in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations," appearing on page 15 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

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

Unfavorable changes in economic conditions and capital spending may negatively impact our operating results.

Our revenue is dependent upon the capital spending trends of manufacturers in a number of industries, including, but not limited to, the semiconductor, electronics, automotive, and steel industries. These spending levels are, in turn, impacted by global economic conditions. Our operating results have been materially adversely affected in the past, and could be materially adversely affected in the future, as a result of unfavorable economic conditions and reduced capital spending by manufacturers worldwide.

Downturns in the semiconductor and electronics industries may adversely affect our business.

In 2006, approximately 32% 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 a slowdown in either of these industries.

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

In 2006, approximately 65% 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. We intend to continue to expand our operations outside of the United States and may enter additional international markets, which will require significant management attention and financial resources. As a result, our operations are subject to the risks inherent in international sales, including, among other things:

- various regulatory requirements,
- transportation delays,
- difficulties in staffing and managing foreign sales operations, and
- potentially adverse tax consequences.

In addition, fluctuations in foreign currency exchange rates may render our products less competitive relative to local product offerings, or could result in significant foreign currency losses if not properly hedged. We are also subject to the political risks inherent in international operations and their impact on the global economy, including economic disruption from acts of war or terrorism, particularly in the aftermath of the terrorist attacks of September 11, 2001. Any of these factors could have a material adverse effect on our operating results.

Fluctuations in foreign exchange rates could materially affect our reported results.

We face exposure to adverse movements in foreign currency exchange rates as a significant portion of our revenue, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of our company. In certain instances, we utilize derivative instruments to hedge against foreign currency fluctuations. These contracts are used to reduce our risk associated with foreign currency exchange rate changes, 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. In addition, our failure to identify new exposures and hedge them in a timely manner may result in material foreign currency gains or losses.

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

In 2006, our top five customers accounted for approximately 11% of total revenue. Our expansion into the factory automation marketplace has reduced our reliance upon the revenue from any one of our larger OEM customers. 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.

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 inventory is manufactured by a third-party contractor. As a result, we are dependent upon this contractor 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. 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 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 Chairman of the Board of Directors, as well as other members of our senior management team, including James F. Hoffmaster, our President, who has full responsibility for running our day-to-day operations. Although we have retained 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 total 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. Beginning in the first quarter of 2006, Cognex was required to recognize compensation expense for all stock option grants. As a result, we incurred increased compensation costs associated with our stock-based compensation programs. Moreover, difficulties relating to obtaining shareholder approval of stock option plans could result in a reduction in the total number of options available for grant in future periods. Due to these factors, we may find it difficult to attract, retain, and motivate employees, and any such difficulty could materially adversely affect our business.

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 which 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.

The market for our products is characterized by rapidly changing technology. Accordingly, we believe that our future success will depend upon our ability to develop or acquire new products with improved price/performance and introduce them to the marketplace in a timely manner. We may not be able to introduce and market new products successfully 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 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 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. 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 failure to properly manage the distribution of our products and services could result in the loss of revenue.

We use a variety of different distribution methods to sell our products and services, including third-party resellers and distributors, as well as direct sales to end users. 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 distribution methods may reduce visibility to demand and pricing issues. Each distribution method has distinct risks and costs, and therefore, our failure to implement the most advantageous balance in the delivery model for our products and services could adversely affect our revenue and profitability.

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

We rely heavily on our proprietary software technology and hardware designs, as well as the technical expertise, creativity, and knowledge of our personnel. 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 effect on our operating results. We refer you to the section captioned “Intellectual Property,” appearing in Part I — Item I of this report.

Our company may be subject to 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. These matters can be time-consuming, divert our 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 service activities may be insufficient to enable us to maintain our competitive advantage. In addition, competitive pressures could lead to price erosion that could materially and adversely affect our operating results. We refer you to the section captioned “Competition,” appearing in Part I — Item 1 of this report.

Implementation of our acquisition strategy may not be successful, which could affect our ability to increase our revenue or profitability.

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 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 technological obsolescence or lower-than-expected cash flows from the acquired assets.

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

Attractive acquisition opportunities may not be available to us.

Our business strategy includes selective expansion into other machine vision applications through the acquisition of businesses and technologies. Since 1995, we have completed several business and technology acquisitions, including the acquisition of DVT Corporation in May 2005 and AssistWare Technology, Inc. in May 2006. 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. However, we may not have the opportunity to make suitable acquisitions on favorable terms in the future, which could negatively impact the growth of our business. We expect that other companies in the machine vision industry will compete with us to acquire compatible businesses. This competition could increase prices for businesses and technologies that we would likely pursue, and our competitors may have greater resources than we do.

The trading price of our common stock may be volatile.

The price of our common stock has historically experienced significant volatility due to:

- fluctuations in our revenue and earnings,
- changes in the market's expectations for our growth,
- overall equity market conditions,
- conditions relating to the market for technology stocks,
- general economic conditions, and
- other factors unrelated to our operations.

The stock markets have experienced extreme price volatility in recent years. This volatility has had a substantial effect on the market prices of securities issued by many technology companies, such as our company, often for reasons unrelated to the operating results of the specific company.

We may have additional tax liabilities.

We are subject to income taxes in both the United States and numerous foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our 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 estimates are reasonable, the final determination of tax audits and any related litigation could be materially different than that which is reflected in historical income tax provisions and accruals. Based on the results of an audit or litigation, a material effect on our income tax provision, net income, or cash flows in the period or periods for which that determination is made could result.

ITEM 1B. UNRESOLVED STAFF COMMENTS

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

ITEM 2: PROPERTIES

In 1994, the Company purchased and renovated a 100,000 square-foot building located in Natick, Massachusetts that serves as its corporate headquarters. In 1997, the Company completed construction of a 50,000 square-foot addition to this building.

In 1995, the Company purchased an 83,000 square-foot office building adjacent to its corporate headquarters. This building is currently occupied with tenants who have lease agreements that expire at various dates through 2017. The Company also uses a portion of this space for storage and product demonstrations.

In 1997, the Company purchased a three and one-half acre parcel of land situated on Vision Drive, adjacent to the Company’s corporate headquarters. This land is being held for future expansion.

The Company also is party to an agreement to purchase land and a 19,000 square-foot building adjacent to its corporate headquarters for $1,700,000, which amount was previously paid by the Company in the form of a deposit. The closing on the purchase of this property, which remains subject to customary closing conditions, is anticipated to occur in 2007. The Company expects to continue to lease this building to its current tenants who have lease agreements that expire at various dates through 2012.

ITEM 3: LEGAL PROCEEDINGS

On March 13, 2006, the Company filed a Declaratory Judgment action in the United States District Court for Minnesota seeking that certain patents being asserted by Acacia Research Corporation and Veritec, Inc., and their respective subsidiaries, be ruled invalid, unenforceable, and/or not infringed by Cognex Corporation. The patent assertions relate to two-dimensional symbology reading; in particular, the defendants have alleged that any company reading a data matrix code infringe the subject patents. Certain defendants in the action have asserted counterclaims against Cognex Corporation, seeking unspecified damages. The litigation is in its early stages and discovery will begin shortly. Cognex Corporation cannot predict the outcome of this matter, and although the Company believes it has a meritorious case, an adverse resolution of this lawsuit could have a material adverse effect on the Company’s financial position, liquidity, results of operations, and/or indemnification obligations.

Various other claims and legal proceedings generally incidental to the normal course of business are pending or threatened on behalf of or against Cognex Corporation. While the Company cannot predict the outcome of these matters, in the opinion of management, any liability arising from them will not have a material adverse effect on the Company’s financial position, liquidity, or results of operations after giving effect to provisions already recorded.

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, 2006 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 the Company's executive officers at December 31, 2006, all of whom have been employed by the Company in their present or other capacities for no less than the past five years:

Name	Age	Title
Robert J. Shillman	60	Chief Executive Officer and Chairman of the Board of Directors
James F. Hoffmaster	55	President and Chief Operating Officer
Eric Ceyrolle	53	Executive Vice President of Worldwide Sales and Marketing, MVSD
Richard A. Morin	57	Senior Vice President of Finance and Administration, Chief Financial Officer, and Treasurer

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

Other members of the senior management team include the following individuals, all of whom have been employed by the Company in their present or other capacities for no less than the past five years:

Name	Age	Title
Markku Jaaskelainen	52	Senior Vice President and General Manager, SISD
Marilyn Matz	53	Senior Vice President, Semiconductor and Electronics
E. John McGarry	50	Senior Vice President, Research and Development
Akira Nakamura	62	President, Cognex K.K.
Kris Nelson	59	Senior Vice President, Factory Automation
William Silver	53	Senior Vice President and Senior Fellow
Justin Testa	54	Senior Vice President, ID Products and Sensor Products

PART II

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

Information with respect to this item may be found in the sections captioned "Selected Quarterly Financial Data (Unaudited)," "Stock Performance Graph" and "Company Information," appearing on pages 57, 58 and 61, respectively, of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

The following table sets forth information as of and for the quarter ended December 31, 2006 with respect to the Company's stock repurchase program.

Period of Repurchase	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Approximate Dollar Value of Shares that May Yet be Purchased under the Plans or Programs
October 2 — November 1, 2006	—	—	—	$ 80,587,000
November 2 — December 1, 2006	125,787	$ 24.83	125,787	77,464,000
December 2 — December 31, 2006	76,384	24.57	76,384	75,587,000
	202,171	$ 24.73	202,171	$ 75,587,000

(1) On July 27, 2006, the Company's Board of Directors authorized the repurchase of up to $100,000,000 of the Company's common stock.

ITEM 6: SELECTED FINANCIAL DATA

Information with respect to this item may be found in the section captioned "Five-Year Summary of Selected Financial Data," appearing on page 56 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

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

Information with respect to this item may be found in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations," appearing on pages 15 through 27 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Information with respect to this item may be found in the section captioned "Quantitative and Qualitative Disclosures About Market Risk," appearing on pages 26 and 27 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Information with respect to this item, which includes the consolidated financial statements and notes thereto, reports of independent registered public accounting firms, and supplementary data, may be found on pages 28 through 58 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

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 2006 or 2005.

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. From time to time, the Company reviews its disclosure controls and procedures, 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.

Management's Report on Internal Control over Financial Reporting

Information with respect to this item may be found in the section captioned "Report of Management on Internal Control Over Financial Reporting," appearing on page 54 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

Registered Public Accounting Firm's Report on Internal Control Over Financial Reporting

Information with respect to this item may be found in the section captioned "Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting," appearing on page 55 of the Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and is incorporated herein by reference.

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, 2006 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B: OTHER INFORMATION

None

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to Directors and Executive Officers of the Company required by Item 10 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2007 Annual Meeting of Shareholders to be held on April 18, 2007 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, www.cognex.com. 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 required by Item 11 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2007 Annual Meeting of Shareholders to be held on April 18, 2007 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 2007 Annual Meeting of Shareholders to be held on April 18, 2007 and is incorporated herein by reference.

The following table provides information as of December 31, 2006 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	11,069,029(1)	$ 26.01	3,623,911(2)
Equity compensation plans not approved by shareholders	255,125(3)	21.20	7,500,000(4)
	11,324,154	$ 25.90	11,123,911

(1) Includes shares to be issued upon exercise of outstanding options under the Company's 1991 Isys Controls, Inc. Long-Term Equity Incentive Plan, 1993 Stock Option Plan, 1993 Stock Option Plan for Non-Employee Directors, 1998 Stock Incentive Plan, and 1998 Non-Employee Director Stock Option 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 1998 Stock Incentive Plan and 1998 Non-Employee Director Stock Option Plan. Includes 240,235 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.

(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 7,500,000 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. No 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 required by Item 13 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2007 Annual Meeting of Shareholders to be held on April 18, 2007 and is incorporated herein by reference.

ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information with respect to principal accountant fees and services required by Item 14 shall be included in the Company's definitive Proxy Statement for the Special Meeting in Lieu of the 2007 Annual Meeting of Shareholders to be held on April 18, 2007 and is incorporated herein by reference.

PART IV

ITEM 15: EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) Financial Statements

The following consolidated financial statements of Cognex Corporation and the reports of independent public accounting firms relating thereto are included in the Company's Annual Report to Shareholders for the year ended December 31, 2006, which is attached as Exhibit 13 hereto, and are incorporated herein by reference:

Consolidated Statements of Operations for the years ended December 31, 2006, 2005, and 2004

Consolidated Balance Sheets at December 31, 2006 and 2005

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2006, 2005, and 2004

Consolidated Statements of Cash Flows for the years ended December 31, 2006, 2005, and 2004

Notes to Consolidated Financial Statements

Reports of Independent Public Accounting Firms

(2) Financial Statement Schedule

Included at the end of this report are the following:

Report of Independent Registered Public Accounting Firm on the Financial Statement Schedule

Schedule II — Valuation and Qualifying Accounts

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.

Table of Contents

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	Title	Date
/s/ Robert J. Shillman Robert J. Shillman	Chief Executive Officer and Chairman of the Board of Directors (principal executive officer)	February 28, 2007
/s/ Richard A. Morin Richard A. Morin	Senior Vice President of Finance and Administration, Chief Financial Officer, and Treasurer (principal financial and accounting officer)	February 28, 2007
/s/ Patrick Alias Patrick Alias	Director	February 28, 2007
/s/ Jerald Fishman Jerald Fishman	Director	February 28, 2007
/s/ Anthony Sun Anthony Sun	Director	February 28, 2007
/s/ Reuben Wasserman Reuben Wasserman	Director	February 28, 2007

COGNEX CORPORATION — SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Additions: Charged to Costs and Expenses	Additions: Charged to Other Accounts	Deductions	Other	Balance at End of Period
		(Dollars in thousands)				
Reserve for Uncollectible Accounts:						
2006	$ 2,370	$ 200	$—	$ (273)(a)	$ (635)(b)	$ 1,662
2005	2,596	—	—	(81)(a)	(145)(b)	2,370
2004	2,613	—	—	(167)(a)	150(b)	2,596
Reserve for Inventory Obsolescence:						
2006	$13,770	$1,486	$—	$(2,647)(c)	$(1,079)(d)	$11,530
2005	14,772	1,334	—	(1,577)(c)	(759)(d)	13,770
2004	17,408	375	—	(2,206)(c)	(805)(d)	14,772

(a) Specific write-offs

(b) Foreign exchange rate changes; 2006 also includes an $800,000 reversal of previously-established reserves that were not supported by specific uncollectible accounts

(c) Specific write-offs and scrap

(d) Sale of previously reserved inventory

EXHIBIT INDEX

EXHIBIT NUMBER	
2A	Agreement and Plan of Merger, dated May 9, 2005, by and among Cognex, Tango Acquisition Corp. and DVT Corporation (excluding schedules and exhibits which the registrant agrees to furnish supplementally to the Commission upon request) (incorporated by reference to Exhibit 2.1 of Cognex's Current Report on Form 8-K filed on May 11, 2005 [File No. 0-17869])
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, 2002 [File No. 0-17869])
3B	By-laws of the Company, as amended March 16, 1998 (incorporated by reference to Exhibit 3B of Cognex's Annual Report on Form 10-K for the year ended December 31, 2002 [File No. 0-17869])
4	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])
10A	Cognex Corporation 1993 Stock Option Plan for Non-Employee Directors (incorporated by reference to Exhibit 4A to the Registration Statement on Form S-8 [Registration No. 33-81150])
10B	Cognex Corporation 1993 Stock Option Plan, as amended November 14, 1995 and February 25, 1996 (incorporated by reference to Exhibit 4A to the Registration Statement on Form S-8 [Registration No. 333-04621])
10C	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])
10D	Amendment to the Cognex Corporation 1993 Stock Option Plan for Non-Employee Directors (incorporated by reference to Exhibit 10E of Cognex's Annual Report on Form 10-K for the year ended December 31, 2002 [File No. 0-17869])
10E	Amendment to the Cognex Corporation 1993 Stock Option Plan (incorporated by reference to Exhibit 10F of Cognex's Annual Report on Form 10-K for the year ended December 31, 2002 [File No. 0-17869])
10F	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])
10G	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])
10H	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])
10I	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])
10J	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])
10K	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])
10L	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])

EXHIBIT NUMBER	
10M	Cognex Corporation 2001 General Stock Option Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 [Registration No. 333-100709])
10N	Transition Loan Agreement between James F. Hoffmaster and Cognex Corporation, dated May 24, 2001 (incorporated by reference to Exhibit 10M of Cognex's Annual Report on Form 10-K for the year ended December 31, 2002 [File No. 0-17869])
10O	Termination Agreement between James F. Hoffmaster and Cognex Corporation dated June 4, 2001 (incorporated by reference to Exhibit 10N of Cognex's Annual Report on Form 10-K for the year ended December 31, 2002 [File No. 0-17869])
10P	Form of Stock Option Agreement (Non-Qualified) under 1998 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 of Cognex's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004 [File No. 0-17869])
10Q	Form of Stock Option Agreement (Non-Qualified) under 1998 Non-Employee Director Stock Plan (incorporated by reference to Exhibit 10.2 of Cognex's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004 [File No. 0-17869])
10R	Supplemental Retirement and Deferred Compensation Plan effective April 1, 1995 (incorporated by reference to Exhibit 10P of Cognex's Annual Report on Form 10-K for the year ended December 31, 2004 [File No. 0-17869])
10S	Summary of Annual Bonus Program *
10T	Summary of Director Compensation*
13	Annual Report to Shareholders for the year ended December 31, 2006 (which is not deemed to be "filed" except to the extent that portions thereof are expressly incorporated by reference in this Annual Report on Form 10-K) *
14	Code of Business Conduct and Ethics as amended March 12, 2004 (incorporated by reference to Exhibit 14 of Cognex's Annual Report on Form 10-K for the year ended December 31, 2004 [File No. 0-17869])
21	Subsidiaries of the registrant *
23.1	Consent of Ernst & Young LLP *
31.1	Certification of Chief Executive Officer*
31.2	Certification of Chief Financial Officer*
32.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (CEO)**
32.2	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (CFO)**

* Filed herewith

** Furnished herewith

EXHIBIT 10S

COGNEX CORPORATION
SUMMARY OF ANNUAL BONUS PROGRAM

Cognex Corporation (the "Company") provides selected employees, including the Company's named executive officers, with an opportunity to earn cash bonuses pursuant to an annual bonus program (the "Bonus Program"). Each participant in the Bonus Program is assigned a target annual cash bonus. Participants may earn their bonuses based on the achievement of certain financial goals set forth in the Company's annual budget related to the Company's operating income as a percentage of revenue, or "operating margin". The Compensation/Stock Option Committee of the Company's Board of Directors establishes a minimum level of operating margin, which must be achieved for any cash bonus to be paid to a participant. Once the minimum threshold has been achieved, each participant's eligible bonus is calculated as follows:

- if the operating margin is above the minimum threshold but below the operating margin target in the annual budget, each employee is eligible to receive a pro-rata portion of his or her target bonus;

- if the operating margin is equal to the operating margin set forth in the annual budget, each employee is eligible to receive 100% of his or her target bonus; and

- if the operating margin is above the operating margin set forth in the annual budget, all exempt employees are eligible to receive an additional amount depending upon his or her grade level and up to a maximum level approved by the Compensation/Stock Option Committee.

The Compensation/Stock Option Committee approves the target bonus for each employee at director level and above, which includes the Company's named executive officers, and the amount by which each individual can participate in any increase due to performance in excess of the budget target. Once the operating margin criterion is met, the amount each employee at director level and above, which includes the Company's named executive officers, receives depends upon the achievement of individual performance goals, which are established annually.

Under the Bonus Program, Robert J. Shillman, the Company's Chief Executive Officer, has the opportunity to earn 0-300% of his target bonus amount based on the achievement of the specified performance goals; James F. Hoffmaster, the Company's President and Chief Operating Officer, has the opportunity to earn 0-250% of his target bonus amount based on the achievement of the specified performance goals; Eric A. Ceyrolle, the Company's Executive Vice President of Worldwide Sales and Marketing, MVSD, has the opportunity to earn 0-200% of his target bonus amount based on the achievement of the specified performance goals; and Richard A. Morin, the Company's Senior Vice President, Chief Financial Officer, and Treasurer, has the opportunity to earn 0-200% of his target bonus amount based on the achievement of the specified performance goals.

The annual bonuses for the Company's named executive officers are listed in the Summary Compensation Table set forth in the Company's proxy statement for its annual meeting of shareholders.

EXHIBIT 10T

COGNEX CORPORATION

SUMMARY OF DIRECTOR COMPENSATION

Cognex Corporation (the "Company") pays each Director (other than Robert J. Shillman and Patrick A. Alias) an annual fee for his services on the Company's Board of Directors and its committees, plus additional amounts for each meeting attended. Each Director receives annual cash compensation in the amount of $7,500, plus an additional $4,000 for each meeting attended. Each Director who serves on the Compensation/Stock Option Committee of the Company's Board of Directors receives an annual fee of $2,000. Each Director who serves on the Audit Committee of the Company's Board of Directors receives an annual fee of $3,500. The Chairman of the Audit Committee receives an additional annual fee of $2,500. Each Audit Committee member also receives $500 for each quarterly meeting attended to discuss the Company's financial results and $1,500 for any additional meetings attended.

All of the Directors (other than Dr. Shillman) also receive an annual option grant of 7,500 shares for 2007. These options have a ten-year term and vest in four equal annual installments.

Dr. Shillman, who is the Company's Chief Executive Officer, receives no additional compensation to serve on the Company's Board of Directors and Mr. Alias, who is an employee of the Company, receives no additional cash compensation to serve on the Company's Board of Directors.

Cognex Corporation: 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 the Company's use of the words "expects," "anticipates," "estimates," "believes," "projects," "intends," "plans," "will," "may," "shall," and similar words and other statements of a similar sense. These statements are based upon the Company's current estimates and expectations as to prospective events and circumstances, which may or may not be in the Company's control and as to which there can be no firm assurances given. These forward–looking statements involve known and unknown risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include: (1) global economic conditions that impact the capital spending trends of manufacturers in a variety of industries; (2) the cyclicality of the semiconductor and electronics industries; (3) the inability to achieve significant international revenue; (4) fluctuations in foreign exchange rates; (5) the loss of, or a significant curtailment of purchases by, any one or more principal customers; (6) the reliance upon certain sole–source suppliers to manufacture and deliver critical components for the Company's products; (7) the inability to attract and retain skilled employees; (8) the inability to design and manufacture high–quality products; (9) the technological obsolescence of current products and the inability to develop new products; (10) the failure to effectively manage product transitions or accurately forecast customer demand; (11) the failure to properly manage the distribution of products; (12) the inability to protect the Company's proprietary technology and intellectual property; (13) the Company's involvement in time–consuming and costly litigation; (14) the impact of competitive pressures; (15) the challenges in integrating acquired businesses; and (16) the inability to achieve expected results from acquisitions. The foregoing list should not be construed as exhaustive and the Company encourages readers to refer to the detailed discussion of risk factors included in Part I – Item 1A of the Company's 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 (the "Company") designs, develops, manufactures, and markets machine vision systems, or computers that can "see," which are used to automate a wide range of manufacturing processes where vision is required. The Company's Modular Vision Systems Division (MVSD) specializes in machine vision systems that are used to automate the manufacturing of discrete items, while the Company's 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. The Company's current customers can be classified into three primary markets: the semiconductor and electronics capital equipment market, the discrete factory automation market, and the surface inspection market.

- Semiconductor and electronics capital equipment manufacturers purchase Cognex machine vision systems and integrate them into the capital equipment that they manufacture and then sell to their customers in the semiconductor and electronics industries that either make computer chips or make printed circuit boards containing computer chips. Although the Company sells to original equipment manufacturers (OEMs) in a number of industries, these semiconductor and electronics OEMs have historically been large consumers of the Company's products. Demand from these capital equipment manufacturers is highly cyclical, with periods of investment followed by temporary downturns.

- Discrete manufacturers in the factory automation area include a wide array of manufacturers who use machine vision for applications in a variety of industries, including the automotive, consumer electronics, food and beverage, healthcare pharmaceutical, and aerospace industries. These customers purchase Cognex machine vision systems either directly from the Company or through a reseller and install them on their production lines.

- Surface inspection customers are manufacturers of materials processed in a continuous fashion, such as paper and metals. These customers need sophisticated machine vision to detect and classify defects in the surfaces of those materials as they are being processed at high speeds.

In May 2006, the Company acquired AssistWare Technology, Inc., a developer of Lane Departure Warning Systems, and entered the emerging market for machine vision systems in vehicles. These highly–specialized sensors are installed in vehicles, ranging from long–haul trucks to passenger cars, where they provide driver assistance by constantly analyzing the vehicle's external environment and warning the driver of potentially dangerous situations. AssistWare's Lane Departure Warning System uses machine vision technology to watch the road ahead and alert drivers if they unintentionally leave their lane or if their driving pattern becomes erratic. Although this acquisition was not significant to the Company's consolidated results of operations in 2006, the Company believes that entering this new commercial market for machine vision systems is an important strategic move to diversify into areas outside of the factory floor.

Revenue for the year ended December 31, 2006 totaled $238 million, representing a 10% increase over the prior year due to higher sales to customers in the semiconductor and electronics capital equipment and discrete factory automation markets. Despite the inclusion of $13.6 million of stock–based compensation expense in 2006, net income per share increased 15% to $0.85 in 2006 compared to $0.74 in 2005.

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

Year ended December 31,	**2006**	2005	2004
Revenue	**100%**	100%	100%
Cost of revenue	**27**	29	28
Gross margin	**73**	71	72
Research, development, and engineering expenses	**13**	13	14
Selling, general, and administrative expenses	**41**	38	35
Operating income	**19**	20	23
Nonoperating income	**2**	2	3
Income before taxes	**21**	22	26
Income tax provision	**4**	6	7
Net income	**17%**	16%	19%

STOCK-BASED COMPENSATION EXPENSE

In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 123R, "Share–Based Payment," which is a revision of SFAS No. 123, "Accounting for Stock–Based Compensation." SFAS No. 123R requires companies to recognize compensation expense for all share–based payments to employees at fair value.

SFAS No. 123R was adopted by the Company on January 1, 2006 using the modified prospective method in which compensation expense is recognized beginning on the effective date. Under this transition method, compensation expense recognized for the year ended December 31, 2006 includes: (1) compensation expense for all share–based payments granted prior to but not yet vested as of December 31, 2005, based on the grant–date fair value estimated under SFAS No. 123, and (2) compensation expense for all share–based payments granted subsequent to December 31, 2005, based on the grant–date fair value estimated under SFAS No. 123R. In accordance with the modified prospective method, the Company's results of operations and financial position have not been restated.

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 for footnote disclosure under SFAS No. 123. 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 the results to possible future events instead of a single path of actual historical events. Readers should refer to Note 13: Stock–Based Compensation Expense to the Consolidated Financial Statements for a detailed description of the valuation assumptions.

The total stock–based compensation expense and the related income tax benefit recognized for the year ended December 31, 2006 was $13,624,000 and $4,741,000, respectively. No compensation expense was capitalized at December 31, 2006. Prior to January 1, 2006, the Company recognized compensation expense using the intrinsic value based method described in APB Opinion No. 25, and accordingly, no compensation expense was recorded since stock options were granted with an exercise price equal to the market value of the Company's common stock at the grant date.

At December 31, 2006, total unrecognized compensation expense related to non–vested stock options was $11,616,000, which is expected to be recognized over a weighted–average period of 1.7 years.

RESULTS OF OPERATIONS

Year Ended December 31, 2006
Compared to Year Ended December 31, 2005

Revenue

Revenue for the year ended December 31, 2006 increased 10% to $238,424,000 from $216,875,000 for the year ended December 31, 2005. This increase was primarily due to higher sales to customers in the semiconductor and electronics capital equipment market, and to a lesser extent, the discrete factory automation market. Geographically, revenue increased in all of the Company's major regions, but most significantly in Japan where many of the Company's semiconductor and electronics capital equipment customers are located, and the rest of Asia, a region where many capital equipment manufacturers are also located and where the general manufacturing economy is experiencing growth.

Semiconductor and Electronics Capital Equipment Market

Sales to customers who make capital equipment for the semiconductor and electronics industries, which are included in the Company's MVSD segment, represented 32% of the Company's total revenue in 2006 and increased by $16,306,000, or 27%, from the prior year. Although the level of demand from these customers is higher than that experienced in 2005, revenue from this sector has been gradually declining since the first quarter of 2006 and the Company expects this trend to continue into 2007.

Discrete Factory Automation Market

Sales to manufacturing customers in the discrete factory automation area, which are included in the Company's MVSD segment, represented 55% of the Company's total revenue in 2006 and increased by $9,179,000, or 7%, from the prior year. The Company offers a full range of machine vision products to its factory automation customers at different capability/price points, from its programmable PC–based vision systems to its low–cost, easy–to–use vision sensors. Although sales of the Company's PC–based vision systems decreased from the prior year primarily in the electronics industry, vision sensor sales increased from 2005 across all product lines including In–Sight vision sensors, Checker expert sensors, and Dataman ID readers. In May 2005, the Company acquired DVT Corporation, and as a result, expanded its worldwide distribution network to sell its vision sensor products and added the DVT vision sensor to its product line, which complements the In–Sight vision sensor. Sales of acquired DVT products also contributed to the increase in factory automation revenue. In recent years, the Company has invested in new product offerings and distribution channels for the factory automation market and expects to continue to grow this business in 2007.

Commercial Markets

The Company's commercial products currently serve the building automation and security market for vision–based "people" sensing and counting, as well as the automotive and truck market for vehicle–based "driver–assist" vision sensors that enhance vehicle safety and driver convenience, which the Company entered in May 2006 with the acquisition of AssistWare Technology, Inc. Sales to commercial customers, which are included in the Company's MVSD segment, were not material in 2006 and the Company does not expect this new market to generate significant revenue in 2007.

Surface Inspection Market

Sales to surface inspection customers, which comprise the Company's SISD segment, represented 13% of the Company's total revenue and declined by $4,088,000, or 12%, from the prior year. This decrease is attributed to customers delaying projects due to a slowing manufacturing economy and to mergers mainly in the metals industry. Since the average order size for a SmartView surface inspection system is relatively large, the timing of customer projects, system deliveries, and installations can have a significant impact on the quarterly, and even annual, distribution of revenue.

Product Revenue

Product revenue for the year ended December 31, 2006 increased 11% to $214,938,000 from $192,804,000 for the year ended December 31, 2005. This increase was due to a higher volume of modular vision systems sold to semiconductor and electronics capital equipment manufacturers, as well as discrete factory automation customers. The average selling price of the Company's MVSD products decreased from 2005 due to the continued shift away from PC-based vision systems to vision sensors, which have a lower average selling price. The average selling price decline, however, was more than offset by the higher volume of units sold.

Service Revenue

Service revenue, which is derived from the sale of maintenance and support, training, consulting, and installation services, decreased 2% to $23,486,000 in 2006 from $24,071,000 in 2005 due principally to lower revenue generated by maintenance and support programs and training services resulting from improved product quality and ease of use. Service revenue decreased as a percentage of total revenue to 10% in 2006 from 11% in 2005.

Gross Margin

Gross margin as a percentage of revenue was 73% for 2006 compared to 71% for 2005. The increase in gross margin was primarily due to the impact of the higher sales volume, as well as a shift in revenue mix to modular vision systems, which have higher margins than the sale of surface inspection systems and services. Stock–based compensation expense included in cost of revenue was $1,596,000 in 2006, which had a relatively small impact on the total gross margin percentage. Benefits from the sale of previously-reserved inventory amounted to $1,079,000 in 2006, which also had a relatively small impact on the total gross margin percentage.

MVSD Margin

MVSD gross margin as a percentage of revenue was 77% for 2006 compared to 75% for 2005. The increase in MVSD margin was primarily due to the impact of the higher sales volume, as well as a shift in mix to product revenue, which has a higher margin than service revenue. The gross margin percentage is relatively consistent among MVSD product offerings.

SISD Margin

SISD gross margin as a percentage of revenue was 46% for 2006 compared to 48% for 2005. The decrease in SISD margin was due principally to the impact of the lower sales volume, as well as the inclusion of stock–based compensation expense in 2006.

Product Margin

Product gross margin as a percentage of revenue was 77% for 2006 compared to 75% for 2005. The increase in product margin was due principally to the impact of the higher sales volume, as well as a shift in mix to higher–margin modular vision systems.

Service Margin

Service gross margin as a percentage of revenue was 38% for 2006 compared to 36% for 2005. A reduction in service personnel due to the elimination of redundancies had a favorable impact on the service margin from the prior year. This was partially offset, however, by the inclusion of stock–based compensation expense in 2006.

Operating Expenses

Research, development, and engineering (R,D&E) expenses for the year ended December 31, 2006 increased 18% to $32,607,000 from $27,640,000 for the year ended December 31, 2005. MVSD R,D&E expenses increased $4,646,000, or 19%, from the prior year primarily due to $3,360,000 of stock–based compensation expense, additional engineering personnel resulting from the acquisitions of DVT Corporation in May 2005 and AssistWare Technology, Inc. in May 2006, and increased outside service and materials costs related to new product initiatives. SISD R,D&E expenses increased $321,000, or 11%, from the prior year due principally to $267,000 of stock–based compensation expense.

R,D&E expenses as a percentage of revenue were 13% in both 2006 and 2005. The Company believes that a continued commitment to R,D&E activities is essential in order to maintain product leadership with its existing products and to provide innovative new product offerings, and therefore, expects to continue to make significant R,D&E investments in the future. Although the Company targets its R,D&E spending to be between 10% and 15% of revenue, this percentage is impacted by revenue cyclicality. At any point in time, the Company has numerous research and development projects underway, and believes that none of these projects is material on an individual basis.

Selling, general, and administrative (S,G&A) expenses for the year ended December 31, 2006 increased 17% to $96,678,000 from $82,332,000 for the year ended December 31, 2005. MVSD S,G&A expenses increased $8,148,000, or 12%, from the prior year, while SISD S,G&A expenses increased $271,000, or 3%, from 2005. Corporate expenses that are not allocated to either division increased $5,927,000, or 83%, from the prior year.

The increase in MVSD S,G&A expenses was primarily due to $5,160,000 of stock–based compensation expense, as well as investments in sales and marketing in the discrete factory automation market, including the acquisition of DVT Corporation in May 2005. This acquisition resulted in additional sales and marketing expenses related to managing a worldwide distribution network, as well as additional amortization expense of $1,259,000 related to acquired intangible assets. The increase in SISD S,G&A expenses was due principally to $820,000 of stock–based compensation expense, partially offset by lower sales commissions.

The increase in corporate expenses was principally due to $2,421,000 of stock–based compensation expense, costs associated with the Company’s 25th Anniversary party held in January 2006, the reversal in 2005 of a $1,000,000 reserve established for possible indemnification of the Company’s customers from patent infringement claims by the Lemelson Partnership, and higher professional fees.

Nonoperating Income

Investment and other income for the year ended December 31, 2006 increased 25% to $6,437,000 from $5,130,000 for the year ended December 31, 2005. Although the average invested balance declined in 2006 due to net cash outlays related primarily to the Company’s stock repurchase program, investment and other income increased over the prior year because the Company earned higher yields on its portfolio of debt securities.

The foreign currency loss for the year ended December 31, 2006 was $333,000 compared to a loss of $888,000 for the year ended December 31, 2005. The loss in 2006 was primarily due to the revaluation of cash balances on the Company’s subsidiaries’ books that are denominated in a currency other than the subsidiaries’ functional currency, as well as the revaluation and settlement of accounts receivable balances that are reported in one currency and collected in another. The loss in 2005 was primarily due to the revaluation and settlement of short–term intercompany balances that are reported in one currency and collected or paid in another.

Income Taxes

The Company’s effective tax rate for 2006 was 21% compared to 26% for 2005. The effective tax rate for 2006 included the impact of the following discrete tax events: a reduction in tax expense of $1,220,000 due to the expiration of the statute of limitations for an open tax year, a reduction in tax expense of $869,000 from the settlement of a multi–year state tax audit, a reduction in tax expense of $405,000 for the final true–up of the 2005 tax accrual upon filing the actual return, and a reduction in tax expense of $200,000 for the favorable impact in the U.S. of the retroactive reinstatement of the Research & Development Tax credit. These reductions were partially offset by an increase in tax expense of $648,000 from the settlement of a long–standing tax audit in Japan. These one–time tax adjustments lowered the Company’s tax rate by four percentage points in 2006. The remaining one percentage point decrease in the effective tax rate from the prior year was due to more of the Company’s profits being earned in lower tax jurisdictions.

Year Ended December 31, 2005
Compared to Year Ended December 31, 2004

Revenue

Revenue for the year ended December 31, 2005 increased 7% to $216,875,000 from $201,957,000 for the year ended Decem-ber 31, 2004. Although sales to customers who make capital equipment for the semiconductor and electronics industries declined by $29,566,000, or 33%, from the prior year, this decrease was offset by increased sales to discrete manufacturing customers in the factory automation area (including approximately $19,000,000 of revenue from acquired DVT products) and higher sales to surface inspection customers. Demand from these capital equipment manufacturers is highly cyclical, with periods of investment followed by temporary downturns. During the first half of 2004, the Company experienced an increase in orders from these customers that has since been curtailed. However, sales to discrete factory automation customers increased

$38,221,000, or 45%, from 2004 and sales to surface inspection customers increased $6,263,000, or 22%, from the prior year. As a result, revenue from customers outside of the semiconductor and electronics capital equipment sector grew from the prior year and represented the majority of the company’s total revenue in 2005, increasing as a percentage of total revenue to 73% in 2005 from 58% in 2004. Geographically, revenue increased in all of the Company’s major regions except in Japan, where many of the Company’s semiconductor and electronics capital equipment customers are located.

Product revenue for the year ended December 31, 2005 increased 9% to $192,804,000 from $176,569,000 for the year ended December 31, 2004. The increase in product revenue was due to a higher volume of machine vision systems sold to discrete manufacturers in the factory automation area, as well as a higher volume of sales to surface inspection customers. Service revenue, which is derived from the sale of maintenance and support, education, consulting, and installation services, decreased 5% to $24,071,000 in 2005 from $25,388,000 in 2004 due principally to lower revenue generated by maintenance and support programs. In recent years, the Company has expanded its MVSD product offerings to include a wider range of easy–to–use products that require less maintenance and support, and this trend has resulted in a decline in service revenue. Service revenue decreased as a percentage of total revenue to 11% in 2005 from 13% in 2004.

MVSD revenue for the year ended December 31, 2005 increased 5% to $182,544,000 from $173,889,000 for the year ended December 31, 2004. The increase in MVSD revenue was due to a higher volume of modular vision systems sold to discrete manufacturing customers in the factory automation area. SISD revenue increased 22% to $34,331,000 in 2005 from $28,068,000 in 2004. The increase in SISD revenue was due principally to a higher volume of SmartView system deliveries and installations. SISD revenue increased as a percentage of total revenue to 16% in 2005 compared to 14% in 2004.

Gross Margin

Gross margin as a percentage of revenue was 71% for 2005 compared to 72% for 2004. The decrease in gross margin was primarily due to a higher percentage of total revenue from the sale of surface inspection systems, which have lower margins than the sale of modular vision systems, as well as a decline in MVSD service margins.

Product gross margin as a percentage of revenue was 75% for 2005 compared to 76% for 2004. The decrease in product margin was primarily due to a shift in product mix to lower–margin surface inspection systems. Service gross margin as a percentage of revenue was 36% for 2005 compared to 43% for 2004. The decrease in service margin was due principally to lower maintenance and support revenue that is sold bundled with MVSD products, without a corresponding decrease in expenses.

MVSD gross margin as a percentage of revenue was 75% for 2005 compared to 76% for 2004. The decrease in MVSD margin was primarily due to lower maintenance and support revenue. SISD gross margin as a percentage of revenue was 48% for 2005 compared to 45% for 2004. The increase in SISD margin was due principally to the higher sales volume with relatively flat overhead costs.

Operating Expenses

Research, development, and engineering (R,D&E) expenses for the year ended December 31, 2005 increased 2% to $27,640,000 from $27,063,000 for the year ended December 31, 2004. MVSD R,D&E expenses increased $498,000, or 2%, from the prior year primarily due to additional engineering personnel resulting from the acquisition of DVT Corporation on May 9, 2005, partially offset by lower company bonus accruals in 2005. SISD R,D&E expenses increased $79,000, or 3%, from the prior year due principally to increased compensation costs.

R,D&E expenses as a percentage of revenue were 13% in 2005 and 14% in 2004. The Company believes that a continued commitment to R,D&E activities is essential in order to maintain product leadership with our existing products and to provide innovative new product offerings, and therefore, we expect to continue to make significant R,D&E investments in the future. Although the Company targets its R,D&E spending to be between 10% and 15% of revenue, this percentage is impacted by revenue cyclicality. At any point in time, the Company has numerous research and development projects underway, and we believe that none of these projects is material on an individual basis.

Selling, general, and administrative (S,G&A) expenses for the year ended December 31, 2005 increased 16% to $82,332,000 from $70,674,000 for the year ended December 31, 2004. MVSD S,G&A expenses increased $12,570,000, or 23%, from the prior year, while SISD S,G&A expenses decreased $30,000 from 2004. Corporate expenses that are not allocated to a division decreased $882,000, or 11%, from the prior year.

The increase in MVSD expenses was primarily due to investments in sales and marketing intended to drive revenue growth in the discrete factory automation market, including the acquisition of DVT Corporation on May 9, 2005. This acquisition resulted in additional sales and marketing expenses related to managing a worldwide distribution network, as well as additional amortization expense of $2,517,000 related to the acquired intangible assets. In addition to the personnel added as a result of the DVT acquisition, the Company also made investments during 2005 in its direct factory automation sales force and in marketing activities, such as advertising, telemarketing, customer seminars, and trade shows.

The decrease in corporate expenses was principally due to the reversal of a $1,000,000 reserve established for possible indemnification of the Company's customers from patent infringement claims by the Lemelson Partnership, as well as lower company bonus accruals in 2005. These decreases were partially offset by higher professional fees in 2005.

Nonoperating Income
Investment and other income for the year ended December 31, 2005 increased 10% to $5,130,000 from $4,670,000 for the year ended December 31, 2004. Although the average invested balance declined in 2005 due to $111,607,000 in net cash outlays related to the acquisition of DVT Corporation on May 9, 2005, investment and other income increased over the prior year because the Company earned higher yields on its portfolio of debt securities.

The foreign currency loss for the year ended December 31, 2005 was $888,000 compared to a gain of $1,641,000 for the year ended December 31, 2004. The Company recognizes foreign currency gains and losses on the revaluation and settlement of accounts receivable and payable balances that are reported in one currency and collected or paid in another, as well as intercompany transactions between its subsidiaries. The gain in 2004 was primarily due to the revaluation and settlement of intercompany balances between the Company and its Irish subsidiary. During 2004, the Euro Dollar strengthened versus the U.S. Dollar, resulting in foreign currency gains on the Irish subsidiary's books when these intercompany balances were revalued and paid. During 2005, the U.S. Dollar gained strength versus the Euro Dollar in the months that large intercompany transactions occurred, resulting in foreign currency losses on the Irish subsidiary's books. These losses were not as significant as the gains experienced in the prior year because foreign exchange rates did not fluctuate as significantly in 2005.

Income Taxes
The Company's effective tax rate for 2005 was 26% compared to 29% for 2004. The decrease in the effective tax rate was primarily due to more of the Company's profits being earned and taxed in lower tax jurisdictions.

LIQUIDITY AND CAPITAL RESOURCES

The Company has historically been able to generate positive cash flow from operations, which has funded its operating activities and other cash requirements and has resulted in an accumulated cash, cash equivalent, and investment balance of $266,220,000 at December 31, 2006, representing 56% of shareholders' equity. 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, 2006 were met with its existing cash, cash equivalent, and investment balance, as well as positive cash flow from operations and the proceeds from the issuance of common stock under stock option plans. Cash requirements primarily consisted of operating activities, capital expenditures, the repurchase of common stock, the payment of dividends, and the purchase of AssistWare Technology, Inc. During 2006, cash flows from operations included $10,178,000 of net cash outflows related to investments in inventories. The Company increased inventory levels to better support distributors, to obtain an adequate supply of end-of-life components, and to support new product introductions while shifting a portion of its manufacturing operations from Massachusetts to Ireland. Capital expenditures in 2006 totaled $4,224,000 and consisted primarily of expenditures for computer hardware and software, as well as various building improvements to the Company's corporate headquarters. The Company believes that its existing cash, cash equivalent, and investment balance, together with continued positive cash flow from operations, will be sufficient to meet its operating, investing, and financing activities in 2007 and the foreseeable future.

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**
2007	$ 1,525	$ 12,731	$ 4,780	**$19,036**
2008	—	—	2,812	**2,812**
2009	—	—	1,459	**1,459**
2010	—	—	886	**886**
2011	—	—	555	**555**
Thereafter	—	—	1,850	**1,850**
	$ 1,525	**$ 12,731**	**$12,342**	**$26,598**

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 is a Managing 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. In January 2007, Venrock reduced the Company's total commitment from $22,500,000 to $20,500,000. The Company does not have the right to withdraw from the partnership prior to December 31, 2010. As of December 31, 2006, the Company had contributed $18,463,000 to the partnership, including $1,013,000 during 2006. In addition, the Company contributed $512,000 in January 2007. The remaining commitment of $1,525,000 can be called by Venrock in any period through 2010.

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

Stock Repurchase Program

On December 12, 2000, the Company's Board of Directors authorized the repurchase of up to $100,000,000 of the Company's common stock. During the first half of 2006, the Company repurchased 2,260,941 shares at a cost of $61,883,000, which completed the Company's repurchases under this program. On July 27, 2006, the Company's Board of Directors authorized a new program for the repurchase of up to $100,000,000 of the Company's common stock. During the second half of 2006, the Company repurchased 1,019,579 shares at a cost of $24,413,000 under this program. The Company may repurchase additional shares under this program in future periods depending upon a variety of factors, including stock price levels and share availability.

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 the first quarter of 2007. Dividend payments amounted to $15,058,000 during 2006 and $3,778,000 in the first quarter of 2007. The payment in the first quarter of 2007 represented a dividend of $0.085 per share. 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.

Acquisitions

On May 20, 2006, the Company acquired AssistWare Technology, Inc. for $2,998,000 in cash paid at closing, with the potential for an additional cash payment of up to $1,500,000 in 2007 and up to $500,000 in 2008 depending upon the achievement of certain performance criteria. 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, 2006, the Company had no off–balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's discussion and analysis of its financial condition and results of operations are based upon its 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. Management bases its 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. The Company believes the following critical accounting policies require the use of significant estimates and judgments in the preparation of its consolidated financial statements.

Revenue Recognition

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 in order to recognize revenue. 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.

While the Company applies the guidance of Statement of Position (SOP) No. 97–2, "Software Revenue Recognition," as amended by SOP No. 98–9, "Modification of SOP 97–2, Software Revenue Recognition, With Respect to Certain Transactions," 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, assessing the probability of collecting the receivable, assessing whether the fee is fixed or determinable, assessing whether customer–specified acceptance criteria are substantive in nature, and assessing whether VSOE of fair value has been established for undelivered elements.

Investments

At December 31, 2006, the Company's investment balance totaled $178,859,000, of which $167,913,000 consisted of municipal bonds and other debt securities. Debt securities are reported at fair value, with unrealized gains and losses, net of tax, recorded in shareholders' equity as other comprehensive income (loss). At December 31, 2006, the Company's portfolio of debt securities had gross unrealized losses totaling $264,000.

The remaining investment balance of $10,946,000 represented a limited partnership interest in Venrock Associates III, L.P., a venture capital fund. A Director of the Company is a Managing General Partner of Venrock Associates. 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. At December 31, 2006, the carrying value of this investment was $10,946,000 compared to an estimated fair value of $13,115,000.

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. The Company understands that the General Partner adjusts the investment valuations at least quarterly to reflect both realized and unrealized gains and losses on partnership investments. Securities of public companies are valued at market, subject to appropriate discounts to reflect limitations on liquidity. Securities of private companies are valued at an estimated fair value, which initially is at cost, adjusted for subsequent transactions that indicate a higher or lower value is warranted. The value of private securities may be discounted when, in the General Partner’s judgment, the carrying value of such securities has been impaired by specific events.

The Company monitors the carrying value of its investments compared to their fair value to determine whether an other–than–temporary impairment has occurred. In considering whether a decline in fair value is other than temporary, the Company considers 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 2006, 2005, or 2004.

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 receivables have been outstanding, the risks associated with selling to smaller customers, and the economic conditions of the primary regions and industries sold to, as well as general economic conditions. An adverse change in any of these factors may result in the need for additional bad debt provisions.

Inventories

Inventories are stated at the lower of cost or market. The Company 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. 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, the Company 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. The failure to effectively manage product transitions or accurately forecast customer demand, in terms of both volume and configuration, and adjust material requirement plans in a timely manner may lead to additional excess and obsolete inventory charges in the future.

Long–Lived Assets

The Company has long–lived assets including property, plant, and equipment, as well as acquired goodwill and other 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. In addition, the fair value of goodwill is susceptible to changes in the fair value of the reporting units in which the goodwill resides, which are also reportable segments. The Company evaluates the potential impairment of its long–lived assets annually, as required, or whenever events or circumstances indicate their carrying value may not be recoverable. If events or circumstances occur which would require a significant reduction in the estimated useful lives of these assets or a significant decrease in fair value below their carrying value, an adjustment to the lives or carrying values would result in a charge to income in the period of determination.

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 the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its 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.

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. The Company relies primarily on assessments made by its internal and external legal counsel to make its 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 the Company 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.

Stock-Based Compensation Expense

The Company adopted Statement of Financial Accounting Standard No. 123R, "Share-Based Payment" on January 1, 2006, which requires compensation expense to be 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, and forfeiture rates. The expected volatility assumption is based partially on the historical volatility of the Company's common stock, which may or may not be a good 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

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.

At December 31, 2006, the Company had net deferred tax assets of $17,638,000, 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, management has 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, it may be required to record material adjustments to these deferred tax assets, resulting in a charge to income in the period of determination.

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 to provide for additional income taxes that may be due in future years as these previously filed tax returns are audited. These reserves have been established based upon management's assessment as to the potential exposure attributable to permanent differences and interest applicable to both permanent and temporary differences. All tax reserves 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 tax expense.

Derivative Instruments

In certain instances, the Company enters into forward contracts and currency swaps to hedge against foreign currency fluctuations. These contracts are used to reduce the Company's risk associated with foreign currency exchange rate changes, 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.

The Company recorded net foreign currency losses of $333,000 in 2006, $888,000 in 2005, and net foreign currency gains of $1,641,000 in 2004. The Company is exposed to foreign currency gains and losses as a significant portion of its revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of the Company or its subsidiaries. In addition, foreign exchange rates have fluctuated significantly in the past.

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.

NEW PRONOUNCEMENTS

FIN No. 48, "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109"

In June 2006, the Financial Accounting Standards Board (FASB) issued Interpretation No. 48 "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109" (FIN 48). FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. This Interpretation also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 will require disclosure at the end of the annual reporting period of the nature of uncertain tax positions and related events if it is reasonably possible that those positions and events could change the associated recognized tax benefit within the next twelve months. This Interpretation is effective for fiscal years beginning after December 15, 2006. The Company will adopt FIN 48 effective January 1, 2007. The cumulative effect of applying the provisions of FIN 48 will be recorded as an adjustment to opening retained earnings in the first quarter of 2007. While our assessment of the impact is not yet complete, the Company expects that the adoption of FIN 48 will result in a reduction in retained earnings of approximately $2,000,000 to $4,000,000.

FASB Statement No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities"

In February 2007, the FASB issued Statement No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities," which provides companies with an option to report selected financial assets and liabilities at fair value. This Statement is effective for the Company's fiscal year ended December 31, 2008, although earlier adoption is permitted. The Company does not expect this Statement to have a material impact on its financial condition or results of operations.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

The Company faces exposure to adverse movements in foreign currency exchange rates as a significant portion of its revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of the Company or its subsidiaries. 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.

In certain instances, the Company enters into forward contracts and currency swaps to hedge against foreign currency fluctuations. Currency swaps are used to hedge long–term transactions between the Company and its subsidiaries. Forward contracts are used to provide a hedge against transactions denominated in currencies other than the functional currencies of the Company or its subsidiaries. These forward contracts and currency swaps are used to reduce the Company's risk associated with foreign currency exchange rate changes, 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.

The success of the Company's 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, the Company could experience unanticipated foreign currency gains or losses that could have a material impact on the Company's results of operations. In addition, the failure to identify new exposures and hedge them in a timely manner may result in material foreign currency gains or losses.

The Company enters into currency swaps to hedge the foreign currency exposure of its long–term intercompany loans between the parent and certain of its European subsidiaries. A currency swap to exchange a total of 30,000,000 Euro Dollars for U.S. Dollars at a settlement price of 1.02 USD/Euro, with an original term of four years, was outstanding at December 31, 2006. This instrument at fair value had a loss of $9,748,000 at December 31, 2006, which was materially offset by gains on the Company's intercompany loans. In addition, the Company enters into forward contracts to hedge the foreign currency exposure of its Irish subsidiary's accounts receivable denominated in U.S. dollars and Japanese Yen. Forward contracts to exchange 1,199,750,000 Japanese Yen for Euro Dollars at a weighted–average settlement price of 151.13 Yen/Euro and contracts to exchange 4,070,000 U.S. dollars for Euro Dollars at a weighted–average settlement price of 1.31 USD/Euro, both with terms between one and six months, were outstanding at December 31, 2006. These instruments at fair value had a gain of $449,000 at December 31, 2006.

Interest Rate Risk

The Company's investment portfolio includes municipal bonds and other debt securities. Debt securities with original maturities greater than three months are designated as available–for–sale and are reported at fair value. At December 31, 2006, the fair value of the Company's portfolio of debt securities amounted to $167,913,000, with principal amounts totaling $170,541,000, maturities that do not exceed three years, and a yield to maturity of 3.35%. 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 at December 31, 2006, 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	Valuation of securities given an interest rate increase	
	(100 BP)	(50 BP)		50 BP	100 BP
Municipal Bonds and Other Debt Securities	$168,047	$168,614	$ 169,181	$169,747	$170,314

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 is a Managing General Partner of Venrock Associates.

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. The Company understands that the General Partner adjusts the investment valuations at least quarterly to reflect both realized and unrealized gains and losses on partnership investments. Securities of public companies are valued at market, subject to appropriate discounts to reflect limitations on liquidity. Securities of private companies are valued at an estimated fair value, which initially is at cost, adjusted for subsequent transactions that indicate a higher or lower value is warranted. The value of private securities may be discounted when, in the General Partner's judgment, the carrying value of such private securities has been impaired by specific events.

At December 31, 2006, the carrying value of this investment was $10,946,000 compared to an estimated fair value, as determined by the General Partner, of $13,115,000. Should the fair value of this investment decline in future periods below its carrying value, the Company will determine whether this decline is other–than–temporary and future impairment charges may be required.

Cognex Corporation: Consolidated Statements of Operations
(In thousands, except per share amounts)

Year Ended December 31,	**2006**	2005	2004
Revenue			
Product	**$214,938**	$192,804	$176,569
Service	**23,486**	24,071	25,388
	238,424	216,875	201,957
Cost of revenue			
Product [1]	**50,318**	47,611	42,788
Service [1]	**14,625**	15,288	14,583
	64,943	62,899	57,371
Gross margin			
Product	**164,620**	145,193	133,781
Service	**8,861**	8,783	10,805
	173,481	153,976	144,586
Research, development, and engineering expenses [1]	**32,607**	27,640	27,063
Selling, general, and administrative expenses [1]	**96,678**	82,332	70,674
Operating income	**44,196**	44,004	46,849
Foreign currency gain (loss)	**(333)**	(888)	1,641
Investment and other income	**6,437**	5,130	4,670
Income before provision for income taxes	**50,300**	48,246	53,160
Income tax provision	**10,445**	12,544	15,416
Net income	**$ 39,855**	$ 35,702	$ 37,744
Net income per common and common–equivalent share:			
Basic	**$ 0.87**	$ 0.76	$ 0.83
Diluted	**$ 0.85**	$ 0.74	$ 0.80
Weighted–average common and common–equivalent shares outstanding:			
Basic	**45,559**	46,709	45,480
Diluted	**46,648**	47,935	47,358
Cash dividends per common share	**$ 0.33**	$ 0.32	$ 0.28
[1] Amounts include stock–based compensation expense, as follows:			
Product cost of revenue	**$ 725**	$ —	$ —
Service cost of revenue	**871**	—	—
Research, development, and engineering	**3,627**	—	—
Selling, general, and administrative	**8,401**	—	—
Total stock–based compensation expense	**$ 13,624**	$ —	$ —

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

Cognex Corporation: Consolidated Balance Sheets
(In thousands)

December 31,	**2006**	2005
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 87,361**	$ 72,856
Short–term investments	**128,319**	169,156
Accounts receivable, less reserves of $1,662 and $2,370 in 2006 and 2005, respectively	**40,055**	42,051
Inventories, net	**30,583**	18,819
Deferred income taxes	**8,636**	7,667
Prepaid expenses and other current assets	**18,127**	16,104
Total current assets	**313,081**	326,653
Long–term investments	**50,540**	70,246
Property, plant, and equipment, net	**26,028**	24,175
Deferred income taxes	**9,002**	10,227
Intangible assets, net	**44,988**	50,049
Goodwill	**83,318**	79,807
Other assets	**1,694**	3,405
	$528,651	$564,562
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	**$ 6,463**	$ 7,118
Accrued expenses	**40,612**	43,476
Customer deposits	**842**	2,142
Deferred revenue	**6,884**	5,305
Total current liabilities	**54,801**	58,041
Commitments (Notes 4, 9, 10, 11, and 18)		
Shareholders' equity:		
Common stock, $.002 par value –		
Authorized: 140,000 shares, issued: 44,403 and 47,171 shares in 2006 and 2005, respectively	**89**	94
Additional paid–in capital	**155,136**	216,031
Retained earnings	**329,251**	304,454
Accumulated other comprehensive loss	**(10,626)**	(14,058)
Total shareholders' equity	**473,850**	506,521
	$528,651	$564,562

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

Cognex Corporation: Consolidated Statements of Shareholders' Equity
(In thousands)

	Common Stock Shares	Common Stock Par Value	Additional Paid–in Capital
Balance at December 31, 2003	48,186	$ 96	$209,679
Issuance of common stock under stock option, stock purchase, and other plans	2,232	4	44,213
Tax benefit from exercise of stock options	—	—	11,722
Payment of dividends	—	—	—
Common stock received for payment of stock option exercises	—	—	—
Retirement of treasury stock	(4,263)	(8)	(72,754)
Comprehensive income:			
Net income	—	—	—
Losses on currency swaps, net of gains on long–term intercompany loans, net of tax of $1,016	—	—	—
Net unrealized loss on available–for–sale investments, net of tax of $696	—	—	—
Foreign currency translation adjustment	—	—	—
Comprehensive income			
Balance at December 31, 2004	46,155	$ 92	$192,860
Issuance of common stock under stock option, stock purchase, and other plans	1,400	2	27,213
Tax benefit from exercise of stock options	—	—	7,648
Repurchase of common stock	(384)	—	(11,690)
Payment of dividends	—	—	—
Comprehensive income:			
Net income	—	—	—
Gains on long–term intercompany loans, net of losses on currency swaps, net of tax of $82	—	—	—
Net unrealized loss on available–for– sale investments, net of tax of $31	—	—	—
Foreign currency translation adjustment	—	—	—
Comprehensive income			
Balance at December 31, 2005	47,171	$ 94	$216,031
Issuance of common stock under stock option, stock purchase, and other plans	513	2	10,357
Stock–based compensation expense	—	—	13,624
Excess tax benefit from stock option exercises	—	—	1,413
Repurchase of common stock	(3,281)	(7)	(86,289)
Payment of dividends	—	—	—
Comprehensive income:			
Net income	—	—	—
Gains on long–term intercompany loans, net of losses on currency swaps, net of tax of $139	—	—	—
Net unrealized gain on available–for–sale investments, net of tax of $330	—	—	—
Foreign currency translation adjustment	—	—	—
Comprehensive income			
Balance at December 31, 2006	**44,403**	**$ 89**	**$155,136**

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

Treasury Stock Shares	Treasury Stock Cost	Retained Earnings	Accumulated Other Comprehensive Loss	Comprehensive Income	Total Shareholders' Equity
4,253	$ (72,445)	$ 258,724)	$ (11,060)	—	$ 384,994
—	—	—	—	—	44,217
—	—	—	—	—	11,722
—	—	(12,756)	—	—	(12,756)
10	(317)	—	—	—	(317)
(4,263)	72,762	—	—	—	—
—	—	37,744	—	$ 37,744	37,744
—	—	—	(1,730)	(1,730)	(1,730)
—	—	—	(1,185)	(1,185)	(1,185)
—	—	—	118	118	118
				$ 34,947	
—	$ —	$ 283,712	$ (13,857)		$ 462,807
—	—	—	—	—	27,215
—	—	—	—	—	7,648
—	—	—	—	—	(11,690)
—	—	(14,960)	—	—	(14,960)
—	—	35,702	—	$ 35,702	35,702
—	—	—	139	139	139
—	—	—	(52)	(52)	(52)
—	—	—	(288)	(288)	(288)
				$ 35,501	
—	$ —	$ 304,454	$ (14,058)		$ 506,521
—	—	—	—	—	10,359
—	—	—	—	—	13,624
—	—	—	—	—	1,413
	—	—	—	—	(86,296)
—	—	(15,058)	—	—	(15,058)
—	—	39,855	—	$ 39,855	39,855
—	—	—	236	236	236
—	—	—	562	562	562
—	—	—	2,634	2,634	2,634
				$ 43,287	
—	**$ —**	**$ 329,251**	**$ (10,626)**		**$ 473,850**

Cognex Corporation: Consolidated Statements of Cash Flows
(In thousands)

Year Ended December 31,	**2006**	2005	2004
Cash flows from operating activities:			
Net income	**$ 39,855**	$ 35,702	$ 37,744
Adjustments to reconcile net income to net cash provided by operations:			
Stock—based compensation expense	**13,624**	—	—
Depreciation of property, plant, and equipment	**4,285**	4,387	4,548
Amortization of intangible assets	**5,884**	4,283	1,526
Amortization of investments	**1,498**	2,755	3,896
Excess tax benefit from stock option exercises	**(1,413)**	—	—
Tax benefit from stock option exercises	**—**	7,648	11,722
Deferred income tax expense (benefit)	**(45)**	(2,996)	(2,568)
Changes in operating assets and liabilities:			
Accounts receivable	**4,216**	(5,770)	(5,417)
Inventories	**(10,178)**	1,048	(3,642)
Accounts payable	**(1,340)**	735	(290)
Accrued expenses	**(6,911)**	(7,089)	15,785
Other	**(996)**	2,058	(128)
Net cash provided by operating activities	**48,479**	42,761	63,176
Cash flows from investing activities:			
Purchase of investments	**(481,086)**	(1,437,264)	(805,621)
Maturity and sale of investments	**541,023**	1,531,830	716,714
Purchase of property, plant, and equipment	**(4,224)**	(3,819)	(3,120)
Cash paid for business acquisitions, net of cash acquired	**(3,188)**	(111,842)	(123)
Net cash provided by (used in) investing activities	**52,525**	(21,095)	(92,150)
Cash flows from financing activities:			
Issuance of common stock under stock option, stock purchase, and other plans	**10,359**	27,215	43,900
Repurchase of common stock	**(86,296)**	(11,690)	—
Payment of dividends	**(15,058)**	(14,960)	(12,756)
Excess tax benefit from stock option exercises	**1,413**	—	—
Net cash provided by (used in) financing activities	**(89,582)**	565	31,144
Effect of exchange rate changes on cash	**3,083**	(3,645)	2,120
Net increase in cash and cash equivalents	**14,505**	18,586	4,290
Cash and cash equivalents at beginning of year	**72,856**	54,270	49,980
Cash and cash equivalents at end of year	**$ 87,361**	$ 72,856	$ 54,270

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

Cognex Corporation: Notes to 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.

Nature of Operations

Cognex Corporation (the "Company") designs, develops, manufactures, and markets machine vision systems, or computers that can "see." The Company's products are used to automate a wide range of 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 at the balance sheet date and the reported amounts of revenue and expenses during the year. Actual results could differ from those estimates.

Basis of Consolidation

The consolidated financial statements include the accounts of Cognex Corporation and its subsidiaries. In addition, the Company consolidated the results of a real estate limited partnership in accordance with Financial Accounting Standards Board Interpretation No. 46, "Variable Interest Entities" (See Note 6). 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).

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, as well as auction rate and variable rate demand securities for which interest rates reset in less than 90 days but for which the maturity date is greater than 90 days, are classified as short-term investments. Despite the long-term nature of their contractual maturities, the Company has the ability to quickly liquidate auction rate and variable rate demand securities. 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 contractual maturities that do not exceed three years.

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 2006, 2005, or 2004.

Accounts Receivable

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 receivables have been outstanding, as well as various other factors. Receivables are written off against these reserves in the period they are determined to be uncollectible.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using standard costs, which approximate the first in, first out (FIFO) method. The Company's inventory is subject to rapid technological change or obsolescence. The Company periodically 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 10 years, and the useful lives of computer hardware, computer software, and furniture and fixtures range from two to five years. Leasehold improvements are depreciated over the shorter of the estimated useful lives or the remaining terms of the leases. Maintenance and repairs are expensed when incurred; additions and improvements are capitalized. Upon retirement or disposition, the cost and related accumulated depreciation of the 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 using the straight-line method over the assets' estimated useful lives. The useful lives of distribution networks range from 11-12 years, of customer contracts and relationships from 8-12 years, and of completed technologies and other intangible assets from three to six 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.

Warranty Obligations

The Company warrants its hardware products to be free from defects in material and workmanship for periods 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.

Revenue Recognition

The Company recognizes revenue in accordance with Statement of Position (SOP) No. 97-2, "Software Revenue Recognition," as amended by SOP No. 98-9, "Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions," since the software is more than incidental to its product and the services in its arrangements do not involve significant production, modification, or customization of the software.

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 in order to recognize revenue. 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.

The Company's products are sold directly to end users, as well as to resellers including original equipment manufacturers (OEMs), system integrators, and distributors. 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 in accordance with Statement of Financial Accounting Standards No. 48, "Revenue Recognition When Right of Return Exists," 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.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, a deferred tax asset or liability is 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. Tax credits are recorded as a reduction in income taxes. 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.

Net Income Per Share

Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period plus potential dilutive common shares. Dilutive common equivalent shares consist of stock options and are calculated using the treasury stock method.

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 $8,643,000 and $11,277,000 at December 31, 2006 and 2005, respectively, net unrealized losses on available-for-sale investments, net of tax, of $166,000 and $728,000 at December 31, 2006 and 2005, respectively, and losses on currency swaps net of gains on long-term inter-company loans, net of tax, of $1,817,000 and $2,053,000 at December 31, 2006 and 2005, respectively.

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 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.

A significant portion of the Company's sales and receivables are from customers who are either in or who serve the semiconductor and electronics industries. 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 a third-party contractor. The Company is dependent upon this contractor 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

The Company has adopted the accounting and disclosure requirements of Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 133 requires that all derivative instruments be 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.

In certain instances, the Company enters into forward contracts and currency swaps to hedge against foreign currency fluctuations. Currency swaps are used to hedge long-term transactions between the Company and its subsidiaries. Forward contracts are used to provide a hedge against transactions denominated in currencies other than the functional currencies of the Company or its subsidiaries. These forward contracts and currency swaps are used to reduce the Company's risk associated with exchange rate changes, 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.

Stock-Based Compensation Plans

In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 123R, "Share-Based Payment," which is a revision of SFAS No. 123, "Accounting for Stock-Based Compensation." SFAS No. 123R requires companies to recognize compensation expense for all share-based payments to employees at fair value. Recognizing compensation expense using the intrinsic value based method described in Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees" and disclosing the pro-forma impact of using the fair value based method described in SFAS No. 123 is no longer an alternative.

SFAS No. 123R was adopted by the Company on January 1, 2006 using the modified prospective method in which compensation expense is recognized beginning on the effective date. Under this transition method, compensation expense recognized for the year ended December 31, 2006 includes: (1) compensation expense for all share-based payments granted prior to but not yet vested as of December 31, 2005, based on the grant-date fair value estimated under SFAS No. 123, and (2) compensation expense for all share-based payments granted subsequent to December 31, 2005, based on the grant-date fair value estimated under SFAS No. 123R. In accordance with the modified prospective method, the Company's results of operations and financial position have not been restated.

The following table details the effect on net income and net income per share had stock-based compensation expense been recorded against income for 2005 and 2004 using the fair value based method described in SFAS No. 123. The reported and pro-forma net income and net income per share for 2006 are the same since stock-based compensation expense was recorded under the provisions of SFAS No. 123R.

Year Ended December 31,	2005	2004
Net income, as reported	**$35,702**	$ 37,744
Less: Total share-based compensation costs determined under fair value based method, net of tax	**(9,355)**	(13,183)
Net income, pro forma	**$26,347**	$ 24,561
Basic net income per share, as reported	**$ 0.76**	$ 0.83
Basic net income per share, pro forma	**$ 0.56**	$ 0.54
Diluted net income per share, as reported	**$ 0.74**	$ 0.80
Diluted net income per share, pro forma	**$ 0.55**	$ 0.52[1]

(1) Amount was originally reported as $0.49 and has been adjusted to $0.52 due to a refinement in the calculation.

NOTE 2: NEW PRONOUNCEMENTS

FIN No. 48, "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109"

In June 2006, the Financial Accounting Standards Board (FASB) issued Interpretation No. 48 "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109" (FIN 48). FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. This Interpretation also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 will require disclosure at the end of the annual reporting period of the nature of uncertain tax positions and related events if it is reasonably possible that those positions and events could change the associated recognized tax benefit within the next twelve months. This Interpretation is effective for fiscal years beginning after December 15, 2006. The Company will adopt FIN 48 effective January 1, 2007. The cumulative effect of applying the provisions of FIN 48 will be recorded as an adjustment to opening retained earnings in the first quarter of 2007. While our assessment of the impact is not yet complete, the Company expects that the adoption of FIN 48 will result in a reduction in retained earnings of approximately $2,000,000 to $4,000,000.

FASB Statement no. 159, "The Fair Value Option for Financial Assets and Financial Liabilities"

In February 2007 , the FASB issued Statement No. 159,"The Fair Value Option for Financial Assets and Financial Liabilities" which provides companies with an option to report selected financial assets and liabilities at fair value. This Statement is effective for the Company's fiscal year ended December 31, 2008, although earlier adoption is permitted. The Company does not expect this Statement to have a material impact on its financial condition or results of operations.

NOTE 3: FOREIGN CURRENCY RISK MANAGEMENT

The Company enters into currency swaps to hedge the foreign currency exposure of its long-term intercompany loans between the parent and certain of its European subsidiaries. Contracts outstanding at December 31, 2006 relate to the Euro Dollar and have an original term of four years. These hedges have been designated for hedge accounting. They are classified as net investment hedges, with the gains or losses on the currency swaps, along with the associated losses or gains on the intercompany loans, net of tax, recorded in shareholders' equity as other comprehensive income (loss) to the extent they are effective as a hedge. The Company recorded net foreign currency gains of $236,000 and $139,000 in 2006 and 2005, respectively, and a net foreign currency loss of $1,730,000 in 2004 in other comprehensive income (loss) on the intercompany loans and associated currency swaps.

The Company enters into forward contracts to hedge the foreign currency exposure of its Irish subsidiary's accounts receivable denominated in U.S. Dollars and Japanese Yen. Contracts outstanding at December 31, 2006 relate to the Euro Dollar and Japanese Yen and have terms of one to six months. These hedges have not been designated for hedge accounting. The gains or losses on the forward contracts, along with the associated losses or gains on the revaluation and settlement of the short-term intercompany balances and accounts receivable, are recorded in current operations.

In addition to the transactions described above that are included in the Company's hedging program, the Company enters into other transactions denominated in foreign currencies for which the exchange rate gains or losses are included in current operations. The Company recorded net foreign currency losses of $333,000 and $888,000 in 2006 and 2005, respectively, and a net foreign currency gain of $1,641,000 in 2004, representing the total net exchange rate gains or losses that are recognized in current operations.

NOTE 4: CASH, CASH EQUIVALENTS, AND INVESTMENTS

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

December 31,	**2006**	2005
Cash	**$ 84,361**	$ 72,856
Cash equivalents	**3,000**	—
Cash and cash equivalents	**87,361**	72,856
Municipal bonds	**108,332**	140,718
Commercial paper	**15,988**	24,584
Agency notes	**3,999**	—
Corporate bonds	**—**	2,500
Treasury bills	**—**	1,354
Short-term investments	**128,319**	169,156
Municipal bonds	**39,594**	59,863
Limited partnership interest	**10,946**	10,383
Long-term investments	**50,540**	70,246
	$266,220	$312,258

The following is a summary of the Company's available-for-sale investments at December 31, 2006 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Municipal bonds	$108,467	$ 4	$ (139)	$108,332
Commercial paper	16,000	—	(12)	15,988
Agency notes	4,000	—	(1)	3,999
Short-term investments	128,467	4	(152)	128,319
Long-term municipal bonds	39,710	13	(129)	39,594
	$168,177	**$ 17**	**$ (281)**	**$167,913**

The Company recorded gross realized gains on the sale of debt securities totaling $22,000 in 2006, $14,000 in 2005, and $392,000 in 2004. The Company recorded gross realized losses on the sale of debt securities totaling $30,000 in 2006, $525,000 in 2005, and $90,000 in 2004.

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 is a Managing General Partner of Venrock Associates. The Company has committed to a total investment in the limited partnership of up to $22,500,000, with an expiration date of December 31, 2010. In January 2007, Venrock reduced the Company's total commitment from $22,500,000 to $20,500,000.

As of December 31, 2006, the Company had contributed $18,463,000 to the partnership, including $1,013,000 during 2006. The Company received distributions of $450,000 from Venrock during 2006 that were accounted for as a return of capital. At December 31, 2006, the carrying value of this investment was $10,946,000 compared to an estimated fair value, as determined by the General Partner, of $13,115,000.

NOTE 5: INVENTORIES

Inventories consist of the following (in thousands):

December 31,	**2006**	2005
Raw materials	**$ 16,746**	$ 8,958
Work-in-process	**1,630**	3,406
Finished goods	**12,207**	6,455
	$ 30,583	$ 18,819

In 2001, the Company recorded a $16,300,000 charge in "Cost of product revenue" on the Consolidated Statement of Operations for excess inventories and purchase commitments resulting from an extended slowdown in the semiconductor and electronics industries, as well as the expected transition to newer Cognex hardware platforms by the Company's OEM customers. A total of $12,500,000 of this charge represented reserves against existing inventories and was accordingly included in "Inventories" on the Consolidated Balance Sheet. The remaining $3,800,000 of this charge represented commitments to purchase excess components and systems from various suppliers and accordingly was included in "Accrued expenses" on the Consolidated Balance Sheet. A favorable settlement of these purchase commitments would result in a recovery of a portion of the remaining $1,400,000 accrued at December 31, 2006.

The following table summarizes the change during 2006, 2005, and 2004 in the inventory-related reserve established in 2001 (in thousands):

	Balance Sheet		Statement of Operations
	Inventories	Accrued Expenses	Benefits
Reserve balance at December 31, 2003	$ 9,383	$ 1,400	
Inventory sold to customers	(805)	—	805
Inventory sold to brokers	(387)	—	—
Write-off and scrap of inventory	(743)	—	—
Reserve balance at December 31, 2004	$ 7,448	$ 1,400	
Benefits to cost of product revenue recorded in 2004			$ 805
Inventory sold to customers	(759)	—	759
Inventory sold to brokers	(158)	—	—
Write-off and scrap of inventory	(647)	—	—
Reserve balance at December 31, 2005	$ 5,884	$ 1,400	
Benefits to cost of product revenue recorded in 2005			$ 759
Inventory sold to customers	**(1,079)**	**—**	**1,079**
Inventory sold to brokers	**(617)**	**—**	**—**
Write-off and scrap of inventory	**(180)**	**—**	**—**
Reserve balance at December 31, 2006	**$ 4,008**	**$ 1,400**	
Benefits to cost of product revenue recorded in 2006			**$ 1,079**

NOTE 6: PROPERTY, PLANT, AND EQUIPMENT

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

December 31,	2006	2005
Land	**$ 3,951**	$ 3,051
Buildings	**18,371**	17,571
Building improvements	**5,769**	5,206
Computer hardware and software	**31,911**	31,976
Furniture and fixtures	**4,710**	4,314
Leasehold improvements	**2,240**	2,105
	66,952	64,223
Less: accumulated depreciation	**(40,924)**	(40,048)
	$ 26,028	$ 24,175

Buildings include property held for lease with a cost basis of $4,950,000 at both December 31, 2006 and 2005 and accumulated depreciation of $1,460,000 and $1,333,000 at Decem ber 31, 2006 and 2005, respectively.

In January 2003, the Financial Accounting Standards Board issued Interpretation No. 46, “Variable Interest Entities” (FIN 46), that addresses when a company should include in its financial statements the assets, liabilities, and activities of another entity. Previously, a company generally included other entities in its consolidated financial statements only if it controlled the entity through voting interests. FIN 46 changed that guidance by requiring variable interest entities, as defined, to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity’s activities or is entitled to receive a majority of that entity’s residual returns (defined as the primary beneficiary).

In 2000, the Company entered into an agreement with a real estate limited partnership to purchase property adjacent to its corporate headquarters for $1,700,000 with an estimated closing date in 2007. The purchase price was accounted for as a deposit included in “Other assets” on the Consolidated Balance Sheet. Although the Company concluded at the transaction date that the limited partnership was a variable interest entity, the Company also concluded that it was not the primary beneficiary because the deposit was fully refundable.

During 2006, the Company became the primary beneficiary of this limited partnership when its right to terminate its obligations under the agreement lapsed and the deposit was no longer refundable. At December 31, 2006, the Company has included the assets, liabilities, and activities of the limited partnership in its consolidated financial statements. This had no impact on the Company’s results of operations since the Company has no ownership interest in the partnership’s results prior to the closing date in 2007. The Company reclassified $1,700,000 from “Other assets” to “Property, plant, and equipment,” specifically land and building, on the Consolidated Balance Sheet.

NOTE 7: INTANGIBLE ASSETS

Intangible assets consist of the following (in thousands):

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
December 31, 2006			
Distribution networks	**$ 38,060**	**$ 5,477**	**$ 32,583**
Customer contracts and relationships	**13,002**	**4,110**	**8,892**
Completed technologies	**6,834**	**4,086**	**2,748**
Other	**1,422**	**657**	**765**
	$ 59,318	**$ 14,330**	**$ 44,988**
December 31, 2005			
Distribution networks	$ 38,060	$ 2,191	$ 35,869
Customer contracts and relationships	12,186	2,520	9,666
Completed technologies	9,028	5,491	3,537
Other	1,264	287	977
	$ 60,538	$ 10,489	$ 50,049

The cost and related accumulated amortization of certain fully-amortized completed technologies totaling $2,369,000 were removed from the accounts during 2006. Aggregate amortization expense was $5,884,000 in 2006, $4,283,000 in 2005, and $1,526,000 in 2004. Estimated amortization expense for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

Year ended December 31,	Amount
2007	5,622
2008	5,622
2009	5,434
2010	5,304
2011	4,401
Thereafter	18,605
	$ 44,988

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 are as follows (in thousands):

	MVSD	SISD	Consolidated
Balance at December 31, 2004	$ 4,121	$ 2,912	$ 7,033
DVT business acquisition (Note 18)		—	73,478
Foreign currency exchange rate changes	(333)	(371)	(704)
Balance at December 31, 2005	$77,266	$ 2,541	$ 79,807
AssistWare business acquisition (Note 18)	**2,962**	—	**2,962**
Siemens contingent payment	**190**	**—**	**190**
DVT purchase price adjustment (Note 18)	**(298)**	**—**	**(298)**
Foreign currency exchange rate changes	**365**	**292**	**657**
Balance at December 31, 2006	**$80,485**	**$ 2,833**	**$ 83,318**

NOTE 9: ACCRUED EXPENSES Accrued expenses consist of the following (in thousands):

December 31,	**2006**	2005
Forward contracts and currency swaps	**$ 9,752**	9,026
Income taxes	**9,548**	$ 12,653
Vacation	**3,270**	3,094
Company bonuses	**3,236**	3,653
Salaries, commissions, and payroll taxes	**3,129**	3,693
Consumption taxes	**2,561**	2,624
Inventory purchase commitments (Note 5)	**1,400**	1,400
Warranty obligations	**1,387**	1,447
Professional fees	**854**	1,050
Other	**5,475**	4,836
	$ 40,612	$ 43,476

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

Balance at December 31, 2004	$ 1,758
Provisions for warranties issued during the period	696
Warranty obligations assumed in business acquisition (Note 17)	200
Fulfillment of warranty obligations	(1,055)
Foreign exchange rate changes	(152)
Balance at December 31, 2005	$ 1,447
Provisions for warranties issued during the period	**993**
Fulfillment of warranty obligations	**(1,153)**
Foreign exchange rate changes	**100**
Balance at December 31, 2006	**$ 1,387**

NOTE 10: COMMITMENTS AND CONTINGENCIES

Commitments

At December 31, 2006, the Company had outstanding purchase orders totaling $12,731,000 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 2007.

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. Annual rental expense totaled $5,562,000 in 2006, $5,062,000 in 2005, and $4,662,000 in 2004. Future minimum rental payments under these agreements are as follows (in thousands):

Year ended December 31,	Amount
2007	$ 4,780
2008	2,812
2009	1,459
2010	886
2011	555
Thereafter	1,850
	$ 12,342

The Company owns an 83,000 square-foot office building adjacent to its corporate headquarters. The building is currently occupied with tenants who have lease agreements that expire at various dates through 2017. Annual rental income totaled $313,000 in 2006, $763,000 in 2005, and $818,000 in 2004. Rental income and related expenses are included in “Investment and other income” on the Consolidated Statement of Operations. Future minimum rental receipts under non- cancelable lease agreements are as follows (in thousands):

Year ended December 31,	Amount
2007	$ 450
2008	495
2009	276
2010	259
2011	274
Thereafter	1,700
	$ 3,454

Contingencies

On March 13, 2006, the Company filed a Declaratory Judgment action in the United States District Court for Minnesota seeking that certain patents being asserted by Acacia Research Corporation and Veritec, Inc., and their respective subsidiaries, be ruled invalid, unenforceable, and/or not infringed by Cognex Corporation. The patent assertions relate to two-dimensional symbology reading; in particular, the defendants have alleged that any company reading a data matrix code infringe the subject patents. Certain defendants in the action have asserted counterclaims against Cognex Corporation, seeking unspecified damages. The litigation is in its early stages and discovery will begin shortly. Cognex Corporation cannot predict the outcome of this matter, and although the Company believes it has a meritorious case, an adverse resolution of this lawsuit could have a material adverse effect on the Company’s financial position, liquidity, results of operations, and/or indemnification obligations.

Various other claims and legal proceedings generally incidental to the normal course of business are pending or threatened on behalf of or against Cognex Corporation. While the Company cannot predict the outcome of these matters, in the opinion of management, any liability arising from them will not have a material adverse effect on the Company’s financial position, liquidity, or results of operations after giving effect to provisions already recorded.

NOTE 11: INDEMNIFICATION PROVISIONS

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

The Company accepts standard limited indemnification provisions in the ordinary course of business, 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 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.

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 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: SHAREHOLDERS' EQUITY

Preferred Stock

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

Stock repurchase Program

On December 12, 2000, the Company's Board of Directors authorized the repurchase of up to $100,000,000 of the Company's common stock. The Company repurchased 2,260,941 shares at a cost of $61,883,000 in 2006, 383,908 shares at a cost of $11,690,000 in 2005, and 1,768,452 shares at a cost of $26,425,000 in 2002 under this program. During the third quarter of 2006, this repurchase program was completed. On July 27, 2006, the Company's Board of Directors authorized a new program for the repurchase of up to $100,000,000 of the Company's common stock. The Company repurchased 1,019,579 shares at a cost of $24,413,000 in 2006 under this program. The Company may repurchase additional shares under this program in future periods depending upon a variety of factors, including stock price levels and share availability.

Stock option Plans

At December 31, 2006, the Company had 10,883,676 shares available for grant under three stock option plans: the 1998 Director Plan, 10,250; the 1998 Stock Incentive Plan, 3,373,426; and the 2001 General Stock Option Plan, 7,500,000. Each of these plans expire ten years from the date the plan was approved. The Company has not granted any stock options from the 2001 General Stock Option Plan.

On April 21, 1998, the shareholders approved the 1998 Stock Incentive Plan, under which the Company initially was able to grant stock options and stock awards to purchase up to 1,700,000 shares of common stock. Effective January 1, 1999 and each January 1st thereafter during the term of the 1998 Stock Incentive Plan, the number of shares of common stock available for grants of stock options and stock awards is increased automatically by an amount equal to 4.5% of the total number of issued shares of common stock as of the close of business on December 31st of the preceding year.

Stock options are generally granted with an exercise price equal to the market value of the Company's common stock at the grant date, generally vest over four years based on continuous service, and generally expire ten years from the grant date. Historically, the majority of the Company's stock options have been granted during the first quarter of each year to reward existing employees for their performance. In addition, the Company grants stock options throughout the year for new employees and promotions.

The following is a summary of the Company's stock option activity for the year ended December 31, 2006 (shares and dollars in thousands):

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2005	10,675	$ 25.36		
Granted at market value	1,730	28.55		
Exercised	(504)	20.01		
Forfeited or Expired	(577)	28.93		
Outstanding at December 31, 2006	**11,324**	**$ 25.90**	**6.5**	**$ 17,212**
Exercisable at December 31, 2006	**6,913**	**$ 25.35**	**5.3**	**$ 15,725**

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.

The maximum number of shares of common stock available for issuance under the ESPP is 250,000 shares. Effective January 1, 2001 and each January 1st thereafter during the term of the ESPP, 250,000 shares of common stock will always be available for issuance. Shares purchased under the ESPP totaled 9,765 in 2006, 21,721 in 2005, and 21,031 in 2004.

NOTE 13: STOCK-BASED COMPENSATION EXPENSE

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 for footnote disclosure under SFAS No. 123. 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 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 fair values of stock options granted in each period presented were estimated using the following weighted-average assumptions:

Year Ended December 31,	**2006**	2005	2004
Risk-free rate	**4.6%**	3.4%	2.5%
Expected dividend yield	**1.12%**	1.26%	.73%
Expected volatility	**45%**	35%	45%
Expected term (in years)	**4.1**	2.8	3.1

Risk-Free Rate

The risk-free rate was based on a treasury instrument whose term was consistent with the contractual term of the option for 2006 grants, and the expected term of the option for 2005 and 2004 grants.

Expected Dividend Yield

The current dividend yield is 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. Although dividends are declared at the discretion of the Company's Board of Directors, for this purpose, the Company anticipates continuing to pay a quarterly dividend that approximates the current dividend yield.

Expected Volatility

The expected volatility for 2006 grants was based on 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. The expected volatility for 2005 and 2004 grants was based on the historical volatility of the Company's common stock over the expected term of the option.

Expected Term

The expected term for 2006 grants was derived from the binomial lattice model from the impact of events that trigger exercises over time. The expected term for 2005 and 2004 grants, which is an input to the Black-Scholes model, was based on historical option exercise behavior.

The weighted-average grant-date fair value of stock options granted during 2006, 2005, and 2004 was $10.96, $6.01, and $9.22, respectively. 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 on 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 currently expects that approximately 62% of its stock options will actually vest, and therefore, has applied a weighted-average annual forfeiture rate of 11% to all unvested options. This rate will be revised, if necessary, in subsequent periods if actual forfeitures differ from this estimate. Ultimately, compensation expense will only be recognized over the vesting period for those options that actually vest. Prior to January 1, 2006, the Company accounted for actual forfeitures as they occur for footnote disclosure under SFAS No. 123.

The total stock-based compensation expense and the related income tax benefit recognized for 2006 was $13,624,000 and $4,741,000, respectively. No compensation expense was capitalized at December 31, 2006. Prior to January 1, 2006, the Company recognized compensation expense using the intrinsic value based method described in APB Opinion No. 25, and accordingly, no compensation expense was recorded since stock options were granted with an exercise price equal to the market value of the Company's common stock at the grant date. The total intrinsic value of stock options exercised for 2006, 2005, and 2004 was $4,003,000, $15,970,000, and $29,306,000, respectively.

At December 31, 2006, total unrecognized compensation expense related to non-vested stock options was $11,616,000, which is expected to be recognized over a weighted-average period of 1.7 years.

NOTE 14: EMPLOYEE SAVINGS PLAN

Under the Company's Employee Savings Plan, a defined contribution plan, employees who have attained age 21 may contribute up to 25% of their salary on a pre-tax basis subject to the annual dollar limitations established by the Internal Revenue Service. The Company contributes fifty cents for each dollar an employee contributes, with a maximum contribution of 3% of an employee's pre-tax salary. Company contributions vest 20%, 40%, 60%, and 100% after two, three, four, and five years of continuous employment with the Company, respectively. Company contributions totaled $1,106,000 in 2006, $1,060,000 in 2005, and $967,000 in 2004. Cognex stock is not an investment alternative, nor are Company contributions made in the form of Cognex stock.

NOTE 15: INCOME TAXES

Domestic income before taxes was $16,772,000, $19,206,000, and $22,507,000 and foreign income before taxes was $33,528,000, $29,040,000, and $30,653,000 in 2006, 2005, and 2004, respectively.

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

Year Ended December 31,	**2006**	2005	2004
Current			
Federal	**$ 9,718**	$ 3,502	$ 9,662
State	**240**	507	758
Foreign	**5,674**	3,279	983
	15,632	7,288	11,403
Deferred:			
Federal	**(4,847)**	3,501	(177)
State	**(101)**	438	306
Foreign	**(239)**	1,317	3,884
	(5,187)	5,256	4,013
	$ 10,445	$ 12,544	$ 15,416

A reconciliation of the United States federal statutory corporate tax rate to the Company's effective tax rate is as follows (in thousands):

Year Ended December 31,	**2006**	2005	2004
Income tax provision at federal statutory rate	**35%**	35%	35%
State income taxes, net of federal benefit	**3**	1	2
Tax-exempt investment income	**(4)**	(3)	(3)
Foreign tax rate differential	**(11)**	(9)	(6)
Discrete tax events	**(4)**	—	—
Other	**2**	2	1
Provision for income taxes	**21%**	26%	29%

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

December 31,	2006	2005
Current deferred tax assets:		
Inventory and revenue related	$ 4,881	$ 4,805
Federal capital loss carryforward	1,237	—
Bonus, commission, and other compensation	1,144	943
Other	1,854	1,919
Gross current deferred tax assets	9,116	7,667
Valuation allowance	(480)	—
Net current deferred tax assets	$ 8,636	$ 7,667
Noncurrent deferred tax assets:		
Federal and state tax credit carryforwards	$ 11,611	$ 11,434
Stock-based compensation expense	4,741	—
Acquired completed technologies and other intangible assets	3,364	3,664
Depreciation	1,478	1,478
Unrealized investment gains and losses	1,428	1,390
Acquired in-process technology	800	924
Net operating loss carryforwards	—	5,600
Federal and state capital loss carryforwards	—	1,708
Other	771	762
	24,193	26,960
Noncurrent deferred tax liabilities:		
Nondeductible intangible assets	(14,990)	(16,703)
Other	(201)	(30)
	(15,191)	(16,733)
Net noncurrent deferred tax assets	$ 9,002	$ 10,227

At December 31, 2006, the Company had federal research and experimentation tax credit carryforwards of approximately $5,390,000, which may be available to offset future federal income tax liabilities and will begin to expire in 2015. The Company also had approximately $2,467,000 of alternative minimum tax credits and approximately $454,000 of foreign tax credits, which may be available to offset future regular income tax liabilities. The alternative minimum tax credits have an unlimited life and the foreign tax credits will begin to expire in 2011. In addition, the Company had approximately $3,300,000 of state research and experimentation tax credit carryforwards, which will begin to expire in 2015.

The Company recorded certain intangible assets as a result of the acquisition of DVT Corporation in May 2005. The amortization of these intangible assets is not deductible for U.S. tax purposes. A deferred tax liability was established to reflect the federal and state liability associated with not deducting the acquisition-related amortization expenses. The balance of this liability at December 31, 2006 was $14,990,000.

The Company established a valuation allowance of $480,000 against its deferred tax assets at December 31, 2006. This partial valuation allowance related to a deferred tax asset for a capital loss carryforward due to expire in 2007. No valuation allowances were recorded in 2005 or 2004.

While the remaining deferred tax assets are not assured of realization, the Company 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, the Company has evaluated certain 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. Should the Company fail to generate sufficient pre-tax profits in future periods, the Company 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 has established reserves to provide for additional income taxes that may be due in future years as previously filed income tax returns are audited. These reserves have been established based upon management's assessment as to the potential exposure attributable to permanent differences and interest applicable to both permanent and temporary differences. All tax reserves 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 tax expense.

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 U.S. 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.

On March 20, 2006, the Company provided standby letters of credit totaling 3,359,825,000 Yen (or approximately $28,231,000 based upon the exchange rate at December 31, 2006) to taxing authorities in Japan that were collateralized by investments on the Consolidated Balance Sheet. The Tokyo Regional Taxation Bureau (TRTB) asserted that Cognex Corporation had a permanent establishment in Japan that would require certain income, previously reported on U.S. tax returns for the years ended December 31, 1997 through December 31, 2001, to be subject instead to taxation in Japan. In September 2003, the Company filed a request with the Internal Revenue Service Tax Treaty Division for competent authority assistance.

During the third quarter of 2006, the Company reached an agreement with the TRTB through the competent authority proceedings. The agreement resulted in an adjustment of the intercompany transfer price between the U.S. parent and its Japanese subsidiary. The resulting additional tax to be paid to the TRTB, net of expected refunds due from the U.S. tax authorities, resulted in an increase in tax expense of $648,000. The standby letters of credit, as a result of this agreement with the TRTB, are no longer required as of December 31, 2006.

During the second quarter of 2006, the Company settled a multi-year state tax audit and, as a result of that settlement, recorded a reduction in tax expense of $869,000. During the third quarter of 2006, the Company recorded a $1,220,000 reduction in tax expense resulting from the expiration of the statute of limitations for an open tax year, and a $405,000 reduction in tax expense resulting from the true-up of the tax accrual recorded in 2005 as compared to actual return filed. The Tax Relief and Health Care Act of 2006 was signed into law on December 20, 2006. This Act retroactively reinstated the Research and Development Tax credit for 2006 and extended this credit to 2007. As a result of this reinstatement, the Company recorded a reduction in tax expense of $200,000 during the fourth quarter of 2006.

NOTE 16: NET INCOME PER SHARE

Net income per share is calculated as follows (in thousands, except per share amounts):

Year Ended December 31,	**2006**	2005	2004
Net income	**$ 39,855**	$ 35,702	$ 37,744
Basic:			
Weighted-average common shares outstanding	**45,559**	46,709	45,480
Net income per common share	**$ 0.87**	$ 0.76	$ 0.83
Diluted:			
Weighted-average common shares outstanding	**45,559**	46,709	45,480
Effect of dilutive stock options	**1,089**	1,226	1,878
Weighted-average common and common-equivalent shares outstanding	**46,648**	47,935	47,358
Net income per common and common-equivalent share	**$ 0.85**	$ 0.74	$ 0.80

Stock options to purchase 5,761,820, 3,903,178, and 1,656,927 shares of common stock were outstanding in 2006, 2005, and 2004, respectively, but were not included in the calculation of diluted net income per share because they were anti-dilutive.

NOTE 17: SEGMENT AND GEOGRAPHIC INFORMATION

The Company has two reportable segments: the Modular Vision Systems Division (MVSD) and the Surface Inspections Systems Division (SISD). MVSD designs, 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 designs, develops, manufactures, and markets surface inspection vision systems that are used to inspect surfaces of materials that are processed in a continuous fashion to ensure there are no flaws or defects in 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 unusual items and stock-based compensation expense.

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

	MVSD	SISD	Reconciling Items	Consolidated
Year Ended December 31, 2006				
Product revenue	**$195,203**	**$19,735**	**—**	**$ 214,938**
Service revenue	**12,978**	**10,508**	**—**	**23,486**
Depreciation and amortization	**9,684**	**260**	**$ 225**	**10,169**
Goodwill and intangibles	**125,473**	**2,833**	**—**	**128,306**
Operating income	**65,123**	**3,380**	**(24,307)**	**44,196**
Year Ended December 31, 2005				
Product revenue	$168,342	$24,462	—	$ 192,804
Service revenue	14,202	9,869	—	24,071
Depreciation and amortization	8,168	286	$ 216	8,670
Goodwill and intangibles	127,315	2,541	—	129,856
Operating income	46,225	4,956	(7,177)	44,004
Year Ended December 31, 2004				
Product revenue	$155,966	$20,603	—	$ 176,569
Service revenue	17,923	7,465	—	25,388
Depreciation and amortization	5,526	341	$ 207	6,074
Goodwill and intangibles	11,627	2,912	—	14,539
Operating income	53,572	1,336	(8,059)	46,849

Reconciling items consist of stock-based compensation expense and unallocated corporate expenses, which primarily include corporate headquarters costs and professional fees. In 2006, corporate expenses also included costs associated with the Company’s 25th Anniversary party. Other asset information by segment is not produced internally for use by the chief operating decision maker, and therefore, is not presented.

Other asset information is not provided because the 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 2006, 2005, or 2004.

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

	North America	Japan	Europe	Other	Consolidated
Year Ended December 31, 2006					
Product revenue	**$ 73,198**	**$61,494**	**$60,162**	**$20,084**	**$ 214,938**
Service revenue	**10,348**	**5,430**	**6,502**	**1,206**	**23,486**
Long-lived assets	**139,377**	**1,820**	**14,723**	**108**	**156,028**
Year Ended December 31, 2005					
Product revenue	$ 70,921	$53,761	$56,150	$11,972	$ 192,804
Service revenue	9,531	6,513	7,299	728	24,071
Long-lived assets	144,432	1,895	10,999	110	157,436
Year Ended December 31, 2004					
Product revenue	$ 52,979	$69,270	$43,983	$10,337	$ 176,569
Service revenue	9,703	8,301	6,596	788	25,388
Long-lived assets	26,221	2,396	13,700	117	42,434

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

NOTE 18: ACQUISITIONS

Acquisition of AssistWare Technology, Inc.

On May 20, 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 the potential for an additional cash payment of up to $1,500,000 in 2007 and up to $500,000 in 2008 depending upon the achievement of certain performance criteria. The $2,998,000 initial purchase price consisted of $2,848,000 in cash consideration and $150,000 in transaction costs. The acquisition was accounted for under the purchase method of accounting. Accordingly, AssistWare's results of operations have been included in the Company's consolidated results of operations since the date of acquisition. The historical results of operations of the acquired business were not material compared to the consolidated results of operations of the Company, and therefore, pro forma results are not presented.

With the acquisition of AssistWare, the Company has entered the emerging market for machine vision systems in vehicles. These highly-specialized sensors are installed in vehicles, ranging from long-haul trucks to passenger cars, where they provide driver assistance by constantly analyzing the vehicle's external environment and warning the driver of potentially dangerous situations. AssistWare's Lane Departure Warning System uses machine vision technology to watch the road ahead and alert drivers if they unintentionally leave their lane or if their driving pattern becomes erratic.

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

	Estimated Fair Value	Weighted-Average Amortization Period (in years)
Accounts receivable	$ 58	
Inventories	29	
Prepaid expenses and other current assets	320	
Property, plant, and equipment	32	
Intangible assets		
Customer contract	140	3.5
Customer relationships	100	9
Completed technologies	100	5
Goodwill	2,962	
Total assets acquired	3,741	
Accounts payable	280	
Accrued expenses	463	
Total liabilities assumed	743	
Total purchase price	**$ 2,998**	

The contingent payments will be recorded as additional purchase price and allocated to goodwill when and if paid. The goodwill is assigned to the MVSD segment. None of the acquired intangible assets, including goodwill, are deductible for tax purposes. The Company obtained third-party valuations of the acquired intangible assets.

Acquisition of DVT Corporation Vision Sensor Business

On May 9, 2005, the Company acquired all of the outstanding shares of DVT Corporation, a provider of low-cost, easy-to-use vision sensors, for approximately $111,607,000, net of $4,702,000 cash acquired. The purchase price consisted of $110,346,000 in cash paid at closing (net of acquired cash) and $1,261,000 in transaction costs. The acquisition was accounted for under the purchase method of accounting. Accordingly, DVT Corporation's results of operations have been included in the Company's consolidated results of operations since the date of acquisition.

In recent years, the Company has expanded its product line by adding low-cost and 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 the Company's own direct end-user sales force. With the acquisition of DVT Corporation, the Company immediately gained a worldwide network of distributors, all fully trained in selling and supporting machine vision products. The Company sells its low-cost, easy-to-use products, including the acquired DVT's vision sensors, through these distribution networks.

The Company adjusted the purchase price allocation during the second quarter of 2006, which resulted in a $281,000 increase in prepaid expenses and other current assets, a $9,000 increase in other assets, a $298,000 decrease in goodwill, and an $8,000 decrease in accrued expenses. The final purchase price was allocated as follows (in thousands):

	Estimated Fair Value	Weighted-Average Amortization Period (in years)
Accounts receivable	$ 5,785	
Inventories	1,995	
Prepaid expenses and other current assets	5,531	
Property, plant, and equipment	766	
Other assets	66	
Intangible assets		
Distribution networks	38,060	11.6
Customer relationships	4,740	12
Completed technologies	3,680	6
Trade names, trademarks, and non-competition agreement	1,110	4
Goodwill	73,180	
Total assets acquired	134,913	
Accounts payable	1,388	
Accrued expenses	6,102	
Net deferred tax liabilities	15,816	
Total liabilities assumed	23,306	
Total purchase price	**$ 111,607**	

The goodwill is assigned to the MVSD segment. None of the acquired intangible assets, including goodwill, are deductible for tax purposes. The Company obtained third-party valuations of the acquired intangible assets.

The following summarized, pro forma results of operations assume the acquisition took place at the beginning of the respective periods (in thousands, except per share amounts).

Year Ended December 31,	2005	2004
Revenue	$227,431	$230,196
Net income	$ 35,266	$ 36,263
Net income per diluted share	$ 0.74	$ 0.77

NOTE 19: DIVIDENDS

Beginning in the third quarter of 2003, the Company's Board of Directors has declared and paid a cash dividend in each quarter. During the third quarter of 2004, the Company's Board of Directors voted to increase the quarterly cash dividend from $0.06 to $0.08 per share. During the third quarter of 2006, the Company's Board of Directors voted to increase the quarterly cash dividend from $0.080 to $0.085 per share. Dividend payments amounted to $15,058,000 in 2006, $14,960,000 in 2005, and $12,756,000 in 2004.

NOTE 20: SUBSEQUENT EVENTS

On January 23, 2007, the Company's Board of Directors declared a cash dividend of $0.085 per share. The dividend was paid on February 23, 2007 to all shareholders of record at the close of business on February 9, 2007 and amounted to $3,778,000.

NOTE 21: SUPPLEMENTAL DISCLOSURES

Cash paid for income taxes totaled $18,356,000 in 2006, $2,970,000 in 2005, and $2,327,000 in 2004.

Common stock received as payment for stock option exercises totaled $317,000 in 2004.

The Company retired certain fully depreciated property, plant, and equipment totaling $3,742,000 in 2006, $4,234,000 in 2005, and $1,824,000 in 2004.

Advertising costs are expensed as incurred and totaled $2,144,000 in 2006, $3,057,000 in 2005, and $2,000,000 in 2004.

Cognex Corporation: Report of Independent Registered Public Accounting Firm on Financial Statements

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, 2006 and 2005, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2006. 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cognex Corporation at December 31, 2006 and 2005, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, on January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. l23(R), "Share-Based Payment" which requires the Company to recognize expense related to the fair value of share-based compensation awards.

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, 2006, 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 27, 2007 expressed an unqualified opinion thereon.

Ernst + Young LLP

Ernst & Young LLP
Boston, Massachusetts
February 26, 2007

Cognex Corporation: Report of Management 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, 2006.

Management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2006 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Cognex Corporation: Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

To The Board of Directors and Shareholders of Cognex Corporation:

We have audited management’s assessment, included in the accompanying Report of Management on Internal Control Over Financial Reporting, that Cognex Corporation maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). 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. Our responsibility is to express an opinion on management’s assessment and an opinion on the effectiveness of the company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management’s assessment, testing and evaluating the design and operating effectiveness of internal control, 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, management’s assessment that Cognex Corporation maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Cognex Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2006 consolidated financial statements of Cognex Corporation and our report dated February 27, 2007 expressed an unqualified opinion thereon.

Ernst + Young LLP

Ernst & Young LLP
Boston, Massachusetts
February 26, 2007

Cognex Corporation: Five-year Summary of Selected Financial Data
(In thousands, except per share amounts)

Year Ended December 31,	**2006**	2005	2004	2003	2002
Statement of Operations Data:					
Revenue	**$238,424**	$216,875	$201,957	$150,092	$114,107
Cost of revenue [1]	**64,943**	62,899	57,371	50,139	39,859
Gross margin	**173,481**	153,976	144,586	99,953	74,248
Research, development, and engineering expenses [1]	**32,607**	27,640	27,063	24,719	25,630
Selling, general, and administrative expenses [1]	**96,678**	82,332	70,674	55,724	58,376
Operating income (loss)	**44,196**	44,004	46,849	19,510	(9,758)
Nonoperating income	**6,104**	4,242	6,311	3,738	1,554
Income (loss) before taxes	**50,300**	48,246	53,160	23,248	(8,204)
Income tax provision (benefit)	**10,445**	12,544	15,416	7,297	(2,177)
Net income (loss)	**$ 39,855**	$ 35,702	$ 37,744	$ 15,951	$ (6,027)
Basic net income (loss) per share	**$ 0.87**	$ 0.76	$ 0.83	$ 0.37	$ (0.14)
Diluted net income (loss) per share	**$ 0.85**	$ 0.74	$ 0.80	$ 0.36	$ (0.14)
Basic weighted-average common shares outstanding	**45,559**	46,709	45,480	43,173	43,503
Diluted weighted-average common shares outstanding	**46,648**	47,935	47,358	44,466	43,503
Cash dividends per common share	**$ 0.33**	$ 0.32	$ 0.28	$ 0.12	$ —

(1) Amounts in 2006 include stock-based compensation expense, as follows:

Cost of revenue	$ 1,596
Research, development, and engineering	3,627
Selling, general, and administrative	8,401
Total stock-based compensation expense	$ 13,624

December 31, (In thousands)	**2006**	2005	2004	2003	2002
Balance Sheet Data:					
Working capital	**$258,280**	$268,612	$242,460	$150,311	$162,808
Total assets	**528,651**	564,562	533,308	432,533	385,934
Long-term debt	—	—	—	—	—
Shareholders' equity	**473,850**	506,521	462,807	384,994	354,520

Cognex Corporation: Selected Quarterly Financial Data (Unaudited)
(In thousands, except per share amounts)

Quarter ended 2006	**April 2,**	**July 2,**	**October 1,**	**December 31,**
Revenue	**$59,040**	**$63,074**	**$ 58,005**	**$ 58,305**
Gross margin	**42,330**	**46,481**	**42,558**	**42,112**
Operating income	**10,634**	**12,622**	**11,147**	**9,793**
Net income	**8,800**	**11,434**	**10,116**	**9,505**
Basic net income per share	**0.19**	**0.25**	**0.23**	**0.21**
Diluted net income per share	**0.18**	**0.24**	**0.22**	**0.21**
Cash dividends per common share	**0.080**	**0.080**	**0.085**	**0.085**
Common stock prices:				
High	**33.24**	**30.01**	**26.20**	**26.98**
Low	**27.18**	**24.25**	**20.87**	**21.65**

Quarter Ended 2005	April 3,	July 3,	October 2,	December 31,
Revenue	$43,198	$54,603	$58,256	$ 60,818
Gross margin	29,408	38,538	42,501	43,529
Operating income	5,585	9,859	13,926	14,634
Net income	5,294	7,800	10,858	11,750
Basic net income per share	0.11	0.17	0.23	0.25
Diluted net income per share	0.11	0.17	0.22	0.24
Cash dividends per common share	0.08	0.08	0.08	0.08
Common stock prices:				
High	28.44	27.28	33.76	32.70
Low	23.80	21.40	25.43	26.78

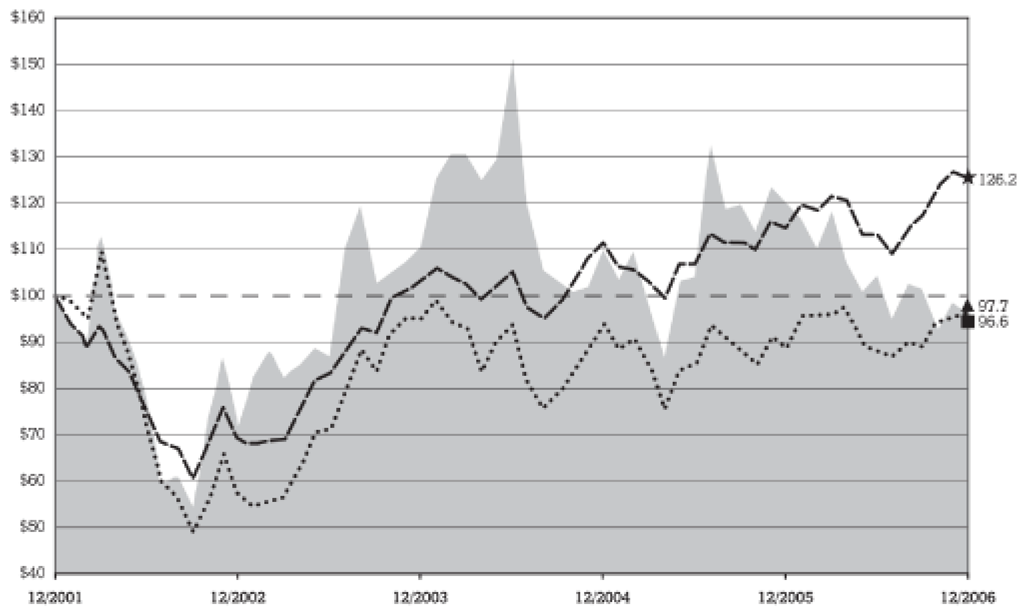
Cognex Corporation: Stock Performance Graph

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 on the market price of the Company common stock, with the total return on companies within the Nasdaq Stock Market-US Companies Index (the "Nasdaq-US Index") and the Center for Research in Security Prices ("CRSP") 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-US Index and the Nasdaq Lab Apparatus Index was provided to the Company by CRSP.

Cognex Corporation
Comparison of Five-year
Cumulative Total Returns

Produced on January 29, 2007

Prepared by CRSP (www.crsp.uchicago.edu)
Center for Research in Security Prices
Graduate School of Business, The University of Chicago
Used with permission. All rights reserved.
©Copyright 2007



Legend:	12/2001	12/2002	12/2003	12/2004	12/2005	12/2006
■ Cognex Corp	100.00	72.0	110.9	110.5	120.5	96.6
★ NASDAQ Stock Market (U.S. Companies)	100.00	69.1	103.4	112.5	114.9	126.2
▲ NASDAQ Stocks *(SIC 3820–3829 U.S. Companies) Lab Apparatus & Analyt.Opt. Measuring, and Controlling Instr*	100.00	57.4	95.2	94.2	89.3	97.7

Notes:

A. The lines represent monthly index levels derived from compounded daily returns that include all dividends.

B. The indexes are reweighted daily using the market capitalization on the previous trading day.

C. If the monthly interval, based on the fiscal year-end, is not a trading day the preceding trading day is used.

D. The index level for all series was set to $100.0 on I2/31/2OO1.

Cognex Corporation: Offices

UNITED STATES

Corporate Headquarters
One Vision Drive
Natick, MA 01760
Telephone: (508) 650-3000
Fax: (508) 650-3333

California
2060 Challenger Drive
Alameda, CA 94501
Telephone: (510) 749-4000
Fax: (510) 865-9927

1001 Rengstorff Avenue
Mountain View, CA 94043
Telephone: (650) 969-4812
Fax: (650) 969-4818

11512 El Camino Real, Suite 360
San Diego, California 92130
Telephone: (858) 481-2469
Fax: (858) 481-2411

Georgia
1855 Satellite Boulevard, Suite 100
Duluth, Georgia 30097
Telephone: (770) 814-7920
Fax: (770) 814-7925

Illinois
800 East Diehl Road, Suite 125
Naperville, IL 60563
Telephone: (630) 649-6312
Fax: (630) 955-0661

Michigan
46850 Magellan Drive, Suite 150
Novi, MI 48377
Telephone: (248) 668-5100
Fax: (248) 624-2964

Oregon
15865 SW 74th Street, Suite 105
Portland, OR 97224
Telephone: (503) 620-6601
Fax: (503) 620-6093

Pennsylvania
2873 West Hardies Road
Gibsonia, PA 15044
Telephone: (724) 449-7233
Fax: (724) 449-7237

Tennessee
318 Seaboard Lane, Suite 314
Franklin, TN 37067
Telephone: (615) 844-6158
Fax: (615) 844-6159

Wisconsin
10150 West National Avenue, Suite 202
West Allis, WI 53227
Telephone: (414) 604-7000
Fax: (414) 604-2342

CANADA

Cognex Canada Inc.,
9970 Cote de Liesse, Suite 110

Lachine, Quebec H8T 1A1
Telephone: (514) 420-0828
Fax: (514) 420-0825

EUROPE

Finland
Cognex Finland
Kellonkierto 7
70460 Kuopio, Finland
Telephone: +358-17-3893 200
Fax: +358-17-3893 232

France
Cognex International Inc., France
104 Avenue Albert ler
F-92563 Rueil Malmaison Cedex, France
Telephone: +33-1-47-77-15-50
Fax: +33-1-47-77-15-55

Germany
Cognex Germany, Inc.
Emmy Noether Strasse 11
D-76131 Karlsruhe, Germany
Telephone: + 49-721-6639-0
Fax: + 49-721-6639-599

Cognex Aachen
Vaalser Straße 259
52074 Aachen, Germany
Telephone: +49 241 17 301 4 0
Fax: +49 241 17 301 4 44

Ireland
Cognex Ltd.
c/o PricewaterhouseCoopers,
1, South Mall,
Cork, Ireland
Telephone: +353 (0)21 230 0271
Fax: +353 (0)21 230 0133

Italy
Cognex International Inc., Italy
Via Gasparotto, 1
I-20124 Milano, Italy
Telephone: + 39-0267 471 200
Fax: +39-0267 471 300

Cognex Corporation: Offices

EUROPE (continued)

Spain
Cognex Spain
Edificio Windsor
Via Augusta 2 Bis 5
08006 Barcelona, Spain
Telephone: +34 93 445 67 78
Fax: +34 93 415 04 62

Sweden
Cognex International Inc., Sweden
Skrapan 1830
Kopparbergsvagen 10
S-722 10 Vasteras, Sweden
Telephone: +46-21-14 55 88
Fax: +46-21-14 408 0

Switzerland
Kornhausstrasse 3
CH-9000 St. Gallen
Switzerland
Telephone: +41 71 313 06 05
Fax: +41 71 313 06 06

United Kingdom
Cognex UK, Ltd.
Sunningdale House
43 Caldecotte Lake Drive
Caldecotte Lake Business Park
Milton Keynes MK7 8LF, UK
Telephone: +44-1908-206 000
Fax: +44-1908-392 463

Cognex UK, Ltd., Epsom Branch
Units 7-8, First Quarter
Blenheim Road, Epsom
Surrey, KT19 9QN, UK
Telephone: +44-1372-754 100
Fax: +44-1372-754 150

Cognex UK, Ltd., Training
Exchange House – MWB
494 Midsummer Boulevard
Milton Keynes MK9 2EA, UK
Telephone: +44-19 08255878
Fax: +44-19 08 255 700

JAPAN

Cognex KK-Headquarters
23F, Bunkyo Green Court
2-28-8 Honkomagome, Bunkyo-ku,
Tokyo
113-6591, Japan
Telephone: +81-3-5977-5400
Fax: +81-3-5977-5401

Cognex KK-Osaka
3F, Central Shin-Osaka Building
4-5-36 Miyahara, Yodogawa-ku
Osaka-shi, Osaka
532-0003 Japan
Telephone: +81-6-4807-8201
Fax: +81-6-4807-8202

Cognex KK-Nagoya
4F, IT Meieki Building
3-11-22 Meieki, Nakamura-ku

Nagoya-shi, Aichi-ken
450-0002 Japan
Telephone: + 81-52-569-5900
Fax: +81-52-581-7760

Cognex KK-Fukuoka
5F, Dai 5 Hakata Kaisei Building
1-18-25 Hakataeki-Higashi, Hakata-ku
Fukuoka-shi, Fukuoka-ken
812-0013, Japan
Telephone: +81-92-432-7741
Fax: +81-92-412-3590

Cognex KK-Sendai
10F, Sendai-Hashimoto Building
27-21 Tachimachi, Aoba-ku,
Sendai-shi, Miyagi-ken
980-0822, Japan
Telephone: +81-22-711-1971
Fax: +81-22-711-1982

ASIA

China
Room 1210, Huaihai China Tower
885, Renmin Road
Shanghai 200010, P.R. of China
Telephone: +86-21-6320 3821
Fax: +86-21-6328 0632

Korea
704 City Air Terminal
159-6 Samsung-dong, Gangnam-gu,
Seoul 135–728 Korea
Telephone: +82-2-539-9047
Fax: +82-2-539-9592

Singapore
10 Anson Road #30-06A
International Plaza
Singapore 079903
Telephone: +65 6325 5 700
Fax: +65 5325 5 703

Taiwan
10F-1, No. 25, Puding Road
Hsin-Chu City
300 Taiwan, R.O.C.
Telephone: +886-3-5780060
Fax: +886-3-5781520

Cognex Corporation: Company Information

Transfer Agent
National City Bank
Corporate Trust Operations
3rd Floor, North Annex
4100 West 150th Street
Cleveland, OH 44135-1385
Telephone: (216) 257-8663
Toll free: (800) 622-6757
www.nationalcitystocktransfer.com
email: shareholder.inquiries@nationalcity.com

General Counsel
Goodwin Procter LLP
Boston, Massachusetts

Independent Auditors
Ernst & Young LLP
Boston, Massachusetts

Form 10-k

A copy of the Annual Report on Form 10-K filed with the Securities and Exchange Commission is available to shareholders, without charge, upon request to:

Department of Investor Relations
Cognex Corporation
One Vision Drive
Natick, MA 01760

Additional copies of this annual report are also available, without charge, upon request to the above address. Or, request information on-line at http://www.cognex.com

The Company's common stock is traded on The NASDAQ Stock Market LLC, under the symbol CGNX. As of February 25, 2007, 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 Company declared and paid a cash dividend of $0.08 per share in each quarter of 2005 and in the first and second quarters of 2006, and $0.085 per share in the third and fourth quarters of 2006. Any future declaration and payment of cash dividends will be subject to the discretion of the Company's Board of Directors and will depend upon such factors as the Board deems relevant.

BOARD OF DIRECTORS

Robert J. Shillman
Chairman and Chief Executive Officer
Cognex Corporation

Patrick A. Alias
Senior Vice President
Cognex Corporation

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

Anthony Sun
Managing General Partner
Venrock Associates

Reuben Wasserman
Business Consultant

SENIOR MANAGEMENT

Robert J. Shillman
Chairman and Chief Executive Officer

James F. Hoffmaster
President and Chief Operating Officer

Patrick A. Alias
Senior Vice President

Patricia Bautz
Vice President,
Corporate Employee Services

Eric Ceyrolle
Executive Vice President Worldwide Sales
and Marketing

Ettore Cucchetti
Vice President of Sales and Service, Asia

Markku Jaaskelainen
Senior Vice President and
General Manager, SISD

Todd Keebaugh
Vice President, Legal Services

Didier Lacroix
Vice President of Sales and Service, Europe

Herb Lade
Vice President, Operations

Stanley Luboda
Vice President, SISD Sales and Service

Marilyn Matz
Senior Vice President, Semi & Electronics

John McGarry
Senior Vice President,
Research and Development

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

Akira Nakamura
President, Cognex K.K.

Kris Nelson
Senior Vice President, Factory Automation

Brian Phillips
Vice President of Sales, Americas

David Schatz
Vice President, Corporate Development

Robert Settle
Vice President, Worldwide Distribution

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

William Silver
Senior Vice President and Senior Fellow

Justin Testa
Senior Vice President, ID Products and
Sensor Products

This annual report, including the letter to shareholders, contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities and Exchange Act of 1934. Please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Forward-Looking Statements" in this report for a discussion regarding risks associated with these statements.

Design: PointOne Marketing & Design, Danvers, MA www.pointonemarketing.com

Major Photography: David Shopper   Printed in the United States of America

EXHIBIT 21

COGNEX CORPORATION
SUBSIDIARIES OF THE REGISTRANT

At December 31, 2006, the registrant had the following subsidiaries, the financial statements of which are all included in the consolidated financial statements of the registrant:

NAME OF SUBSIDIARY	STATE/COUNTRY OF INCORPORATION	PERCENT OWNERSHIP
Cognex Technology and Investment Corporation	California	100%
Cognex Canada Technology, Inc.	California	100%
Cognex Foreign Sales Corporation	Barbados	100%
Cognex Distribution Corporation	Georgia	100%
AssistWare Technology, Inc.	Pennsylvania	100%
Vision Drive, Inc.	Delaware	100%
Cognex Canada, Inc.	Delaware	100%
Cognex K.K.	Japan	100%
Cognex International, Inc.	Delaware	100%
Cognex Europe, Inc.	Delaware	100%
Cognex Europe, b.v.	Netherlands	100%
Cognex, Ltd.	Ireland	100%
Cognex Germany, Inc.	Massachusetts	100%
Cognex UK Ltd.	United Kingdom	100%
Cognex Finland Oy	Finland	100%
Cognex Singapore, Inc.	Delaware	100%
Cognex Korea, Inc.	Delaware	100%
Cognex Taiwan, Inc.	Delaware	100%
Cognex Asia, Inc. (formerly Cognex China, Inc.)	Delaware	100%

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Annual Report (Form 10-K) of Cognex Corporation of our report dated February 26, 2007, with respect to the consolidated financial statements of Cognex Corporation and our report dated February 26, 2007 with respect to Cognex Corporation management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting of Cognex Corporation, included in the 2006 Annual Report to Shareholders of Cognex Corporation.

Our audits also included the financial statement schedule of Cognex Corporation listed in Item 15(a). This schedule is the responsibility of Cognex Corporation's management. Our responsibility is to express an opinion based on our audits. In our opinion, as to which the date is February 26, 2007, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 33-81150, 333-04621, 333-02151, 333-60807, 33-32815, 333-44824, 333-68158, 333-96961, 333-100709, and 333-126787) of Cognex Corporation of our report dated February 26, 2007, with respect to the consolidated financial statements of Cognex Corporation incorporated herein by reference, our report dated February 26, 2007 with respect to Cognex Corporation management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting of Cognex Corporation incorporated herein by reference, and our report included in the preceding paragraph with respect to the financial statement schedule of Cognex Corporation included in this Annual Report (Form 10-K) of Cognex Corporation.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 26, 2007

CERTIFICATION **Exhibit 31.1**

I, Robert J. Shillman, Chief Executive Officer and Chairman of the Board of Directors of Cognex Corporation, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cognex Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2007

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

Exhibit 31.2

CERTIFICATION

I, Richard A. Morin, Senior Vice President of Finance and Administration, Chief Financial Officer, and Treasurer of Cognex Corporation, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cognex Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize, and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 28, 2007

/s/ Richard A. Morin
Richard A. Morin
Senior Vice President of Finance and
Administration, Chief Financial Officer, and
Treasurer

Exhibit 32.1*

**CERTIFICATION PURSUANT TO
18 U.S.C. 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned officer of Cognex Corporation (the "Company") hereby certifies that the Company's Annual Report on Form 10-K for the year ended December 31, 2006 (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2007

/s/ Robert J. Shillman
Robert J. Shillman
Chief Executive Officer and Chairman of the Board of Directors
(principal executive officer)

---

* This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

Exhibit 32.2*

**CERTIFICATION PURSUANT TO
18 U.S.C. 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned officer of Cognex Corporation (the “Company”) hereby certifies that the Company’s Annual Report on Form 10-K for the year ended December 31, 2006 (the “Report”), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2007

/s/ Richard A. Morin
Richard A. Morin
Senior Vice President of Finance and Administration,
Chief Financial Officer, and Treasurer
(principal financial officer)

---

* This certification shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.