

TERADYNE, INC  
Form 10-K  
March 01, 2010

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

**FORM 10-K**

ANNUAL REPORT

PURSUANT TO SECTIONS 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

(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, 2009

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 001-06462

**TERADYNE, INC.**

(Exact Name of Registrant as Specified in Its Charter)

MASSACHUSETTS  
(State or Other Jurisdiction of

Incorporation or Organization)

04-2272148  
(I.R.S. Employer

Identification Number)

600 RIVERPARK DRIVE

NORTH READING, MASSACHUSETTS

01864

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(Address of Principal Executive Offices)

(Zip Code)

Registrant's telephone number, including area code: (978) 370-2700

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value \$0.125 per share	New York Stock Exchange

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 Exchange Act. Yes  No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

\* The registrant has not yet been phased in to the interactive data requirements.

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 in any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 5, 2009 was approximately \$1.2 billion based upon the closing price of the registrant's Common Stock on the New York Stock Exchange on that date.

The number of shares outstanding of the registrant's only class of Common Stock as of February 22, 2010 was 177,237,096 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's proxy statement in connection with its 2010 annual meeting of shareholders are incorporated by reference into Part III.

**TERADYNE, INC.**

**FORM 10-K**

**PART I**

**Item 1: Business**

Teradyne, Inc. (the Company or Teradyne) was founded in 1960 and is a leading global supplier of automatic test equipment.

We design, develop, manufacture and sell automatic test systems and solutions used to test complex electronics in the consumer electronics, automotive, computing, telecommunications, and aerospace and defense industries. Our automatic test equipment products and services include:

semiconductor test ( Semiconductor Test ) systems, and

military/aerospace ( Mil/Aero ) test instrumentation and systems, hard disk drive test ( HDD ) systems, circuit-board test and inspection ( Commercial Board Test ) systems, and automotive diagnostic and test ( Diagnostic Solutions ) systems (collectively these products represent Systems Test Group ).

We have a broad customer base which includes integrated device manufacturers ( IDMs ), outsourced sub-assembly and test providers ( OSATs ), wafer foundries, fabless companies that design, but contract with others for the manufacture of integrated circuits ( ICs ), manufacturers of circuit boards, automotive companies, HDD manufacturers, aerospace and military contractors as well as the United States Department of Defense.

In 2009, we entered the High Speed dynamic random access memory ( DRAM ) testing market with our UltraFlex-M product. High speed DRAM memory devices are used for high-end graphics applications in personal computer and gaming consoles.

In 2009, we also entered the market for hard disk drive test systems with our Neptune product. The Neptune product line currently is used to test 2.5 inch hard disk drives for laptops, netbooks and consumer electronic storage devices.

In 2008, we acquired Nextest Systems Corporation ( Nextest ) and Eagle Test Systems, Inc. ( Eagle Test ) to expand our product portfolio of automated test equipment for the semiconductor industry. Nextest develops systems to test integrated circuits such as microcontrollers, image sensors, smart cards and field programmable logic devices for the flash memory, flash card and flash memory based system-on-a-chip ( SOC ) markets. Eagle Test develops systems to test analog, mixed-signal and radio frequency semiconductors used in digital cameras, MP3 players, cellular telephones, video/multimedia products, automotive electronics and notebook and desktop computers. Nextest and Eagle Test are included within our Semiconductor Test segment.

In 2007, we purchased in-process enabling test technology and hired certain engineers from MOSAID Technologies Inc.

**Investor Information**

We are a Massachusetts corporation incorporated on September 23, 1960. We are subject to the informational requirements of the Exchange Act. We file periodic reports, proxy statements and other information with the Securities and Exchange Commission ( SEC ). Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, N.E., Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically.

You can access financial and other information, including the charters of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee, our Corporate Governance Guidelines and Standards of Business Conduct, by clicking the Investors link on our web site at [www.teradyne.com](http://www.teradyne.com). We make available, free of charge, copies of our filings with the SEC, including our annual reports 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 Exchange Act through our web site as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

## Products

### *Semiconductor Test*

We design, manufacture, sell and support Semiconductor Test products and services on a world wide basis. The test systems we provide are used both for wafer level and device package testing. These chips are used in automotive, communications, consumer, computer and electronic game applications, among others. Semiconductor devices span a broad range of functionality, from very simple low-cost devices such as appliance microcontrollers, operational amplifiers or voltage regulators to complex digital signal processors, microprocessors, high-density as well as high speed memory devices. Semiconductor Test products and services are sold to IDMs that integrate the fabrication of silicon wafers into their business, Fabless companies that outsource the manufacturing of silicon wafers, Foundries that cater to the processing and manufacturing of silicon wafers, and OSATs that provide test and assembly services for the final packaged devices to both Fabless companies and IDMs. Fabless companies perform the design of integrated circuits without manufacturing capabilities, and use Foundries for wafer manufacturing and OSATs for test and assembly. These customers obtain the overall benefit of comprehensively testing devices and reducing the total costs associated with testing by using our Semiconductor Test systems to:

improve and control product quality;

measure and improve product performance;

reduce time to market; and

increase production yields.

Our FLEX Test Platform architecture advances our core technologies to produce test equipment that is designed for high efficiency multi-site testing. Multi-site testing involves the simultaneous testing of many devices and functions in parallel. Leading semiconductor manufacturers are using multi-site testing to significantly improve their Cost of Test economics. The FLEX Test Platform architecture addresses customer requirements through the following key capabilities:

- 1) A high efficiency multi-site architecture that eliminates tester overhead such as instrument setup, synchronization and data movement, and signal processing;
- 2) The IG-XL software operating system which provides fast program development, including instant conversion from single to multi-site test; and
- 3) Broad technology coverage by instruments designed to cover the range of test parameters, coupled with a Universal Slot test head design that allows easy test system reconfiguration to address changing test needs.

FLEX Test Platform purchases are being made by IDMs, OSATs and Fabless customers. The FLEX Test Platform has become a widely used test solution at OSATs and test houses by providing versatile testers that can handle the widest range of devices, allowing OSATs to leverage their capital investments. The broad consumer, automotive and broadband markets have historically driven most of the device volume growth in the semiconductor industry. These markets include cell phones, set top boxes, HDTVs, game controllers, computer

graphics, and automotive controllers to name a few. These end use markets are continuing to be drivers for the FLEX Test Platform family of products because they require a wide range of technologies and instrument coverage. The FLEX Test Platform has an installed base of more than 2,100 customer systems to date and it continues to grow. The introduction of the UltraFLEX-M tester in 2009 extends the FLEX Test Platform into the High Speed DRAM testing market.

Our J750 test system shares the IG-XL software environment with the family of FLEX Test Platform systems. The J750 is designed to address the highest volume semiconductor devices such as microcontrollers that are central to the functionality of almost every consumer electronics product, from small appliances to automotive engine controllers. J750 test systems combine compact packaging, high throughput and ease of production test. These benefits are possible due to the high level of integration in the design. We extended the J750 platform technology to create the IP750 Image Sensor test system. The IP750 is focused on testing image sensor devices used in digital cameras and other imaging products. The J750 platform has an installed base of over 2,900 systems and it continues to grow.

We have continued to invest in the J750 platform with a set of J750Ex instrumentation that was released in 2007, with additional instrument releases in 2008. These instruments bring new capabilities to existing market segments and expand the J750 platform to critical new devices that include high end microcontrollers and the latest generation of cameras. These new J750Ex instruments are designed to be compatible with our customers' existing hardware and software investments and deliver industry leading parallel test economics while providing customers with flexibility to address next generation functional requirements.

Our acquisition of Nextest in January of 2008 expanded our product offerings to include the Magnum test platform. The Magnum products address the requirements of mass production test of memory devices such as flash memory and DRAM. Flash and DRAM memory are widely used core building blocks in modern electronic products finding wide application in consumer, industrial, and computing equipment. Magnum II is the newest member of the family. With test rates up to 800 megabits per second and a versatile architecture designed for maximal throughput, Magnum II tests flash and DRAM devices, an important advantage for large memory producers that manufacture both types of memory. The Magnum platform has an installed base of over 700 systems and it continues to grow.

Our acquisition of Eagle Test in November of 2008 expanded our product offerings to include the ETS platform. The ETS platform is used by semiconductor manufacturers and assembly and test subcontractors, primarily in the low pin count analog/mixed signal discrete markets that cover more cost sensitive applications. Eagle Test's proprietary SmartPin technology enables multiple semiconductor devices to be tested simultaneously, or in parallel, on an individual test system, permitting greater test throughput. Semiconductors tested by Eagle Test's systems are incorporated into a wide range of products in historically high-growth markets, including digital cameras, MP3 players, cellular telephones, video/multimedia products, automotive electronics, computer peripherals, and notebook and desktop computers. The ETS platform has an installed base of over 1,900 systems and it continues to grow.

### ***Systems Test Group***

Our Systems Test Group segment is comprised of four business units: Mil/Aero, Hard Disk Drive, Commercial Board Test and Diagnostic Solutions.

#### ***Mil/Aero***

Our expertise in the test and diagnosis of printed circuit boards ( PCB ) and subsystems has proven to be essential in supporting the ever-demanding military, defense and aerospace markets. Our test solutions for these markets include high-performance systems, instruments and software solutions that manufacturers and repair depots depend on to ensure the readiness of commercial and military electronic systems.

New programs from tactical aircraft to missile systems, as well as widespread enhancement programs, continue to fuel the demand for high performance test systems. We are a leading provider of test instrumentation and systems with performance well suited to the demands of military/aerospace electronics manufacturers and repair depots worldwide. Success in this market is illustrated by our penetration into major Department of Defense programs across all U.S. military service branches and many allied military services worldwide.

#### ***Hard Disk Drive***

Leveraging our expertise in functional test and semiconductor test, we introduced the Neptune product line in 2009. This product is targeted at the high growth 2.5 inch hard disk drive market.

The storage growth for laptops, netbooks and consumer electronics combined with the growth in storage density is driving the need for high density test solutions for the 2.5 inch HDD segment. The Neptune product line addresses the challenges of high throughput automated manufacturing environments while at the same time meeting the performance requirements for next generation HDDs. Our products are targeted at the HDD manufacturers and used as part of the manufacturing and test process of drives.

#### ***Commercial Board Test***

We produce a variety of test and inspection systems sold to many of the industry's leading PCB original equipment manufacturers ( OEMs ) and subcontract manufacturers ( Subcons ) around the world. Because today's PCBs and electronic assemblies handle more functionality than ever before, they contain highly integrated circuits and more complex components that operate faster, use lower voltages and are more susceptible to assembly problems. Our assembly test and inspection systems combine the advanced diagnostic hardware and operating software needed to ensure product quality, sustain high manufacturing yield, verify functional operation, diagnose faults and effectively reduce manufacturing costs. Our products are sold to the electronics manufacturers of cell phones, servers, computers, Internet switches, automobiles and military avionics systems worldwide.

#### ***In-Circuit Test Systems***

We manufacture in-circuit test ( ICT ) systems that are used to assess electrical interconnections, verify interoperation and find faulty circuits on fully assembled and soldered PCBs. Fast, accurate and cost-effective diagnostic capabilities are hallmark features of our ICT systems, including the TestStation and Spectrum product families used in a variety of in-line, high-volume PCB test applications. These systems are also used in sample test environments for prototype testing and early-stage PCB design and development. Supporting technologies such as our patented SafeTest technology allow TestStation users to safely troubleshoot the low-voltage components and interconnects commonly found in battery-powered portable consumer electronics and low-power commercial equipment. In addition to standard ICT equipment, we offer combinational test platforms and handler-ready in-line test systems for high-volume board manufacturing.

#### ***Imaging Inspection Systems***

We manufacture automated x-ray inspection ( AXI ) machines that are used to test PCB assemblies. These machines use patented technologies to quickly and automatically inspect the solder joints of the components on the board. Using x-rays allows our XStation MX to inspect joints that are on either side of the PCB assembly, or that are hidden by the component packages themselves. The XStation MX uses ClearVue, a patented three-dimensional X-Ray imaging technique, to more accurately detect subtle defects and manufacturing flaws, even as board complexities grow.

***Diagnostic Solutions***

We provide electronic test and diagnostic systems to the automotive OEMs and their major subcontractors. The systems are used throughout the vehicle's lifecycle from design through manufacture to after sale service and consist of highly integrated software and hardware components. As the number and complexity of electronic systems and embedded software proliferate in vehicles, the ability to manufacture and service those vehicles becomes increasingly dependent on electronic diagnostic equipment. Our Diagnostic Solutions products fall into two categories:

***OEM Service Diagnostics***

OEM dealer service technicians use our systems to find faults in vehicles in use by their customers, and to reduce OEM warranty costs. Historically, the focus has been on fixing faults in the service bay, but is now growing to include the programming of vehicle software.

***Vehicle Configuration and Test Solutions***

Our VCATS products are used on automotive and major automotive subassembly production lines. These products connect to the vehicle to test and program or configure the electronic systems on vehicles. These vehicle electronic systems include engine control modules and subsystems such as braking, navigation and climate control. Our VCATS products are also able to link to an OEM's manufacturing control system in order to provide statistical quality reports to operators and management.

Both VCATS and OEM Service Diagnostics products utilize our GRADE-X authoring software enabling the manufacturing and service phases of vehicle development. Diagnostics for electronic modules and systems used on vehicles of our customers can be developed and written using the GRADE-X authoring software. The actual diagnosis of a customer's vehicle occurs in the OEM dealer's service bay utilizing a runtime portion of the software to facilitate the service and repair of the vehicle.

***Discontinued Operations***

On August 1, 2007, our Broadband Test Division business was sold to Tollgrade Communications, Inc. This business provided test systems for testing lines and qualifying lines for DSL telephone networks. On November 30, 2005, our Connection Systems business was sold to Amphenol Corporation. This business designed and manufactured high-performance connection systems including backplane systems, printed circuit boards and high-speed, high-density connectors. Connection Systems and Broadband Test Division have been reflected as discontinued operations in the accompanying financial statements.

***Summary of Net Revenue by Reportable Segment***

Our two reportable segments accounted for the following percentages of consolidated net revenue for each of last three years:

	2009	2008	2007
Semiconductor Test	67%	81%	80%
Systems Test Group	33	19	20
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Sales and Distribution**

Prices for our systems can reach \$2 million or more. In fiscal year 2009, revenues from Western Digital Corporation accounted for more than 10% of total revenue. Western Digital Corporation is a customer of our

Systems Test Group. In 2008 and 2007, no single customer accounted for more than 10% of our consolidated net revenue. In each of the years 2009, 2008 and 2007, our three largest customers in aggregate accounted for 26%, 14% and 16% of our consolidated net revenue, respectively.

Direct sales to United States government agencies accounted for 4%, 2% and 5% of our consolidated net revenue in 2009, 2008 and 2007, respectively. Approximately 12%, 11% and 23% of Systems Test Group's revenue in 2009, 2008 and 2007, respectively, was to United States government agencies and 18%, 27% and 16% of Systems Test Group's revenue in 2009, 2008 and 2007, respectively, was to government contractor customers.

We have sales and service offices located throughout North America, Asia and Europe, as our customers outside the United States are located primarily in these geographic areas. We sell in these areas predominantly through a direct sales force. Our manufacturing activities are primarily conducted through subcontractors and outsourced contract manufacturers with a significant operation concentrated in China.

Sales to customers outside the United States accounted for 74%, 78% and 77% of our consolidated net revenue in 2009, 2008 and 2007, respectively. Sales to customers located in Taiwan were 14%, 18% and 13% of consolidated net revenue in 2009, 2008 and 2007, respectively. Sales to customers located in Malaysia were 11%, 6% and 7% of our consolidated net revenue in 2009, 2008 and 2007 respectively. Sales to customers located in Europe were 10%, 10% and 12% of our consolidated net revenue in 2009, 2008 and 2007, respectively. Sales to customers located in South East Asia were 10%, 10% and 8% of our consolidated net revenue in 2009, 2008 and 2007, respectively. Sales are attributed to geographic areas based on the location of the customer site.

See also Item 1A: Risk Factors and Note R: Operating Segment and Geographic Information in Notes to Consolidated Financial Statements.

### Competition

We face significant competition throughout the world in each of our reportable segments. Competitors in the Semiconductor Test segment include, among others, Advantest Corporation, Verigy Inc. and LTX Credence Corporation. Competitors in the Systems Test Group include, among others, Agilent Technologies, Inc. and Xyratex Ltd. Some of our competitors have substantially greater financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. We also face competition from internal suppliers at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. See also Item 1A: Risk Factors.

### Backlog

At December 31, 2009 and 2008, our backlog of unfilled orders in our two reportable segments was as follows:

	2009	2008
	(in millions)	
Semiconductor Test	\$ 276.8	\$ 129.4
Systems Test Group	95.2	106.9
	\$ 372.0	\$ 236.3

Of the backlog at December 31, 2009, approximately 99% of the Semiconductor Test backlog and 85% of Systems Test Group backlog is expected to be delivered in 2010.



Customers may delay delivery of products or cancel orders suddenly and without significant notice, subject to possible cancellation penalties. Due to possible customer changes in delivery schedules and cancellation of orders, our backlog at any particular date is not necessarily indicative of the actual sales for any succeeding period. Delays in delivery schedules and/or cancellations of backlog during any particular period could have a material adverse effect on our business, financial condition and results of operations.

### **Raw Materials**

Our products contain electronic and mechanical components that are provided by a wide range of suppliers. Certain of these components are standard products, while others are manufactured to our specifications. We can experience occasional delays in obtaining timely delivery of certain items. While the majority of our components are available from multiple suppliers, certain items are obtained from sole sources. We may experience a temporary adverse impact if any of our sole source suppliers delays or ceases to deliver products.

### **Intellectual Property and Licenses**

The development of our products, both hardware and software, is based in significant part on proprietary information, our brands and technology. We protect our rights in proprietary information, brands and technology through various methods, such as:

patents;

copyrights;

trademarks;

trade secrets;

standards of business conduct and related business practices; and

technology license agreements, software license agreements, non-disclosure agreements, employment agreements, and other agreements.

However, these protections might not be effective in all circumstances. Competitors might independently develop similar technology or exploit our proprietary information and our brands in countries where we lack enforceable intellectual property rights or where enforcement of such rights through the legal system provides an insufficient deterrent. Also, intellectual property protections can lapse or be invalidated through appropriate legal processes. We do not believe that any single piece of intellectual property or proprietary rights is essential to our business.

### **Employees**

As of December 31, 2009, we employed approximately 2,900 people. Since the inception of our business, we have experienced no work stoppages or other labor disturbances. We have no collective bargaining contracts.

### **Engineering and Development Activities**

The highly technical nature of our products requires a large and continuing engineering and development effort. Engineering and development expenditures for the years ended December 31, 2009, 2008 and 2007 were \$164.8 million, \$216.5 million, and \$204.3 million, respectively. These expenditures amounted to approximately 20%, 20%, and 19% of consolidated net revenue in 2009, 2008, and 2007, respectively.

### **Environmental Affairs**

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We are subject to various federal, state, and local government laws and regulations relating to the protection of employee health and safety and the environment. We accrue for all known environmental liabilities when it becomes probable that we will incur cleanup costs and those costs can reasonably be estimated. The amounts accrued do not cover sites that are in the preliminary stages of investigation. Estimated environmental costs are not expected to materially affect the financial position or results of our operations in future periods. However, estimates of future costs are subject to change due to protracted cleanup periods and changing environmental remediation laws and regulations.

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**OUR EXECUTIVE OFFICERS**

Pursuant to General Instruction G(3) of Form 10-K, the following table is included in Part I of this Annual Report on Form 10-K in lieu of being included in the Proxy Statement for the Annual Meeting of Shareholders. The table sets forth the names of all of our executive officers and certain other information relating to their positions held with Teradyne and other business experience. Our executive officers do not have a specific term of office but rather serve at the discretion of the Board of Directors.

<b>Executive Officer</b>	<b>Age</b>	<b>Position</b>	<b>Business Experience For The Past 5 Years</b>
Michael A. Bradley	61	Chief Executive Officer and President	Chief Executive Officer since 2004; President of Teradyne since 2003; President of Semiconductor Test from 2001 to 2003.
Gregory R. Beecher	52	Vice President, Chief Financial Officer and Treasurer	Vice President and Chief Financial Officer of Teradyne since 2001 and Treasurer of Teradyne from 2003 to 2005 and since 2006.
Charles J. Gray	48	Vice President, General Counsel and Secretary	Vice President, General Counsel and Secretary of Teradyne since April 2009; Vice President and General Counsel of Sonus Networks, Inc. from 2002 to 2008.
Jeffrey R. Hotchkiss	62	President of Systems Test Group	President of Systems Test Group since 2007; President of Assembly Test Systems from 2004 to 2007, and President of Diagnostic Solutions from 2005 to 2007.
Mark E. Jagiela	49	President of Semiconductor Test	President of Semiconductor Test since 2003; Vice President of Teradyne since 2001.

**Item 1A: Risk Factors**  
**Risks Associated with Our Business**

The risks described below are not the only risks that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

***Our business is impacted by worldwide economic cycles, which are difficult to predict.***

Capital equipment providers in the electronics and semiconductor industries, such as Teradyne, have, in the past, been negatively impacted by sudden slowdowns in the global economies, and resulting reductions in customer capital investments. The duration of slowdowns in customer capital investments are difficult to predict.

The global economy and financial markets experienced disruption in 2009, including, among other things, extreme volatility in security prices, severely diminished liquidity and credit availability, rating downgrades of certain investments and declining valuations of others. Governments have taken historic actions intended to address extreme market conditions that include severely restricted credit. There may be a further deterioration in financial markets and confidence in major economies. We are unable to predict the likely duration and severity of the current disruptions in financial markets, credit availability, and adverse economic conditions throughout the world. These economic developments affect businesses such as ours and those of our customers and vendors in a number of ways that could result in unfavorable consequences to us. Further disruption and deterioration in economic conditions may reduce customer purchases of our products, thereby reducing our revenues and earnings. In addition, such adverse decline in economic conditions may, among other things, result in increased price competition for our products, increased risk of excess and obsolete inventories, increased risk in the collectability of our accounts receivable from our customers, increased risk in potential reserves for doubtful accounts and write-offs of accounts receivable, and higher operating costs as a percentage of revenues. In 2009

and 2008, we took actions to address the effects of the economic crisis, including implementing cost control and reduction measures. It is possible that we may need to take further cost control and reduction measures. We cannot predict whether these measures will be sufficient to offset certain of the negative trends that might affect our business.

***Our business is dependent on the current and anticipated market for electronics, which historically has been highly cyclical.***

Our business and results of operations depend in significant part upon capital expenditures of manufacturers of semiconductors and other electronics, which in turn depend upon the current and anticipated market demand for those products. As evidenced by our current business and results of operations, the market demand for electronics is impacted by economic slowdowns. Historically, the electronics and semiconductor industry has been highly cyclical with recurring periods of over-supply, which often have had a severe negative effect on demand for test equipment, including systems we manufacture and market. We believe that the markets for newer generations of electronic products such as those that we manufacture and market will also be subject to similar fluctuations. We are dependent on the timing of orders from our customers, and the deferral or cancellation of previous customer orders could have an adverse effect on our results of operations. We cannot ensure that the level of revenues or new orders for a calendar quarter will be sustained in subsequent quarters. In addition, any factor adversely affecting the electronics industry or particular segments within the electronics industry may adversely affect our business, financial condition and operating results.

***We are subject to intense competition.***

We face significant competition throughout the world in each of our reportable segments. Some of our competitors have substantial financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. We also face competition from internal suppliers at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of our products. Moreover, increased competitive pressure could lead to intensified price based competition, which could materially adversely affect our business, financial condition and results of operations.

***Our operating results are likely to fluctuate significantly.***

Our operating results are affected by a wide variety of factors that could materially adversely affect revenues and profitability. The following factors are expected to impact future operations:

the worldwide economic slowdown and continued disruption in the global financial markets;

competitive pressures on selling prices;

our ability to introduce, and the market acceptance of, new products;

changes in product revenue mix resulting from changes in customer demand;

the level of orders received which can be shipped in a quarter because of the tendency of customers to wait until late in a quarter to commit to purchase due to capital expenditure approvals and constraints occurring at the end of a quarter, or the hope of obtaining more favorable pricing from a competitor seeking the business;

engineering and development investments relating to new product introductions, and the expansion of manufacturing, outsourcing and engineering operations in Asia;



provisions for excess and obsolete inventory relating to the lack of demand for and the discontinuance of products;

impairment charges for certain long-lived and intangible assets and goodwill;

parallel or multi-site testing could lead to a decrease in the ultimate size of the market for our products; and

the ability of our suppliers and subcontractors to meet product quality or delivery requirements needed to satisfy customer orders for our products, especially if product demand continues to increase.

As a result of the foregoing and other factors, we have experienced and may continue to experience material fluctuations in future operating results on a quarterly or annual basis which could materially and adversely affect our business, financial condition, operating results and stock price.

***We are subject to risks of operating internationally.***

A significant portion of our total revenue is derived from customers outside the United States. Our international sales and operations are subject to significant risks and difficulties, including:

unexpected changes in legal and regulatory requirements affecting international markets;

changes in tariffs and exchange rates;

social, political and economic instability, acts of terrorism and international conflicts;

difficulties in protecting intellectual property;

difficulties in accounts receivable collection;

cultural differences in the conduct of business;

difficulties in staffing and managing international operations; and

compliance with customs regulations.

In addition, an increasing portion of our products and the products we purchase from our suppliers are sourced or manufactured in foreign locations, including China, and a large portion of the devices our products test are fabricated and tested by foundries and subcontractors in Taiwan, Singapore, China and other parts of Asia. As a result, we are subject to a number of economic and other risks, particularly during times of political or financial instability in these regions. Disruption of manufacturing or supply sources in these international locations could materially adversely impact our ability to fill customer orders and potentially result in lost business.

***If we fail to develop new technologies to adapt to our customers' needs and if our customers fail to accept our new products, our revenues will be adversely affected.***

We believe that our technological position depends primarily on the technical competence and creative ability of our engineers. In a rapidly evolving market, such as ours, the development of new technologies, commercialization of those technologies into products and market

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acceptance and customer demand for those products are critical to our success. Successful product development, introduction and acceptance depend upon a number of factors, including:

new product selection;

ability to meet customer requirements;

development of competitive products by competitors;

timely and efficient completion of product design;

timely and efficient implementation of manufacturing and manufacturing processes;

timely remediation of product performance issues, if any, identified during testing;

assembly processes and product performance at customer locations;

differentiation of our products from our competitors' products;

management of customer expectations concerning product capabilities and product life cycles;

ability to attract and retain technical talent; and

innovation that does not infringe on the intellectual property rights of third parties.

***If our suppliers do not meet product or delivery requirements, we could have reduced revenues and earnings.***

Certain components, including semiconductor chips, may be in short supply from time to time because of high industry demand or the inability of some vendors to consistently meet our quality or delivery requirements. Approximately 30% of material purchases require some custom work where having multiple suppliers would be cost prohibitive. If any of our suppliers were to cancel contracts or commitments or fail to meet the quality or delivery requirements needed to satisfy customer orders for our products, we could lose time-sensitive customer orders and have significantly decreased revenues and earnings, which would have a material adverse effect on our business, results of operations and financial condition. In addition, we rely on contract manufacturers for certain subsystems used in our products, and our ability to meet customer orders for those products depends upon the timeliness and quality of the work performed by these subcontractors, over whom we do not exercise any control.

To a certain extent, we are dependant upon the ability of our suppliers and contractors to help meet increased product or delivery requirements. Many of our suppliers implemented cost reduction strategies to address the slowdowns in the market. In the second half of 2009, several of our suppliers had material shortages which increased the lead times for certain of our products. We implemented programs to minimize the impact of these shortages. However, it may be difficult for certain suppliers to meet delivery requirements in a period of rapid growth, therefore impacting our ability to meet our customers' demands.

We rely on the financial strength of our suppliers. There can be no assurance that the loss of suppliers either as a result of financial viability, bankruptcy or otherwise will not have a material adverse effect on our business, results of operations or financial condition.

***Our operations may be adversely impacted if our outsourced contract manufacturers or service providers fail to perform.***

We depend on Flextronics International Ltd. ( Flextronics ) to manufacture and test our FLEX and J750 family of products from its facility in China. If for any reason Flextronics cannot provide us with these products in a timely fashion, or at all, we may not be able to sell these products to our customers until we enter a similar arrangement with an alternative contract manufacturer. If we experience a problem with our supply of products from Flextronics, it may take us significant time to either manufacture the product or find an alternate contract manufacturer, which could result in substantial expense and disruption to our business.

We have also outsourced a number of our general and administrative functions, including information technology, to reputable service providers, many of which are in foreign countries, sometimes impacting communication with them because of language and time difficulties. Their presence in foreign countries also increases the risk they could be exposed to political risk. Additionally, there may be difficulties encountered in coordinating the outsourced operations with existing functions and operations. If we fail in successfully





coordinating and managing the outsourced service providers, it may cause an adverse effect on our operations which could result in a decline in our stock price.

***We may not fully realize the benefits of our acquisition of Nextest, Eagle Test, and other businesses that we may acquire or strategic alliances that we may form in the future.***

In January 2008, we acquired Nextest, and in November 2008, we acquired Eagle Test. We may continue to acquire additional businesses, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing businesses. We may not be able to realize the expected synergies and cost savings from the integration with our existing operations of Nextest, Eagle Test and other businesses or technologies that we may acquire. In addition, the integration process for our acquisitions may be complex, costly and time consuming and include unanticipated issues, expenses and liabilities. We may have difficulty in developing, manufacturing and marketing the products of a newly acquired company in a manner that enhances the performance of our combined businesses or product lines and allows us to realize value from expected synergies. Following an acquisition, we may not achieve the revenue or net income levels that justify the acquisition. Acquisitions may also result in one-time charges (such as acquisition-related expenses, write-offs or restructuring charges) or in the future, impairment of goodwill, that adversely affect our operating results. Additionally, we may fund acquisitions of new businesses, strategic alliances or joint ventures by utilizing our cash, raising debt, issuing shares of our common stock, or by other means.

***We have increased our indebtedness.***

On April 6, 2009, we completed a registered underwritten offering of \$190.0 million aggregate principal amount of 4.50% Convertible Senior Notes (the Notes) due March 15, 2014 and received net proceeds of approximately \$163.0 million. We used approximately \$123.3 million of the net proceeds of this offering to repay all amounts outstanding under our revolving credit facility. Although we are no longer subject to the restrictive covenants under the revolving credit facility, we have incurred approximately \$190.0 million principal amount of new indebtedness that the holders of the Notes may require us to repurchase upon the occurrence of certain fundamental changes involving the Company. In addition, on March 31, 2009, our wholly-owned subsidiary in Japan, Teradyne K.K., incurred approximately \$10.0 million in indebtedness that we guaranteed. The level of our indebtedness, among other things, could:

make it difficult to make payments on our other obligations;

make it difficult to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;

require the dedication of a substantial portion of any cash flow from operations to service for indebtedness, thereby reducing the amount of cash flow available for other purposes, including capital expenditures; and

limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we compete.

***Our convertible note hedge and warrant transactions could impact the value of our stock.***

Concurrent with the offering of the Notes, we entered into a convertible note hedge transaction with Goldman, Sachs & Co. (the hedge counterparty) with a strike price equal to the initial conversion price of the Notes. The convertible note hedges cover, subject to customary antidilution adjustments, approximately 34,703,196 shares of our common stock.

Separately and concurrent with the pricing of the Notes, we entered into a warrant transaction with the hedge counterparty with a strike price of \$7.6650 per share, which is 75% higher than the closing price of our common stock on March 31, 2009. The warrants will be net share settled and cover, subject to customary

antidilution adjustments, approximately 31,963,470 shares of our common stock. On April 1, 2009, the hedge counterparty exercised its option to purchase warrants covering, subject to customary antidilution adjustments, an additional 2,739,726 shares of our common stock. However, we will not be obligated to deliver to the hedge counterparty more than 34,526,500 shares of common stock upon exercise of the warrants (which amount represents less than 19.99% of our outstanding shares of common stock as of March 31, 2009, without giving effect to any shares of common stock issuable pursuant to the warrant transaction), subject to customary antidilution adjustments.

The convertible note hedges are expected to reduce the potential dilution to our common stock upon any conversion of the Notes. However, the warrant transaction could separately have a dilutive effect to the extent that the market value per share of our common stock exceeds the applicable strike price of the warrant. The net cost of the convertible note hedge transaction to us, after being partially offset by the proceeds from the sale of the warrants, was approximately \$21.7 million.

In connection with establishing its initial hedge of these convertible note hedge and warrant transactions, the hedge counterparty has entered into various derivative transactions with respect to our common stock and/or purchase shares of our common stock or other securities, including the Notes, concurrent with, or shortly after, the pricing of the Notes. In addition, the hedge counterparty may modify its hedge positions by entering into or unwinding various derivative transactions with respect to our common stock or by selling our common stock or other securities, including the Notes, in secondary market transactions (and may do so during any observation period related to the conversion of the Notes). These activities could adversely impact the value of our common stock and the Notes.

***We may not be able to pay our debt and other obligations.***

If our cash flow is inadequate to meet our obligations, we could face substantial liquidity problems. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments on the Notes or certain of our other obligations, we would be in default under the terms thereof, which would permit the holders of those obligations to accelerate their maturity and also could cause defaults under future indebtedness we may incur. Any such default could have a material adverse effect on our business, prospects, financial position and operating results. In addition, we cannot be certain that we would be able to repay amounts due in respect of the Notes if those obligations were to be accelerated following the occurrence of any other event of default as defined in the instruments creating those obligations, or if the holders of the Notes require us to repurchase the Notes upon the occurrence of a fundamental change involving us. Moreover, we cannot be certain that we will have sufficient funds or will be able to arrange for financing to pay the principal amount due on the Notes at maturity.

***We have taken measures to address slowdowns in the market for our products, which could have long-term negative effects on our business or impact our ability to adequately address a rapid increase in customer demand.***

We have taken measures to address slowdowns in the market for our products. These measures include shifting more of our operations to lower cost regions, outsourcing manufacturing processes, divesting of certain businesses, implementing material cost reduction programs, reducing the number of our employees, and reducing planned capital expenditures and expense budgets. We cannot ensure that the measures we have taken will not impair our ability to effectively develop and market products, to remain competitive in the industries in which we compete, to operate effectively, to operate profitably during slowdowns or to effectively meet a rapid increase in customer demand. These measures may have long-term negative effects on our business by reducing our pool of technical talent, decreasing or slowing improvements in our products, making it more difficult to hire and retain talented individuals and to quickly respond to customers or competitors in an upward cycle.

***We may incur significant liabilities if we fail to comply with environmental regulations.***

We are subject to both domestic and international environmental regulations and statutory strict liability relating to the use, storage, discharge, site cleanup and disposal of hazardous chemicals used in our manufacturing processes. If we fail to comply with present and future regulations, or are required to perform site remediation, we could be subject to future liabilities or cost, including penalties or the suspension of production. Present and future regulations may also:

restrict our ability to expand facilities;

restrict our ability to ship certain products into the European Union or elsewhere;

require us to modify our operations logistics;

require us to acquire costly equipment; or

require us to incur other significant costs and expenses.

Pursuant to present regulations and agreements, we are conducting groundwater and subsurface assessment and monitoring and are implementing remediation and corrective action plans for facilities located in California, Massachusetts and New Hampshire which are no longer conducting manufacturing operations. As of December 31, 2009, we have not incurred material costs as result of the monitoring and remediation steps taken at the California, Massachusetts and New Hampshire sites.

On January 27, 2003, the European Union adopted the following directives: (i) the directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (the RoHS Directive ); and (ii) the directive on Waste Electrical and Electronic Equipment (the WEEE Directive ). The WEEE Directive became effective August 13, 2005 and the RoHS Directive became effective on July 6, 2006. Both the RoHS Directive and the WEEE Directive alter the form and manner in which electronic equipment is imported, sold and handled in the European Union. Other jurisdictions, such as China, have followed the European Union's lead in enacting legislation with respect to hazardous substances and waste removal. Ensuring compliance with the RoHS Directive, the WEEE Directive and similar legislation in other jurisdictions, and integrating compliance activities with our suppliers and customers could result in additional costs and disruption to operations and logistics and thus, could have a negative impact on our business, operations and financial condition.

***We currently are and in the future may be subject to litigation that could have an adverse effect on our business.***

From time to time, we may be subject to litigation or other administrative and governmental proceedings that could require significant management time and resources and cause us to incur expenses and, in the event of an adverse decision, pay damages in an amount that could have a material adverse effect on our financial position or results of operations.

***Third parties may claim we are infringing their intellectual property and we could suffer significant litigation costs, licensing expenses or be prevented from selling our products.***

We have been sued for patent infringement in the past and receive notifications from time to time that we may be in violation of patents held by others. An assertion of patent infringement against us, if successful, could have a material adverse effect on our ability to sell our product or it could force us to seek a license to the intellectual property rights of others or alter such products so that they no longer infringe the intellectual property rights of others. A license could be very expensive to obtain or may not be available at all. Similarly, changing our products or processes to avoid infringing the rights of others may be costly or impractical. Additionally, patent litigation could require a significant use of management resources and involve a lengthy and expensive defense, even if we eventually prevail. If we do not prevail, we might be forced to pay significant damages, obtain licenses, modify our products, or stop making our products; each of which could have a material adverse effect on our financial condition and operating results.

***We may incur higher tax rates than we expect and may have exposure to additional international tax liabilities and costs.***

We are subject to paying income taxes in the United States and various other countries where we operate. Our effective tax rate is dependent on where our earnings are generated and the tax regulations and the interpretation and judgment of administrative tax or revenue entities in the United States and such other countries. We have pursued a global tax strategy which could adversely be affected by our failure to expand operations or earnings in certain countries, the mix of earnings and tax rates in the countries where we operate, changes to tax laws or an adverse tax ruling by administrative entities. We are also subject to tax audits in the countries where we operate. Any material assessment resulting from an audit from an administrative tax or revenue entity could also negatively affect our financial results.

As a multinational corporation, we are subject to income taxes as well as non-income based taxes, in both the United States and various foreign jurisdictions. In certain foreign jurisdictions, we qualify for tax incentives based on our ability to meet, on a continuing basis, various tests relating to our employment levels, research and development expenditures and other qualification requirements in a particular foreign jurisdiction. While we intend to operate in such a manner to maintain and maximize our tax incentives, no assurance can be given that we have so qualified or that we will so qualify for any particular year or jurisdiction. If we fail to qualify and to remain qualified for certain foreign tax incentives, we may be subject to further taxation or an increase in our effective tax rate which would adversely impact our financial results. In addition, we may incur additional costs, including headcount expenses, in order to obtain or maintain a foreign tax incentive in a particular foreign jurisdiction.

***We have significant guarantees and indemnification obligations.***

From time to time we make guarantees to customers regarding the performance of our products and guarantee certain indebtedness, performance obligations or lease commitments of our subsidiary and affiliate companies. We also have agreed to provide indemnification to our officers, directors, employees and agents, to the extent permitted by law, arising from certain events or occurrences while the officer, director, employee or agent, is or was serving at our request in such capacity. If we become liable under any of these obligations, it could materially and adversely affect our business, financial condition and operating results. For additional information see Note J: Commitments and Contingencies Guarantees and Indemnification Obligations in Notes to Consolidated Financial Statements.

***If we are unable to protect our intellectual property ( IP ), we may lose a valuable asset or may incur costly litigation to protect our rights.***

We protect the technology that is incorporated in our products in several ways, including through patent, copyright, and trade secret protection and by contractual agreement. However, even with these protections, our IP may still be challenged, invalidated or subject to other infringement actions. While we believe that our IP has value in the aggregate, no single element of our IP is in itself essential. If a significant portion of our IP is invalidated or ineffective, our business could be materially adversely affected.

***Our business may suffer if we are unable to attract and retain key employees.***

Competition for employees with skills we require is intense in the high technology industry. Our success will depend on our ability to attract and retain key technical employees. The loss of one or more key or other employees, a decrease in our inability to attract additional qualified employees, or the delay in hiring key personnel could each have a material adverse effect on our business, results of operations or financial condition.

*We may have additional pension funding obligations as a result of the weak performance of financial markets and its effect on plan assets.*

Our future funding obligations for our U.S. defined benefit pension plan qualified with the Internal Revenue Service ( IRS ) depend upon the future performance of assets for this plan, the level of interest rates used to determine funding levels, the level of benefits provided for by the plans and any changes in government laws and regulations. Our defined benefit pension plan currently holds a significant amount of equity and fixed income securities. Due to our contributions and the strong performance of these assets during prior periods, our U.S. defined benefit pension plan has been over funded prior to 2008, which allowed us to maintain a surplus without making additional contributions to the plan. However, due to significant declines in financial markets and deterioration in the value of our plan assets, we made additional discretionary contributions to our U.S. Defined Benefit Pension Plan in the fourth quarter of 2009 and first quarter of 2010 and may make additional contributions in future reporting periods, which would negatively affect our cash flow.

*Acts of war, terrorist attacks and the threat of domestic and international terrorist attacks may adversely impact our business.*

Acts of war and terrorist attacks may cause damage or disruption to our employees, facilities, customers, suppliers and distributors which could have a material adverse effect on our business, results of operation or financial condition. As we, our outsourced manufacturing providers and our suppliers sell and manufacture products both in the United States and internationally, the threat of future terrorist attacks could lead to changes in security and operations at these locations which could increase our operating costs and which may adversely affect our business. Such conflicts may also cause damage or disruption to transportation and communication systems. We have completed some emergency preparedness planning and have a business continuity plan in case some of these events occur. However, we cannot be certain that our plans will be effective in the event of a disaster or other situation. All of these conditions make it difficult for us, and our customers, to accurately forecast and plan future business activities and could have a material adverse effect on our business, financial condition and results of operations.

*Provisions of our charter and by-laws and Massachusetts law make a takeover of Teradyne more difficult.*

During 2007, we made several important corporate governance changes, which included declassification of our Board of Directors, adoption of majority voting standard for the election of our directors, and early termination of our shareholder rights plan. Despite these changes, there are still provisions in our basic corporate documents and under Massachusetts law that could discourage, delay or prevent a change in control, even if a change in control may be regarded as beneficial to some or all of our stockholders.

**Item 1B: Unresolved Staff Comments**

None.

**Item 2: Properties**

The following table provides certain information as to our principal general offices and manufacturing facilities.

Location	Operating Segment	Major Activity+	Approximate Square Feet of Floor Space
<b>Properties Owned:</b>			
North Reading, Massachusetts	Semiconductor Test, Systems Test Group & Corporate Offices	1-2-3-4-5	413,000
Agoura Hills, California	Semiconductor Test	3-5	120,000
Kumamoto, Japan	Semiconductor Test	2-3-4-5	77,000
<b>Subtotal of Owned Properties</b>			<b>610,000</b>
<b>Properties Leased:</b>			
Westford, Massachusetts			230,000(a)
Cebu, Philippines	Semiconductor Test	2-6	135,000(b)
San Jose, California	Semiconductor Test (Nextest business unit)	2-3-4-5	128,000
Buffalo Grove, Illinois	Semiconductor Test (Eagle Test business unit)	2-3-4-5	84,600
Stockport, England	Systems Test Group (Diagnostic Solutions business unit)	2-3-4-5-6	75,000
Woburn, Massachusetts	Semiconductor Test & Systems Test Group	2-6	69,000
North Reading, Massachusetts	Corporate Offices	1	67,600(c)
Agoura Hills, California	Semiconductor Test	3	57,000
Shanghai, China	Semiconductor Test & Systems Test Group	2-5-6	43,000
Tai Yuan, Taiwan	Semiconductor Test & Systems Test Group	5	43,000
San Jose, California	Semiconductor Test	4-5	36,000
<b>Subtotal of Leased Properties</b>			<b>968,200</b>
<b>Total Square Feet of Floor Space</b>			<b>1,578,200</b>

+ Major activities have been separated into the following categories: 1. Corporate Administration, 2. Sales Support and Manufacturing, 3. Engineering and Development, 4. Marketing, 5. Sales and Administration, and 6. Storage and Distribution.

(a) This space consists of two buildings. One building is subleased and the other is vacant.

(b) This space consists of two buildings.

(c) In 2009, Teradyne completed the consolidation and relocation of its operations into the three remaining buildings on the campus.

**Item 3: Legal Proceedings**

On July 11, 2008, Xyratex Technology, Ltd ( Xyratex ) filed a complaint against us in the United States District Court in Los Angeles, California alleging that certain of our disk drive test products infringe one of Xyratex 's patents. The suit sought temporary, preliminary and permanent injunctive relief as well as unspecified monetary damages, including treble damages, for patent infringement. We filed separate complaints in the United States District Court in Los Angeles alleging that Xyratex 's disk drive test products infringe two of our patents and that Xyratex had engaged in anti-competitive conduct in violation of the federal antitrust laws. Prior to trial,

on December 14, 2009, the parties entered into a Settlement Agreement agreeing to settle all of the pending litigation between them. The settlement had no impact on our financial condition or results of operations. Although there can be no assurance, we do not expect the settlement to negatively impact our business.

On September 5, 2001, after our August 2000 acquisition of Herco Technology Corp. and Perception Laminates, Inc., the former owners of those companies filed a complaint against us and two of our then executive officers in the United States District Court in San Diego, California, asserting securities fraud and breach of contract related to the acquisition. The District Court dismissed certain of the plaintiffs' claims, granted partial summary judgment against them with respect to their breach of contract claim and denied their motion for reconsideration. In July 2007, after an appeal by the plaintiffs, the U.S. Court of Appeals for the Ninth Circuit affirmed in part and reversed in part the District Court rulings. We petitioned the Ninth Circuit for rehearing, which was denied, and the case was remanded back to the District Court. On August 29, 2008, the District Court granted us motion for judgment on the pleadings. On September 11, 2008, the plaintiffs filed their notice of appeal. In August 2009, the parties agreed to settle the litigation. The settlement had no impact on our financial condition or results of operations.

In November 2008, we received a general notice letter from the California Department of Toxic Substances Control ( DTSC ) that informed us of potential liability with respect to contamination at the BKK Corporation Landfill Facility Site in West Covina, California. This claim arose out of our acquisition of Perception Laminates in August 2000. Neither we nor Perception Laminates have ever conducted any operations at the West Covina site. We have asked the DTSC and the group of settling defendants to remove us as a Potentially Responsible Party ( PRP ) for this site.

In addition, we are subject to legal proceedings, claims and investigations that arise in the ordinary course of business such as, but not limited to, patent, employment, commercial and environmental matters. We believe that we have meritorious defenses against all pending claims and intend to vigorously contest them. While it is not possible to predict or determine the outcomes of any pending claims or to provide possible ranges of losses that may arise, we believe the potential losses associated with all of these actions are unlikely to have a material adverse effect on our business, financial position or results of operations.

**Item 4: *Reserved***



## PART II

**Item 5: Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities**

The following table shows the market range for our common stock based on reported sales price on the New York Stock Exchange.

Period	High	Low
2008		
First Quarter	\$ 13.13	\$ 8.75
Second Quarter	14.50	10.53
Third Quarter	11.38	7.88
Fourth Quarter	8.24	2.80
2009		
First Quarter	\$ 5.52	\$ 3.24
Second Quarter	7.65	4.40
Third Quarter	9.90	5.97
Fourth Quarter	10.96	8.09

The number of record holders of our common stock at February 22, 2010 was 2,586.

We have never paid cash dividends because it has been our policy to use earnings to finance expansion and growth. Payment of future cash dividends will rest within the discretion of our Board of Directors and will depend, among other things, upon our earnings, capital requirements, and financial condition.

See Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations Equity Compensation Plans, for information on our equity compensation plans and our performance graph.

In November 2007, Teradyne's Board of Directors (the Board) authorized a \$400 million stock repurchase program. During the three months and the year ended December 31, 2009, Teradyne did not repurchase any shares of common stock. The cumulative repurchases as of December 31, 2009 and 2008, totaled 8.5 million shares of common stock for \$102.6 million at an average price of \$12.14 per share. As of November 4, 2008, the Board suspended the stock repurchase program.

The following table includes information with respect to repurchases we made of our common stock during the quarter ended December 31, 2009 (in thousands except per share price):

Period	(a) Total Number of Shares (or units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may Yet Be Purchased Under the Plans or Programs
October 5, 2009 – November 1, 2009		\$		\$ 297,375
November 2, 2009 – November 29, 2009		\$		\$ 297,375
November 30, 2009 – December 31, 2009		\$		\$ 297,375

**Item 6: Selected Financial Data**

	2009	Years Ended December 31,			2005
		2008	2007	2006	
(dollars in thousands, except per share amounts)					
<b>Consolidated Statement of Operations Data (1)(2):</b>					
Net revenues	\$ 819,407	\$ 1,107,042	\$ 1,102,280	\$ 1,356,249	\$ 1,045,104
(Loss) income from continuing operations	(133,837)	(394,995)	71,883	208,162	(63,656)
(Loss) net income	(133,837)	(394,227)	77,711	198,757	90,648
(Loss) income from continuing operations per common share basic	(0.77)	(2.32)	0.39	1.07	(0.32)
(Loss) income from continuing operations per common share diluted	(0.77)	(2.32)	0.39	1.06	(0.32)
Net (loss) income per common share basic	(0.77)	(2.31)	0.42	1.02	0.46
Net (loss) income per common share diluted	(0.77)	(2.31)	0.42	1.01	0.46
<b>Consolidated Balance Sheet Data (1):</b>					
Total assets	1,235,337	1,241,655	1,555,288	1,721,055	1,859,732
Long-term debt obligations	141,100				1,819

- (1) As a result of the divestiture of Broadband Test Division and Connection Systems, we are reporting Broadband Test Division and Connection Systems as discontinued operations for all periods presented. See Note D: Discontinued Operations in the Notes to Consolidated Financial Statements for further discussion.
- (2) The Consolidated Statement of Operations Data for the year ended December 31, 2008 includes the results of operations of Nextest from January 24, 2008 and the results of operations of Eagle Test from November 15, 2008.

**Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations**

Statements in this Annual Report on Form 10-K which are not historical facts, so called forward looking statements, are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended. Investors are cautioned that all forward looking statements involve risks and uncertainties, including those detailed in Teradyne's filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements which reflect management's analysis only as of the date hereof. We assume no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting forward-looking statements, except as may be required by law.

## Overview

We design, develop, manufacture, and sell automatic test systems and solutions used to test complex electronics in the consumer electronics, automotive, computing, telecommunications, and aerospace and defense industries. Our automatic test equipment products and services include:

semiconductor test ( Semiconductor Test ) systems; and

military/aerospace ( Mil/Aero ) test instrumentation and systems, circuit-board test and inspection ( Commercial Board Test ) systems, automotive diagnostic and test ( Diagnostic Solutions ) systems and hard disk drive test ( HDD ) systems, collectively these products represent Systems Test Group .

We have a broad customer base which includes integrated device manufacturers ( IDMs ), outsourced sub-assembly and test providers ( OSATs ), wafer foundries, fabless companies that design, but contract with others for the manufacture of integrated circuits ( ICs ), manufacturers of circuit boards, automotive companies, HDD manufacturers, aerospace and military contractors as well as the United States Department of Defense.

The sales of our products and services are dependent, to a large degree, on customers who are subject to cyclical trends in the demand for their products. These cyclical periods have had, and will continue to have, a significant effect on our business since our customers often delay or accelerate purchases in reaction to changes in their businesses and to demand fluctuations in the semiconductor industry. Historically, these demand fluctuations have resulted in significant variations in our results of operations. This was particularly relevant beginning in the fourth quarter of fiscal year 2008 where we saw a significant decrease in revenue in our Semiconductor Test business which was impacted by the deteriorating global economy, which has negatively impacted the entire semiconductor industry. The sharp swings in the semiconductor industry in recent years have generally affected the semiconductor test equipment and services industry more significantly than the overall capital equipment sector.

In response to the business downturn, we implemented significant permanent and temporary cost reduction measures. We reduced headcount worldwide, cut capital spending, and imposed temporary salary reductions and furloughs on our workforce.

Due to the continued improvement in our business, we removed the temporary salary reductions and furloughs we imposed over the last year. We believe the permanent cost-cutting measures we took in the last several quarters will be of long term value. In addition, we believe our acquisitions of Nextest and Eagle Test and our entry into the high speed memory and HDD markets have enhanced our opportunities for growth. We will continue to invest in our business in anticipation of a broader recovery in our markets and to expand further our addressable markets while tightly managing our costs. As the fourth quarter of 2009 demonstrated, with our current cost structure, we can achieve significantly higher profitability than we achieved at comparable revenue levels in the past.

## Critical Accounting Policies and Estimates

We have identified the policies discussed below as critical to understanding our business and our results of operations and financial condition. The impact and any associated risks related to these policies on our business operations is discussed throughout Management's Discussion and Analysis of Financial Condition and Results of Operations where such policies affect our reported and expected financial results.

### *Preparation of Financial Statements and Use of Estimates*

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to inventories,

investments, goodwill, intangible and other long-lived assets, bad debts, income taxes, pensions, warranties, contingencies, and litigation. Management bases its estimates on historical experience and on appropriate and customary assumptions that are 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 may differ significantly from these estimates.

### ***Revenue Recognition***

We recognize revenue when there is persuasive evidence of an arrangement, title and risk of loss have passed, delivery has occurred or the services have been rendered, the sales price is fixed or determinable and collection of the related receivable is reasonably assured. Title and risk of loss generally pass to our customers upon shipment or at delivery destination point. In circumstances where either title or risk of loss pass upon destination, acceptance or cash payment, we defer revenue recognition until such events occur.

Our equipment includes embedded software which is considered incidental to the product. Revenue is recognized upon shipment or at delivery destination point, provided that customer acceptance criteria can be demonstrated prior to shipment. Certain contracts require us to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, revenue is deferred until customer acceptance has been received.

For multiple element arrangements, we defer the fair value of any undelivered elements of the contract. We also defer the portion of the sales price that is not due until acceptance, which represents deferred profit. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered item must be considered probable and substantially in our control. Fair value is the price charged when the element is sold separately. Our post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customer's ability to use the product. We defer revenue for the fair value of installation and training. Extended warranties constitute warranty obligations beyond one year and we defer revenue in accordance with Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) 605-20, *Separately Priced Extended Warranty and Product Maintenance Contracts*.

Our products are generally subject to warranty and related costs of the warranty are provided for in cost of revenue when product revenue is recognized. We classify shipping and handling costs in cost of revenue. Service revenue is recognized over the contractual period or as the services are performed.

We generally do not provide our customers with contractual rights of return for any of our products.

For transactions involving the sale of software which is not incidental to the product, revenue is recognized in accordance with ASC 985-605, *Software Revenue Recognition*. We recognize revenue when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable and collectability is probable. In instances where an arrangement contains multiple elements, revenue related to the undelivered elements is deferred to the extent that vendor-specific objective evidence of fair value ( VSOE ) exists for such elements. In instances where VSOE does not exist for one or more of the undelivered elements of an arrangement, all revenue related to the arrangement is deferred until all elements have been delivered. VSOE is the price charged when the element is sold separately. Revenue for the separate elements is only recognized where the functionality of the undelivered element is not essential to the delivered element.

For certain contracts eligible for contract accounting under ASC 605-35, *Revenue Recognition Construction-Type and Production-Type Contracts*, revenue is recognized using the percentage-of-completion accounting method based upon the percentage of incurred costs to estimated total costs. These arrangements require significant production, modification, or customization. In all cases, changes to total estimated costs and anticipated losses, if any, are recognized in the period in which they are determined. With respect to contract change orders, claims or similar items, judgment must be used in estimating related amounts and assessing the potential for realization. Such amounts are only included in the contract value when they can be reliably estimated and realization is reasonably assured, generally upon receipt of a customer approved change order.

### ***Inventories***

Inventories, which include materials, labor, and manufacturing overhead, are stated at the lower of cost (first-in, first-out basis) or net realizable value. On a quarterly basis, we use consistent methodologies to evaluate all inventories for net realizable value. We record a provision for both excess and obsolete inventory when such write-downs or write-offs are identified through the quarterly review process. The inventory valuation is based upon assumptions about future demand, product mix, and possible alternative uses.

### ***Equity Incentive and Stock Purchase Plans***

Effective January 1, 2006, we adopted the fair value recognition provision of ASC 718-10, *Stock Compensation*, using the modified prospective transition method and therefore have not restated results for prior periods. Under this transition method, stock based compensation expense for the years ended December 31, 2009, 2008 and 2007 includes compensation expense for all stock-based compensation awards granted prior to, but not yet vested as of January 1, 2006, and is calculated based on the grant date fair value estimated in accordance with the original provisions of ASC 718-10. Stock-based compensation expense for all stock-based compensation awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with the provisions of ASC 718-10. As required by ASC 718-10, we have made an estimate of expected forfeitures and are recognizing compensation costs only for those stock-based compensation awards expected to vest. The cumulative effect of the initial adoption of ASC 718-10 was not material. Prior to the adoption of ASC 718-10, we recognized stock-based compensation expense in accordance with Accounting Principles Board ( APB ) Opinion No. 25 ( APB 25 ).

On May 26, 2005, our Board of Directors approved the accelerated vesting of certain outstanding, unvested out of the money stock options awarded to employees, officers, and other eligible participants under our various stock option plans in effect at that time. The stock options that were accelerated had exercise prices that were in excess of \$13.26, the closing price of our common stock on the New York Stock Exchange on May 26, 2005, and ranged in exercise price from \$13.73 to \$41.37 per share. As a result of the vesting acceleration, options to purchase approximately 7.6 million shares became exercisable immediately, and we reduced the compensation expense we otherwise would have been required to record under ASC 718-10 by approximately \$48.6 million in the aggregate, on a pre-tax basis, over fiscal years 2006, 2007 and 2008.

### ***Income Taxes***

On a quarterly basis, we evaluate the realizability of our deferred tax assets by jurisdiction and assess the need for a valuation allowance. As a result of this review, undertaken at December 31, 2002, we concluded under applicable accounting criteria that it was more likely than not that our deferred tax assets would not be realized and established a valuation allowance in several jurisdictions, most notably the United States. Due to the continued uncertainty of realization, we have maintained our valuation allowance at December 31, 2009 and 2008.

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**Investments**

We account for our investments in debt and equity securities in accordance with the provisions of ASC 320-10, *Investments Debt and Equity Securities*. On a quarterly basis we review our investments to identify and evaluate those that have an indication of a potential other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include:

The length of time and the extent to which the market value has been less than cost;

The financial condition and near-term prospects of the issuer; and

The intent and ability to retain the investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value.

We determined that we did not intend to hold certain marketable securities for a period of time sufficient to allow for recovery in market value and recognized an other-than-temporary impairment loss in the amount of \$0.7 million and \$11.0 million, in the years ended December 31, 2009 and 2008, primarily related to mortgage and asset backed debt securities.

Effective January 1, 2008, we adopted ASC 820-10, *Fair Value Measurements and Disclosures* for financial assets and liabilities. As defined in ASC 820-10, fair value is the price that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants. We use the market and income approach techniques to value our financial instruments. ASC 820-10 requires that assets and liabilities carried at fair value be classified and disclosed in one of the following three categories:

Level 1: Quoted prices in active markets for identical assets as of the reporting date.

Level 2: Inputs other than Level 1, that are observable either directly or indirectly as of the reporting date. For example, a common approach for valuing fixed income securities is the use of matrix pricing. Matrix pricing is a mathematical technique used to value securities by relying on the securities' relationship to other benchmark quoted prices, and therefore is considered a Level 2 input.

Level 3: Unobservable inputs that are not supported by market data. Unobservable inputs are developed based on the best information available, which might include Teradyne's own data.

As a result of our November 14, 2008 acquisition of Eagle Test, we acquired \$26.5 million of auction rate securities (ARS) at fair value (\$30.0 million par value). In addition, we acquired (1) the right (UBS Put) to sell our ARS back to UBS at par plus interest, at our sole discretion, during a two-year period beginning on June 30, 2010, and (2) received an option to borrow up to 75% of the fair value of the ARS at no cost.

Beginning in February 2008 and continuing through December 31, 2009, the majority of the securities in our acquired ARS portfolio have experienced failed auctions, resulting in inability to sell these securities. Consequently, as set forth in the trust indentures, the coupon rate resets to a contractual rate which may not equal the current market rate. A failed auction results in a lack of liquidity in the securities but does not necessarily represent a deterioration of the credit quality of the issuer. All of our ARS are AAA, AA or A rated by one or more of the major credit rating agencies and are substantially guaranteed by a U.S. Department of Education agency or a third party insurer. At December 31, 2009, the underlying securities for the ARS have remaining maturities ranging from five to thirty years. Substantially all of these securities are collateralized by student loans.

Because the UBS Put is expected to allow us to sell our ARS securities at par within a relatively short time period and provides UBS with the ability to require us to sell the securities to them at any time between acceptance of the UBS Put through July 2012, we do not anticipate holding these investments to the earlier of maturity or redemption by the issuer. We intend to exercise the UBS Put and require UBS to repurchase our ARS at par at the earliest possible time, June 2010. As a result, as of the Eagle Test acquisition date (November 14,

2008), we classified the ARS as trading securities under ASC 320-10. During 2009, we recorded a net gain of \$0.7 million in interest income and during 2008 we recorded a loss of \$0.5 million, in interest expense and other, in our consolidated statement of operations for the changes in the ARS fair value.

In determining the fair value of our ARS and other investments, we utilize the provisions of ASC 820-10. In determining the value of our ARS as of December 31, 2009 and 2008 we utilized a discounted cash flow valuation model with the major inputs to such model based on our estimates of the assumptions that market participants would use in valuing these instruments. Specifically, we used the following key inputs to our valuation model as of December 31, 2009 and 2008:

**Term** we estimated a four to five-year expected life of the instruments, based on our expectations of the most likely time in which it would take for the instruments to be called by the issuer or liquidity to be restored to the market place.

**Probability of Default** we determined the probability of default using market credit spreads.

**Discount Rate** we determined the discount rate based on estimated yields of similar publicly traded instruments (e.g., similar collateral, terms, credit quality, etc.).

**Liquidity Risk Premium** given the recent instability in the financial markets and the low demand for auction rate securities, it is unclear as to when these securities will become liquid again. Without the auction process functioning again, it would be extremely difficult to estimate the expected holding period for these instruments. As a result, we included a 400 to 600 basis point premium to the discount rate to reflect the illiquidity of these bonds.

Based on these key inputs, we estimated the fair value of our ARS portfolio at \$23.6 million and \$26.0 million as of December 31, 2009 and 2008, respectively.

On November 14, 2008, we recognized the UBS Put as an asset measured at a fair value of \$2.7 million. At December 31, 2009 and 2008, the fair value of the UBS Put was \$2.8 million and \$3.3 million, respectively. We recorded a \$0.5 million loss in interest expense during 2009 for the decrease in the fair value of the UBS Put and a \$0.6 million gain in interest income during 2008 for an increase in the fair value. In determining the fair value of the UBS Put as of December 31, 2009, we assumed we would redeem the auction rate securities at par at the earliest possible time, June 30, 2010. We utilized a discounted cash flow model to determine the fair value of the UBS Put using the following assumptions: (1) a time period of 0.5 years, representing the period from December 31, 2009 to the earliest date we can expect to be able to redeem the UBS Put (June 30, 2010) and (2) a discount rate of 0.85%, which included a spread based on the credit default swap of UBS in order to account for the credit risk of UBS. As of December 31, 2008, the following assumptions were used: (1) a time period of 1.5 years and (2) a discount rate of 3.79%.

We have elected fair value treatment for the UBS Put under ASC 825-10, *Financial Instruments*. The UBS Put is the only instrument of this nature or type that we hold and for which we have elected the fair value option under ASC 825-10.

### ***Goodwill, Intangible and Long-Lived Assets***

We assess the impairment of identifiable intangibles, long-lived assets, and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important in the determination of an impairment include significant underperformance relative to historical or projected future operating results, significant changes in the manner that we use the acquired asset and significant negative industry or economic trends. When we determine that the carrying value of intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate commensurate with the associated risks. We assess goodwill for impairment at least annually in the fourth quarter, on a reporting unit

basis, or more frequently, when events and circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess.

We considered the significant adverse change in the business climate for our products at the end of 2008 a triggering event for testing the recoverability of the carrying amount of our long-lived assets. Based upon a review of the operations and activities associated with our long-lived assets, we determined that our long-lived assets should be grouped with other assets and liabilities and identified four asset groups (System on a Chip/High Speed Memory, Nextest, Eagle Test and Assembly Test) that resulted in the lowest level for which identifiable cash flows were largely independent of the cash flows of other assets and liabilities. We identified developed technology as the primary asset for the Nextest and Eagle Test asset groups, test system fixed assets as the primary asset for the System on a Chip/High Speed Memory asset group, and fixed assets as the primary asset for the Assembly Test asset group.

We tested the recoverability of our asset groups by comparing the sum of the undiscounted cash flows from the use and eventual disposition of the asset group to the asset group's carrying amount. The projections utilized in the undiscounted cash flows to test the recoverability of the asset groups were consistent with the underlying projections utilized in our 2008 goodwill impairment evaluation, except that the undiscounted cash flows included only the future cash flows directly associated with the direct use and eventual disposition of the asset group. The sum of the undiscounted cash flows exceeded the carrying amount of the asset groups and, as a result, the carrying amount of asset groups was deemed recoverable. As a result, no impairment loss was recognized.



**SELECTED RELATIONSHIPS WITHIN THE CONSOLIDATED  
STATEMENTS OF OPERATIONS**

	Year Ended December 31,		
	2009	2008	2007
Percentage of net revenue:			
Net revenue:			
Products	72.7%	75.5%	78.2%
Services	27.3	24.5	21.8
Total net revenue	100.0	100.0	100.0
Cost of revenues:			
Cost of products	47.2	40.8	39.0
Cost of services	14.8	14.2	14.4
Total cost of revenue	62.0	55.0	53.4
Gross profit	38.0	45.0	46.6
Operating expenses:			
Engineering and development	20.1	19.6	18.6
Selling and administrative	24.5	22.4	22.5
Acquired intangible assets amortization	3.9	1.9	0.3
In-process research and development		0.1	1.5
Restructuring and other, net	4.5	5.6	(0.1)
Goodwill impairment		29.8	
Total operating expenses	53.0	79.4	42.8
Interest and other, net	(2.4)	(0.2)	3.4
(Loss) income from continuing operations before income taxes	(17.4)	(34.6)	7.2
(Benefit) Provision for income taxes	(1.1)	1.1	0.7
(Loss) income from continuing operations	(16.3)%	(35.7)%	6.5%

### Results of Operations

#### *Discontinued Operations*

On August 1, 2007, we completed the sale of the Broadband Test Division to Tollgrade Communications, Inc. for \$11.3 million in cash. Broadband Test Division had revenues for the seven month period ended July 31, 2007 of \$11.2 million. Loss from discontinued operations of our Broadband Test Division for the year ended December 31, 2007 was \$6.3 million. In 2007, we recorded a gain on the sale of Broadband Test Division of \$5.9 million, net of a tax provision of \$0.4 million.

In accordance with ASC 360-10, we are reporting Broadband Test Division as discontinued operations in the consolidated financial statements for all periods presented throughout this Annual Report on Form 10-K. Unless indicated otherwise, the discussion and amounts provided in this Results of Operations section and elsewhere in this Form 10-K relate to continuing operations only.

#### *Book to Bill Ratio*

Book to bill ratio is calculated as net bookings divided by net sales. Book to bill ratio by reportable segment was as follows:

**Three months ended December 31,**  
**2009                      2008                      2007**

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Semiconductor Test	1.3	0.7	1.1
Systems Test Group	0.6	1.5	1.2
Total Company	1.1	0.9	1.1

**Revenues**

Net revenues for our two reportable segments were as follows:

	2009	2008	2007	2008-2009 Dollar Change	2007-2008 Dollar Change
	(in millions)				
Semiconductor Test	\$ 552.4	\$ 900.3	\$ 876.5	\$ (347.9)	\$ 23.8
Systems Test Group	267.0	206.7	225.8	60.3	(19.1)
	\$ 819.4	\$ 1,107.0	\$ 1,102.3	\$ (287.6)	\$ 4.7

Semiconductor Test revenue decreased \$347.9 million or approximately 39% from 2008 to 2009, due to excess test capacity at our customers as a result of the global economic downturn. The Eagle Test acquisition which was completed in November of 2008 added \$61.0 million of revenue in 2009 compared to \$2.5 million in 2008.

Semiconductor Test revenue increased \$23.8 million or approximately 3% from 2007 to 2008, primarily due to \$79.4 million of sales from our Nextest acquisition partially offset by lower sales due to decreased demand related to SOC device units growing at a lower rate in 2008 compared to 2007.

The increase in Systems Test Group revenue of \$60.3 million or approximately 29% from 2008 to 2009 was primarily due to sales of Hard Disk Drive test systems, partially offset by a decrease in Commercial Board Test and Diagnostic Solutions sales, while Mil/Aero product and service sales remained flat.

Systems Test Group revenue decreased \$19.1 million or approximately 8% from 2007 to 2008, primarily due to a lower Mil/Aero board test program-related sales.

Our two reportable segments accounted for the following percentages of consolidated net revenue for each of the last three years:

	2009	2008	2007
Semiconductor Test	67%	81%	80%
Systems Test Group	33	19	20
	100%	100%	100%

Net revenue by region as a percentage of total revenue was as follows:

	2009	2008	2007
United States	26%	22%	23%
Taiwan	14	18	13
Malaysia	11	6	7
South East Asia	10	10	8
Europe	10	10	12
Thailand	9	3	1
Singapore	8	10	15
Japan	6	11	12
Korea	5	7	6
Rest of the World	1	3	3
	100%	100%	100%

The breakout of product and service revenue for the past three years was as follows:

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	2009	2008	2007 (in millions)	2008-2009 Dollar Change	2007-2008 Dollar Change
Product Revenue	\$ 595.3	\$ 836.0	\$ 861.6	\$ (240.7)	\$ (25.6)
Service Revenue	224.1	271.0	240.7	(46.9)	30.3
	\$ 819.4	\$ 1,107.0	\$ 1,102.3	\$ (287.6)	\$ 4.7

Our product revenue decreased \$240.7 million or 29% in 2009 from 2008 due to lower sales across all Semiconductor Test, Commercial Board Test and Diagnostic Solutions products as a result of excess test capacity at our customers due to the global economic downturn. The decrease was partially offset by sales of Hard Disk Drive test systems. The Eagle Test acquisition which was completed in November of 2008 added \$52.6 million of product revenue in 2009. Service revenue, which is derived from the servicing of our installed base of products and includes maintenance contracts, repairs, extended warranties, parts sales, and applications support, decreased \$46.9 million or 17% due to the global economic downturn.

Our product revenue decreased \$25.6 million or 3% in 2008 from 2007 due to decreased demand. Service revenue increased \$30.3 million or 13% due to a larger installed base.

In 2009, revenues from one customer accounted for approximately 12% of total revenue. In 2008 and 2007, no single customer accounted for more than 10% of our consolidated net revenue.

In 2009, 2008, and 2007, our three largest customers in the aggregate accounted for 26%, 14%, and 16% of consolidated net revenue, respectively.

### Gross Profit

	2009	2008	2007	2008-2009 Dollar / Point Change	2007-2008 Dollar / Point Change
	(dollars in millions)				
Gross Profit	\$ 311.6	\$ 498.2	\$ 513.4	\$ (186.6)	\$ (15.2)
Percent of Total Revenue	38.0%	45.0%	46.6%	(7.0)	(1.6)

Gross profit as a percentage of revenue decreased from 2008 to 2009 by 7.0 percentage points. This decrease in gross profit was the result of a decrease of 5.2 points due to lower product sales volume, a decrease of 4.1 points related to higher product revenue as a percentage of total revenue, which included the growth of Hard Disk Drive test system revenues, and a decrease of 1.5 points for a charge to adjust Eagle Test acquired inventory to fair value. These decreases were partially offset by an increase of 3.8 points primarily from lower operations spending due to workforce reductions and lower freight and warranty charges, which were the result of lower product sales.

Gross profit as a percentage of revenue decreased from 2007 to 2008 by 1.6 percentage points. A decrease of 2.5 points was due to a \$27.6 million increase in provision for excess inventory recorded as a result of the significant decrease in forecasted semiconductor demand coupled with a product transition; this decrease was partially offset by improved service margins in our Semiconductor Test group.

The breakout of product and service gross profit was as follows:

	2009	2008	2007	2008-2009 Dollar / Point Change	2007-2008 Dollar / Point Change
	(dollars in millions)				
Product Gross Profit	\$ 208.5	\$ 384.8	\$ 431.1	\$ (176.3)	\$ (46.3)
Percent of Product Revenue	35.0%	46.0%	50.0%	(11.0)	(4.0)
Service Gross Profit	\$ 103.1	\$ 113.4	\$ 82.3	\$ (10.3)	\$ 31.1
Percent of Service Revenue	46.0%	41.8%	34.2%	4.2	7.6

We assess the carrying value of our inventory on a quarterly basis by estimating future demand and comparing that demand against on-hand and on-order inventory positions. Forecasted revenue information is obtained from the sales and marketing groups and incorporates factors such as backlog and future revenue demand. This quarterly process identifies obsolete and excess inventory. Obsolete inventory, which represents items for which there is no demand, is fully reserved. Excess inventory, which represents inventory items that are not expected to be consumed during the next four quarters, is written-down to estimated net realizable value.



During the year ended December 31, 2009, we recorded an inventory provision of \$28.0 million included in cost of revenues, due to the following factors:

Downward revisions to previously forecasted demand levels as a result of worsening economic conditions experienced in the semiconductor and automotive industries primarily in the first half of 2009 resulted in an inventory provision of \$16.7 million for inventory not expected to be consumed;

A decline in demand versus forecast for our Liquid Crystal Display ( LCD ) test product due to the global economic downturn, lower product pricing by competitors, the introduction of a new product by a competitor and consolidation among a number of the expected buyers of the product, resulted in an inventory provision of \$8.6 million; and

During late 2008, we introduced the next versions of our Nextest Magnum memory test product. At that time, it was anticipated that demand would continue for the existing version of the product within its installed base of customers. An overall decline in the memory market combined with a portion of our customers accelerating their purchasing of the newer version of the product resulted in an inventory provision of \$2.7 million.

Of the \$28.0 million of total excess and obsolete provisions recorded in 2009, \$20.3 million was related to Semiconductor Test and \$7.7 million was related to Systems Test Group.

During the year ended December 31, 2008, we recorded an inventory provision of \$29.4 million included in cost of revenues, due to the following factors:

In the third quarter of 2008, we recorded an inventory provision of \$20.2 million related to wireless instrumentation associated with our Semiconductor Test segment's FLEX Test Platform. In the first half of 2008, there had been a significant increase in demand for our wireless instrumentation. In the third quarter of 2008, this wireless instrumentation demand decreased abruptly causing a reduction in forecasted demand. This significant decrease in demand combined with an upcoming wireless instrumentation product transition resulted in an inventory write-down of \$20.2 million; and

The remainder of the charge of \$9.2 million primarily reflects downward revisions to previously forecasted demand levels as a result of worsening economic conditions experienced in the semiconductor test industry at the end of 2008.

Of the \$29.4 million of total excess and obsolete provisions recorded in 2008, \$24.9 million was related to Semiconductor Test and \$4.5 million was related to Systems Test Group.

The provision for excess and obsolete inventory included in cost of revenues for the year ended December 31, 2007 was \$1.8 million. Of the \$1.8 million of total excess and obsolete provisions recorded, \$0.5 million related to Semiconductor Test and \$1.3 million related to Systems Test Group.

During the year ended December 31, 2009, 2008 and 2007, we scrapped \$31.6 million, \$9.8 million and \$33.5 million of inventory, respectively, and sold \$4.3 million, \$2.4 million and \$1.1 million of previously written-down or written-off inventory, respectively. As of December 31, 2009, we had inventory related reserves for amounts which had been written-down or written-off totaling \$129.7 million. We have no pre-determined timeline to scrap the remaining inventory.

**Engineering and Development**

Engineering and development expenses were as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
	(dollars in millions)				
Engineering and Development	\$ 164.8	\$ 216.5	\$ 204.3	\$ (51.7)	\$ 12.2
Percent of Total Revenue	20.1%	19.6%	18.6%		

The decrease of \$51.7 million in engineering and development expenses from 2008 to 2009 was mainly due to a \$54.9 million decrease in spending as a result of workforce reductions and lower project spending and a \$6.2 million decrease due to temporary salary reductions. This decrease was partially offset by additional costs of \$9.4 million related to the acquisition of Eagle Test.

The increase of \$12.2 million in engineering and development expenses from 2007 to 2008 was mainly due to an increase of \$10.3 million in spending related to investments in adjacent markets, an increase of \$12.9 million due to the acquisition of Nextest and Eagle Test, partially offset by a decrease in other Semiconductor Test spending primarily related to headcount reduction of \$8.3 million and lower variable employee compensation of \$2.8 million.

**Selling and Administrative**

Selling and administrative expenses were as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
	(dollars in millions)				
Selling and Administrative	\$ 200.4	\$ 247.8	\$ 248.1	\$ (47.4)	\$ (0.3)
Percent of Total Revenue	24.5%	22.4%	22.5%		

The decrease in selling and administrative spending of \$47.4 million from 2008 to 2009 is due primarily to a \$57.3 million decrease from workforce reductions and on-going cost reduction initiatives and a \$9.9 million decrease due to temporary salary reductions, partially offset by additional costs of \$19.8 million related to the acquisition of Eagle Test.

The decrease in selling and administrative spending of \$0.3 million from 2007 to 2008 consists primarily of the following: \$14.7 million decrease due to lower labor costs from reductions in headcount, \$7.0 million decrease due to lower variable employee compensation, partially offset by \$18.5 million increase due to the acquisition of Nextest and \$3.0 million increase related to the acquisition of Eagle Test.

**Acquired Intangible Assets Amortization**

Acquired intangible assets amortization expense was as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
	(dollars in millions)				
Acquired Intangible Assets Amortization	\$ 32.3	\$ 20.6	\$ 3.7	\$ 11.7	\$ 16.9
Percent of Total Revenue	3.9%	1.9%	0.3%		

Acquired intangible assets amortization expense increased from 2008 to 2009 due to the Eagle Test acquisition which was completed in November of 2008. Acquired intangible assets amortization expense increased from 2007 to 2008 due to the acquisitions of Nextest and Eagle Test.



### **Goodwill Impairment**

In 2008, we recorded a non-cash impairment charge of \$329.7 million. We experienced a worsening in our demand outlook during the fourth quarter of 2008. This sharp decline led to a non-cash impairment of our goodwill of \$329.7 million as of December 31, 2008.

### **In-process Research and Development**

In 2008, we recorded an expense of \$1.6 million related to in-process research and development related to the acquisition of Nextest and Eagle Test.

On March 7, 2007, we purchased in-process enabling test technology and hired certain engineers from MOSAID Technologies Inc. for \$17.6 million, which includes \$0.6 million in fees directly related to the acquisition. Of the purchase price, \$16.7 million has been allocated to in-process research and development and therefore has been immediately charged to the statement of operations. The balance of the purchase price has been allocated to acquired workforce and fixed assets. In the year ended December 31, 2008, as a result of a workforce reduction, we recorded an impairment charge of \$0.6 million to write-off the acquired workforce asset.

### **Restructuring and Other**

#### **Restructuring**

In response to a downturn in the industry, we implemented restructuring activities across all segments to reduce costs, principally through headcount reductions and facility consolidations. The remaining accrual for severance and benefits of \$2.9 million is reflected in the accrued employees' compensation and withholdings account on the balance sheet and is expected to be paid by the end of the first quarter of 2010. The remaining accrual for lease payments of \$10.5 million on vacated facilities is reflected in the other accrued liabilities account and the long-term other accrued liabilities account, and is expected to be paid out over the lease terms, the latest of which expires in 2013. We expect to pay approximately \$3.5 million against the lease accruals over the next twelve months. Our future lease commitments, as of December 31, 2009, are net of expected sublease income of \$5.8 million. As of December 31, 2009, we have subleased approximately 54% of our unoccupied space.

During the year ended December 31, 2009, we recorded restructuring charges of \$37.9 million related to 2009 activities, as part of ongoing efforts to lower expenses and our cost structure in light of the industry wide decline in orders for semiconductor equipment, and a credit of \$(0.4) million due to a change in sublease income estimate related to Q208 activity. The restructuring charges (credit) recorded in 2009 consisted of the following activities:

#### **Q1 2009 Activity:**

\$17.6 million of severance charges related to headcount reductions of approximately 518 people, of which \$14.9 million and 460 people were in Semiconductor Test, \$1.9 million and 42 people were in Systems Test Group, and \$0.8 million and 16 people were in Corporate.

#### **Q2 2009 Activity:**

\$15.9 million of severance charges related to headcount reductions of approximately 316 people, of which \$11.4 million and 267 people were in Semiconductor Test, \$3.0 million and 25 people were in Corporate, and \$1.5 million and 24 people were in Systems Test Group.

#### **Q3 2009 Activity:**

\$4.1 million of charges in Corporate related to the early exit of a leased facility in North Reading; and

\$0.3 million of charges in Systems Test Group related to the early exit of a leased facility in Novi, Michigan.



Q2 2008 Activity:

\$(0.4) million credit in Semiconductor Test segment for a revision in estimated sublease income at an exited leased facility in Ontario, Canada.

The restructuring actions taken during the year ended December 31, 2009 are expected to generate quarterly cost savings of approximately \$14.8 million in Semiconductor Test, \$1.4 million in Systems Test Group, and \$0.7 million in Corporate.

During the year ended December 31, 2008, we recorded restructuring charges of \$25.8 million related to 2008 activities, mainly due to the continuation of the cost down and improved productivity efforts, the consolidation of field operations, and lowering our service infrastructure. We also recorded an additional charge of \$2.7 million due to a change in sublease income estimate related to Pre-2007 activity. The restructuring charges recorded in 2008 consisted of the following activities:

Q1 2008 Activity:

\$7.4 million of severance charges across all functions and segments related to headcount reductions of approximately 148 people, of which \$6.3 million and 126 people were in Semiconductor Test, and \$1.1 million and 22 people were in Systems Test Group; and

\$0.7 million of facility charges in Semiconductor Test related to the early exit of a leased facility in Bracknell, United Kingdom.

Q2 2008 Activity:

\$8.1 million of severance charges across all functions and segments related to headcount reductions of approximately 132 people, of which \$7.3 million and 112 people were in Semiconductor Test, and \$0.8 million and 20 people were in Corporate; and

\$0.7 million of facility charges in the Semiconductor Test related to the early exit of a leased facility in Ontario, Canada.

Q4 2008 Activity:

\$8.9 million of severance charges across all functions and segments related to headcount reductions of approximately 190 people, of which \$7.4 million and 149 people were in Semiconductor Test, \$0.8 million and 21 people were in Systems Test Group, and \$0.7 million and 20 people were in Corporate.

Pre-2007 Activity:

\$2.7 million charge in Systems Test Group for a revision in estimated sublease income at a facility in Westford, Massachusetts. During the year ended December 31, 2007, we recorded restructuring charges of \$7.0 million related to 2007 activities, primarily due to the transition of our manufacturing processes, including board assembly, electro-mechanical integration and final configuration and test for the FLEX product to the outsourced provider in China, in an effort to achieve lower material costs, more efficient manufacturing and lower shipping costs. We also recorded an additional net charge of \$1.2 million for a change in estimates related to Pre-2007 activities. The restructuring charges recorded in 2007 consisted of the following activities:

Q1 2007 Activity:

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\$2.5 million of severance charges across all functions and segments related to headcount reductions of approximately 38 people, of which \$1.0 million and 10 people were in Semiconductor Test, \$1.0 million and 21 people were in Systems Test Group, and \$0.5 million and 7 people were in Corporate.

Q2 2007 Activity:

\$1.7 million of severance charges across all functions in Semiconductor Test related to headcount reductions of approximately 101 people.

Q3 2007 Activity:

\$2.8 million of severance charges across all functions and segments related to headcount reductions of approximately 63 people, of which \$1.5 million and 25 people were in Semiconductor Test, and \$1.3 million and 38 people were in Systems Test Group.

Pre-2007 Activity:

\$1.7 million charge in Systems Test Group for a revision in estimated sublease income at a facility in Westford, Massachusetts; and

\$(0.5) million related to change in the estimated amount of benefits payments related to pre-2007 headcount reduction activities across both segments.

Other

During the year ended December 31, 2009, we recorded \$(1.0) million of other net credits related to the following:

\$1.1 million of long-lived asset impairment charges across both segments primarily related to the disposal of fixed assets as a result of the consolidation of our facilities in North Reading, Massachusetts;

\$(2.0) million of credits related to finalization of certain Eagle Test purchase accounting items; and

\$(0.1) million related to other miscellaneous.

During the year ended December 31, 2008, we recorded \$34.3 million of other charges related to the following:

\$20.9 million loss on sale of land and buildings, including \$22.6 million loss on the sale of real estate across both segments for a manufacturing facility in North Reading, Massachusetts as a result of the transfer of manufacturing to an outsourced partner and \$1.7 million gain on the sale of real estate in the Semiconductor Test segment for a facility in Agoura Hills, California;

\$12.0 million of facility charges across both segments related to the accelerated depreciation of a manufacturing facility in North Reading, Massachusetts as a result of the transfer of manufacturing to an outsourced partner;

\$0.8 related to acquisition financing costs; and

\$0.6 million charge in the Semiconductor Test segment for a long-lived asset impairment related to acquired intangible assets.

During the year ended December 31, 2007, we recorded \$(8.8) million of other credits related to the following:

\$(3.6) million related to the gain on sale of land and building in Deerfield, Illinois;

\$(4.3) million related to cash proceeds recovered from insurance related to a facility fire in Taiwan; and

\$(0.9) million related to gain on sale of product lines.

**Interest and Other**

	2009	2008	2007	2008-2009 Change	2007-2008 Change
	(in millions)				
Interest income	\$ 3.4	\$ 12.6	\$ 39.1	\$ (9.2)	\$ (26.5)
Interest expense and other	\$ (23.6)	\$ (14.2)	\$ (1.1)	\$ (9.4)	\$ (13.1)

Interest income decreased by \$9.2 million, from \$12.6 million in 2008 to \$3.4 million in 2009, due primarily to lower cash balances as a result of the acquisitions of Nextest and Eagle Test and lower interest rates. Interest income decreased by \$26.5 million, from \$39.1 million in 2007 to \$12.6 million in 2008, due primarily to lower cash balances as a result of the acquisitions of Nextest and Eagle Test and stock repurchase activity.

Interest expense and other increased by \$9.4 million, from \$14.2 million in 2008 to \$23.6 million in 2009, due primarily to the following: \$13.9 million of interest expense related to our convertible senior notes, \$2.5 million related to the write off of the remaining revolving credit facility debt issue costs due to the termination of our revolving credit facility agreement, an increase of \$1.2 million in interest expense related to the revolving credit facility, partially offset by a decrease of \$12.6 million in losses on marketable securities. In 2008, interest expense and other included \$2.8 million for the gain on sale of an equity investment and a \$1.3 million life insurance gain.

**(Loss) Income from Continuing Operations before Income Taxes**

	2009	2008	2007	2008-2009 Change	2007-2008 Change
	(in millions)				
Semiconductor Test	\$ (129.1)	\$ (291.8)	\$ 25.1	\$ 162.7	\$ (316.9)
Systems Test Group	11.6	(83.6)	12.0	95.2	(95.6)
Corporate	(25.1)	(7.0)	42.1	(18.1)	(49.1)

Total \$ (142.6) \$ (382.4) \$ 79.2 \$ 239.8 \$ (461.6)

The decrease in loss from continuing operations before income taxes from 2008 to 2009 is primarily due to the goodwill impairment charge in 2008, lower spending and lower restructuring and other costs in 2009 compared to 2008, partially offset by lower revenue in 2009 compared to 2008. The decrease in income from continuing operations before income taxes from 2007 to 2008 is primarily due to the goodwill impairment charge in 2008 and increased restructuring and other costs in 2008 compared to 2007.

**Income Taxes**

The income tax benefit from continuing operations of \$8.8 million for 2009 was primarily due to federal net operating loss carryback claims. The income tax expense from continuing operations for 2008 and 2007 of \$12.6 and \$7.4 million, respectively, related primarily to tax provisions for foreign taxes.

**Contractual Obligations**

The following table reflects our contractual obligations as of December 31, 2009:

Payments Due by Period	Purchase Obligations	Non-cancelable Lease Commitments (1)	Debt	Interest on Debt	Pension Contributions	Total
2010	\$ 131,650	\$ 19,155	\$ 2,156	\$ 8,677	\$ 9,834	\$ 171,472
2011		16,317	2,156	8,647		27,120
2012		12,629	2,156	8,618		23,403
2013		7,395	2,156	8,587		18,138
2014		5,171	191,078	4,306		200,555
Beyond 2014		5,672				5,672
<b>Total</b>	<b>\$ 131,650</b>	<b>\$ 66,339</b>	<b>\$ 199,702</b>	<b>\$ 38,835</b>	<b>\$ 9,834</b>	<b>\$ 446,360</b>

- (1) Non-cancelable lease payments have not been reduced by sublease income of \$5.8 million due in the future under non-cancelable sublease agreements.
- (2) As of December 31, 2009, the total amount of unrecognized tax benefit for uncertain tax positions and the accrual for the related interest, net of the federal benefit, was \$12.8 million and \$13.9 million, respectively, and was included in current and long-term other accrued liabilities. We are unable to make a reasonably reliable estimate of when a cash settlement will occur with tax authorities as the timing of examinations and ultimate resolutions of those examinations is uncertain.

**Liquidity and Capital Resources**

Our cash, cash equivalents and marketable securities balance increased \$144.5 million in 2009 from 2008 to \$518.8 million. Cash activity for 2009, 2008 and 2007 was as follows (in millions):

	2009	2008	2007	2008-2009 Change	2007-2008 Change
Cash provided by operating activities:					
Income (loss) from continuing operations, adjusted for non cash items	\$ 42.8	\$ 124.5	\$ 175.8	\$ (81.7)	\$ (51.3)
Change in operating assets and liabilities, net of businesses and product lines sold and acquired	78.5	38.6	(44.2)	39.9	82.8
Cash provided by (used for) discontinued operations		0.8	(3.6)	(0.8)	4.4
<b>Total cash provided by operating activities</b>	<b>\$ 121.3</b>	<b>\$ 163.9</b>	<b>\$ 128.0</b>	<b>\$ (42.6)</b>	<b>\$ 35.9</b>
Cash (used for) provided by investing activities for continuing operations	(93.9)	(449.1)	105.8	355.2	(554.9)
Cash provided by investing activities of discontinued operations			10.8		(10.8)
<b>Total cash (used for) provided by investing activities</b>	<b>\$ (93.9)</b>	<b>\$ (449.1)</b>	<b>\$ 116.6</b>	<b>\$ 355.2</b>	<b>\$ (565.7)</b>
<b>Total cash provided by (used for) financing activities</b>	<b>\$ 66.1</b>	<b>\$ 46.3</b>	<b>\$ (250.5)</b>	<b>\$ 19.8</b>	<b>\$ 296.8</b>
Effect of exchange rate changes on cash and cash equivalents	0.5	(0.8)	0.2	1.3	(1.0)
<b>Total</b>	<b>\$ 94.0</b>	<b>\$ (239.7)</b>	<b>\$ (5.7)</b>	<b>\$ 333.7</b>	<b>\$ (234.0)</b>



In 2009, changes in operating assets and liabilities, net of businesses and product lines sold and acquired, provided cash of \$78.5 million. This was due to a decrease in operating assets of \$47.1 million and an increase in operating liabilities of \$31.4 million. The decrease in operating assets consisted mainly of a decrease in inventory of \$63.4 million partially offset by an increase of \$15.6 million in accounts receivable due to higher sales volume. The increase in operating liabilities consisted of an increase in advanced customer payments, accounts payable, deferred revenue and other accrued expenses of \$46.7 million partially offset by retirement plan contributions of \$15.3 million. The \$46.4 million increase in deferred revenue and customer advances in 2009 is due to an advanced payment of approximately \$68.2 million received from one of our Semiconductor Test customers. The customer received an incremental discount and also wanted to secure its position in our manufacturing slot plan. This increase in customer advances was partially offset by a \$21.8 million decrease in deferred revenue.

Investing activities in 2009 used cash of \$93.9 million due to investments in property, plant and equipment of \$41.9 million, payment of transaction fees related to the Eagle Test acquisition of \$3.7 million, and purchases of marketable securities of \$90.4 million, partially offset by sales of marketable securities that provided cash of \$41.0 million, and proceeds from life insurance policies that provided cash of \$1.1 million.

During 2009, financing activities provided cash of \$66.1 million due to approximately \$163.0 million of net proceeds from the issuance of the senior convertible notes, \$10.0 million of long-term debt proceeds from a loan in Japan, and \$15.7 million from the issuance of common stock under stock option and stock purchase plans. These increases were partially offset by \$122.5 million of cash used for the repayment of our revolving credit facility and \$1.1 million of cash used for principal payment on long-term debt.

On April 6, 2009, we completed a registered public offering of \$190.0 million aggregate principal amount convertible senior notes ( Notes ) and settled the related convertible bond hedge and warrant transaction and received approximately \$163.0 million as a result of these financing transactions. The Notes bear interest at a rate of 4.50% per annum, payable semi-annually in arrears on March 15 and September 15 of each year. The first interest payment was on September 15, 2009. The Notes will mature on March 15, 2014, unless earlier repurchased by us or converted. The Notes may be converted, under certain circumstances and during certain periods, at an initial conversion rate of approximately 182.65 shares of our common stock per \$1,000 principal amount of Notes, which is equivalent to an initial conversion price of approximately \$5.48. The convertible note hedge and warrant transaction will generally have the effect of increasing the conversion price of the Notes to approximately \$7.67 per share of our common stock, representing a 75% conversion premium based upon the closing price of our common stock on March 31, 2009. We may not redeem the Notes prior to their maturity. Holders of the Notes may require us to purchase in cash all or a portion of their Notes at a price equal to 100% of the principal amount, plus accrued and unpaid interest, upon the occurrence of certain fundamental changes involving the Company.

In 2008, changes in operating assets and liabilities, net of businesses and product lines sold and acquired, provided cash of \$38.6 million. This was due primarily to a decrease in accounts receivable of \$118.2 million as a result of a decrease in sales volume in the fourth quarter of 2008, and a decrease in days sales outstanding from 66 days in 2007 to 51 days in 2008, as a result of improved collections. This was partially offset by a decrease in accounts payable and other accruals of \$31.6 million and an increase in other assets of \$32.7 million.

In 2007, changes in operating assets and liabilities, net of businesses and product lines sold and acquired, used cash of \$44.2 million. This was due to a number of factors including, an increase in accounts receivable of \$33.7 million due to an increase in days sales outstanding from 55 days in 2006 to 66 days in 2007, a reduction of accrued income taxes of \$30.9 million due to the payments of 2006 foreign income taxes around the world, and an increase in other assets of \$25.0 million primarily related to balances due for inventory provided to our outsourced subcontract manufacturer of \$15.7 million. These uses of cash were partially offset by a decrease in our inventory balances due to shorter cycle times for our FLEX products.

In 2008, investing activities used cash of \$449.1 million, and in 2007, investing activities provided cash of \$116.6 million. In 2008, we completed the acquisition of Nextest and Eagle Test, for a total cash purchase price and related fees, net of cash acquired of \$574.3 million. In March 2007, we bought an enabling technology from MOSAID Technologies Inc. for a purchase price and related costs totaling \$17.6 million. Capital expenditures were \$87.2 million in 2008 and \$86.1 million in 2007. Proceeds from asset disposals were \$61.7 million and \$8.8 million in 2008 and 2007, respectively, and primarily consisted of sales of real estate. Investing activities of discontinued operations provided \$10.8 million of cash in 2007. Included in this balance are the net proceeds we received related to the sale of our Broadband Test Division to Tollgrade Communications, Inc. in August 2007.

In 2008, financing activities provided cash of \$46.3 million, and in 2007, financing activities used cash of \$250.5 million. In November of 2008, we obtained a revolving credit facility that provided net cash of \$119.7 million. The credit facility had a three year term that was to end on November 14, 2011. As of December 31, 2008, the outstanding balance under the credit facility was \$122.5 million. The credit facility contained customary representations and warranties, as well as affirmative and negative covenants, including the financial measures of a leverage ratio, fixed charge coverage ratio, and an available domestic cash to total revolving borrowings ratio. As of December 31, 2008, we were in compliance with the financial covenants contained in the credit facility. On April 7, 2009, we repaid and terminated our revolving credit facility agreement. We used approximately \$123.3 million of the net proceeds of the convertible senior notes transaction to repay \$122.5 million of principal and \$0.8 million of accrued interest outstanding under the revolving credit facility agreement.

During 2008 and 2007, issuances of common stock under stock option and stock purchase plans provided cash of \$17.8 million and \$23.2 million, respectively.

In July 2006, our Board of Directors authorized a stock repurchase program which was completed in October 2007. In total, \$400.0 million of common stock was repurchased in the open market or in privately negotiated transactions. During 2007, we repurchased 18.3 million shares of common stock for \$273.7 million for an average price per share of \$14.94. In November 2007, our Board of Directors authorized another stock repurchase program, allowing us to spend an aggregate of \$400.0 million to repurchase shares of our common stock. During 2008, we repurchased 7.5 million shares of common stock for \$91.2 million at an average price of \$12.20 per share. As of November 4, 2008, the Board of Directors suspended the stock repurchase program.

We operate in a highly cyclical industry and we may experience, with relatively short notice, significant fluctuations in demand for our products. This could result in a material effect on our liquidity position. We expect that our cash, cash equivalents and marketable securities balance of \$518.8 million will be sufficient to meet our cash requirements for at least the next twelve months. Inflation has not had a significant long-term impact on earnings.

#### **Retirement Plans**

We adopted the funded status recognition provision of ASC 715-20, *Compensation Retirement Benefits Defined Benefit Plans* effective December 31, 2006. ASC 715-20 requires an employer with defined benefit plans or other postretirement benefit plans to recognize an asset or a liability on its balance sheet for the overfunded or underfunded status of the plans as defined by ASC 715-20. The pension asset or liability

represents the difference between the fair value of the pension plan's assets and the projected benefit obligation as of December 31. For other postretirement benefit plans, the liability is the difference between the fair value of the plan's assets and the accumulated postretirement benefit obligation as of December 31.

Our pension expense, which includes the U.S. Qualified Pension Plan, certain qualified plans for non-U.S. subsidiaries, and a Supplemental Executive Defined Benefit Plan, was approximately \$9.0 million, including a settlement charge of \$1.6 million and a curtailment gain of \$0.6 million for the year ended December 31, 2009. The largest portion of our 2009 pension expense was \$2.8 million for our Supplemental Executive Defined Benefit Plan. Pension expense is calculated based upon a number of actuarial assumptions, a significant input to the actuarial models that measure pension benefit obligations. Discount rate and expected return on assets are two assumptions which are important elements of pension plan expense and asset/liability measurement. We evaluate these critical assumptions at least annually on a plan and country specific basis. We evaluate other assumptions related to demographic factors, such as retirement age, mortality and turnover periodically, and update them to reflect our experience and expectations for the future.

In developing the expected return on plan assets assumption, we evaluated input from our investment manager and pension consultants, including their review of asset class return expectations. Based on this review, we believe that 7.75% was an appropriate rate to use for 2009. We will continue to evaluate the expected return on plan assets at least annually, and will adjust the rate as necessary. The current asset allocation for our U.S. Qualified Pension Plan is 46.0% invested in equity securities, 42.6% invested in fixed income securities, and 11.4% invested in other securities. Our investment manager regularly reviews the actual asset allocation and periodically rebalances the portfolio to ensure alignment with our targeted allocations.

We base our determination of pension expense or benefit on a market-related valuation of assets, which reduces year-to-year volatility. This market-related valuation recognizes investment gains or losses over a five-year period from the year in which they occur. Investment gains or losses for this purpose are the difference between the expected return calculated using the market-related value of assets and the actual return on assets. Since the market-related value of assets recognizes gains or losses over a five-year period, the future value of assets will be impacted as previously deferred gains or losses are recognized. As of December 31, 2009, under the U.S. Qualified Pension Plan, we had cumulative losses of approximately \$34.7 million, which remain to be recognized in the calculation of the market-related value of assets. The discount rate that we utilized for determining future pension obligations for the U.S. Qualified Pension Plan is based on the Citigroup Pension Index adjusted for the Plan's expected cash flows and was 5.85% at December 31, 2009, down from 6.2% at December 31, 2008. We estimate that in 2010 we will recognize approximately \$3.3 million of pension expense for the U.S. Qualified Pension Plan. The pension expense estimate for 2010 is based on a 5.85% discount rate, and 7.5% return on Plan assets. Future pension expense will depend on future investment performance, changes in future discount rates and various other factors related to the employee population participating in our pension plans. As of December 31, 2009, we had unrecognized pension losses and prior service costs of \$136.6 million, of which \$120.7 million is for the U.S. Qualified Pension Plan.

We performed a sensitivity analysis, which expresses the potential change in our U.S. Qualified Pension Plan expense for the year ending December 31, 2010, that would result from changes to either the discount rate or the expected return on plan assets.

Return on Plan Assets	Discount Rate		
	5.35%	5.85%	6.35%
	(in millions)		
7.0%	\$ 5.5	\$ 4.5	\$ 3.3
7.5%	4.3	3.3	2.1
8.0%	3.0	2.0	0.9

The assets of the U.S. Qualified Pension Plan consist primarily of equity and fixed income securities. The value of our U.S. Qualified Pension Plan assets has increased from \$184.5 million at December 31, 2008 to

\$217.1 million at December 31, 2009. Our funding policy is to make contributions to the Pension Plan in accordance with local laws and to the extent that such contributions are tax deductible. During 2009, we made a discretionary contribution of \$7.5 million to the U.S. Qualified Pension Plan, \$1.5 million contribution to the U.S. Supplemental Executive Defined Benefit Pension Plan and \$3.4 million contribution to certain qualified plans for non-U.S. subsidiaries. On February 18, 2010, we made a discretionary contribution of \$5.0 million to the U.S. Qualified Pension Plan and we expect to contribute approximately \$1.5 million to the U.S. Supplemental Executive Defined Benefit Pension Plan in 2010. Contributions that will be made in 2010 to certain qualified plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$3.3 million.

### Equity Compensation Plans

In addition to our 1996 Employee Stock Purchase Plan discussed in Note N: Stock Based Compensation in Notes to Consolidated Financial Statements, we have the 2006 Equity and Cash Compensation Incentive Plan (the 2006 Equity Plan) under which equity securities are authorized for issuance. The 2006 Equity Plan was approved by stockholders on May 25, 2006. The 2006 Equity Plan replaced our 1996 Non-Employee Director Stock Option Plan, our 1997 Employee Stock Option Plan, and our 1991 Employee Stock Option Plan, each of which were terminated upon the shareholders approval of the 2006 Equity Plan. We may not issue any additional option grants or awards under the terminated plans, but the options and awards previously granted and currently outstanding under these plans will remain in effect until the earlier of the date of their exercise, vesting or expiration, as applicable.

At our annual meeting of stockholders held May 28, 2009, our stockholders approved an amendment to the 2006 Equity Plan to increase the number of shares issuable thereunder by 10.0 million, for an aggregate of 22.0 million shares issuable thereunder, and our stockholders also approved an amendment to our 1996 Employee Stock Purchase Plan to increase the number of shares issuable thereunder by 5.0 million, for an aggregate of 25.4 million shares issuable thereunder.

The following table presents information about these plans as of December 31, 2009 (share numbers in thousands):

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 (1))
Equity plans approved by shareholders	9,204(1)	\$ 12.60	19,391(3)
Equity plans not approved by shareholders(4,5,6)	8,959(2)	\$ 14.27	
<b>Total</b>	<b>18,163</b>	<b>\$ 13.88</b>	<b>19,391</b>

- (1) Includes 6,570,476 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.
- (2) Includes 325,141 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.
- (3) Consists of 12,652,940 securities available for issuance under the 2006 Equity Plan and 6,738,034 of securities available for issuance under the Employee Stock Purchase Plan.
- (4) In connection with the acquisition of GenRad, Inc. in October 2001 (the Acquisition), we assumed the outstanding options granted under the GenRad, Inc. 1991 Equity Incentive Plan, the GenRad, Inc. 1991 Directors Stock Option Plan and the GenRad, Inc. 1997 Non-Qualified Employee Stock Option Plan (collectively, the GenRad Plans). Upon the consummation of the Acquisition, these options became exercisable for shares of our common stock based on an exchange ratio of 0.1733 shares of our common stock for each share of GenRad's common stock. No additional options will be granted pursuant to the

GenRad Plans. As of December 31, 2009, there were outstanding options exercisable for an aggregate of 58,692 shares of our common stock pursuant to the GenRad Plans, with a weighted average exercise price of \$46.56 per share.

- (5) In connection with the acquisition of Nextest (the Nextest Acquisition), we assumed the options and restricted stock units granted under the Nextest Systems Corporation 1998 Equity Incentive Plan, as amended, and the Nextest Systems Corporation 2006 Equity Incentive Plan (collectively, the Nextest Plans). Upon the consummation of the Nextest Acquisition, these options and restricted stock units were converted automatically into, respectively, options to purchase and restricted stock units representing, an aggregate of 4,417,594 shares of our common stock. No additional awards will be granted under the Nextest Plans. As of December 31, 2009, there were outstanding options exercisable for an aggregate of 1,816,670 shares of our common stock pursuant to the Nextest Plans, with a weighted average exercise price of \$3.36 per share. As of December 31, 2009, there were outstanding restricted stock units covering an aggregate of 314,254 shares of our common stock, none of which are included in the calculation of the weighted average exercise price.
- (6) In connection with the acquisition of Eagle Test (the Eagle Acquisition), we assumed the options granted under the Eagle Test Systems, Inc. 2003 Stock Option and Grant Plan and the Eagle Test Systems, Inc. 2006 Stock Option and Incentive Plan (collectively, the Eagle Plans). Upon the consummation of the Eagle Acquisition, these options were converted automatically into options to purchase an aggregate of 3,594,916 shares of our common stock. No additional awards will be granted under the Eagle Plans. As of December 31, 2009, there were outstanding options exercisable for an aggregate of 1,535,391 shares of our common stock pursuant to the Eagle Plans, with a weighted average exercise price of \$3.63 per share.

The purpose of the 2006 Equity Plan is to motivate employees, officers, directors, consultants and advisors by providing equity ownership and compensation opportunities in Teradyne. The aggregate number of shares available under the 2006 Equity Plan as of December 31, 2009 was 12,652,940 shares of our common stock. The 2006 Equity Plan authorizes the grant of stock-based awards in the form of (1) non-qualified and incentive stock options, (2) stock appreciation rights, (3) restricted stock awards and restricted stock unit awards, (4) phantom stock, and (5) other stock-based awards. Awards may be tied to time-based vesting schedules and/or performance-based vesting measured by reference to performance criteria chosen by the Compensation Committee of the Board of Directors, which administers the 2006 Equity Plan. Awards may be made to any employee, officer, consultant and advisor of Teradyne and our subsidiaries, as well as, to our directors. The maximum number of shares of stock-based awards that may be granted to one participant during any one fiscal year is 2,000,000 shares of common stock. The 2006 Equity Plan will expire on May 24, 2016. In 2009, we granted restricted stock units to employees and directors and restricted stock units and stock options to executive officers. In 2008, we only issued restricted stock unit awards to our employees, executive officers and directors.

As of December 31, 2009, total unrecognized compensation expense related to non-vested awards and options totaled \$38.8 million, and is expected to be recognized over a weighted average period of 1.8 years.

**Performance Graph**

The following graph compares the change in our cumulative total shareholder return in our common stock with the Standard & Poor's 500 Index and the S&P Information Technology 500 Index. The comparison assumes \$100.00 was invested on December 31, 2004 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any.

	2004	2005	2006	2007	2008	2009
Teradyne, Inc.	\$ 100.00	\$ 85.35	\$ 87.64	\$ 60.57	\$ 24.72	\$ 62.86
S&P 500 Index	\$ 100.00	\$ 104.90	\$ 121.43	\$ 128.09	\$ 80.77	\$ 102.08
S&P Information Technology 500 Index	\$ 100.00	\$ 101.00	\$ 109.49	\$ 127.35	\$ 72.44	\$ 117.09

- (1) This graph is not soliciting material, is not deemed filed with the SEC and is not to be incorporated by reference in any other filing under the Securities Act or the Exchange Act whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
- (2) The stock price performance shown on the graph is not necessarily indicative of future price performance. Information used on the graph was obtained from Hewitt Associates, a source believed to be reliable, but we are not responsible for any errors or omissions in such information.

***Related Party Transaction***

During 2007, Paul Tufano, a member of our Board of Directors, was Executive Vice President, Chief Financial Officer and Interim Chief Executive Officer of Solectron Corporation until it was acquired by Flextronics in October 2007. Mr. Tufano ceased being an employee of Solectron or Flextronics in October 2007. In the ordinary course of business, we have for the last ten years purchased printed circuit board assemblies from Solectron, and have also sold in-circuit testers to Solectron which we refer to as Flextronics. In August 2007, prior to the Flextronics acquisition, we expanded our contract with Solectron to have it provide additional manufacturing and test services, including areas of final configuration and test for most of our FLEX family of products. In the year ended December 31, 2007, we purchased \$207.8 million of printed circuit board assemblies and services from Flextronics. Sales of in-circuit testers to Flextronics for the year ended December 31, 2007 were \$4.0 million.

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**Recently Issued Accounting Pronouncements**

In October 2009, the FASB issued ASC 605-25, *Revenue Recognition Multiple-Element Arrangements*. This ASC establishes the accounting and reporting guidance for arrangements including multiple revenue-generating activities. This ASC provides amendments to the criteria for separating deliverables, measuring and allocating arrangement consideration to one or more units of accounting. The amendments in this ASC also establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor's multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. The amendments also require providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. The amendments in this ASC are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010. Early application is permitted. We have chosen to early adopt this ASC as of January 1, 2010. Adoption will not have a material impact on our financial position or results of operations.

In October 2009, the FASB issued ASC 985-605, *Software Revenue Recognition*. This ASC changes the accounting model for revenue arrangements that include both tangible products and software elements that are essential to the functionality, and scopes these products out of current software revenue guidance. The new guidance will include factors to help companies determine what software elements are considered essential to the functionality. The amendments will now subject software-enabled products to other revenue guidance and disclosure requirements, such as guidance surrounding revenue arrangements with multiple-deliverables. The amendments in this ASC are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010. Early application is permitted. We have chosen to early adopt this ASC as of January 1, 2010. Adoption will not have a material impact on our financial position or results of operations.

**Item 7A: Quantitative and Qualitative Disclosures About Market Risks**

**Concentration of Credit Risk**

Financial instruments which potentially subject us to concentrations of credit risk consist principally of cash equivalents, marketable securities, forward currency contracts and accounts receivable. Our cash equivalents consist primarily of money market funds invested in U.S. Treasuries and government agencies. All of our auction rate marketable securities are AAA, AA or A rated by one or more of the major credit rating agencies and are substantially guaranteed by a U.S. Department of Education agency or a third party insurer. Our fixed income available-for-sale marketable securities purchased during 2009 and held as of December 31, 2009 have a minimum rating of AA by one or more of the major credit rating agencies. We place forward currency contracts with high credit-quality financial institutions in order to minimize credit risk exposure. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of geographically dispersed customers. We perform ongoing credit evaluations of our customers' financial condition and from time to time may require customers to provide a letter of credit from a bank to secure accounts receivable.

**Exchange Rate Risk Management**

We regularly enter into foreign currency forward contracts to hedge the value of our net monetary assets in Euro, British Pound, Japanese Yen and the Taiwan Dollar. These foreign currency forward contracts have maturities of less than one year. These contracts are used to reduce our risk associated with exchange rate movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. We do not engage in currency speculation.

We performed a sensitivity analysis assuming a hypothetical 10% fluctuation in foreign exchange rates to the hedging contracts and the underlying exposures described above. As of December 31, 2009, 2008 and 2007, the analysis indicated that these hypothetical market movements would not have a material effect on our consolidated financial position, results of operations or cash flows.

**Interest Rate Risk Management**

We are exposed to potential loss due to changes in interest rates. Our interest rate exposure is primarily in the United States in short-term and long-term marketable securities.

In order to estimate the potential loss due to interest rate risk, a 10% fluctuation in interest rates was assumed. Market risk for the short and long-term marketable securities was estimated as the potential change in the fair value resulting from a hypothetical change in interest rates for securities contained in the investment portfolio. On these bases, the potential change in fair value from changes in interest rates is immaterial as of December 31, 2009 and \$0.6 million as of December 31, 2008.



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**Item 8: Financial Statements and Supplementary Data**

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Teradyne, Inc. (the Company):

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Teradyne, Inc. and its subsidiaries at December 31, 2009 and 2008, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2009 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Controls over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

March 1, 2010

## TERADYNE, INC.

## CONSOLIDATED BALANCE SHEETS

December 31, 2009 and 2008

	2009	2008
	(in thousands, except per share information)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 416,737	\$ 322,705
Marketable securities	46,933	
Accounts receivable, less allowance for doubtful accounts of \$3,770 and \$4,712 in 2009 and 2008, respectively	125,236	109,625
Inventories:		
Parts	43,691	89,140
Assemblies in process	37,161	56,780
Finished goods	9,984	22,531
	90,836	168,451
Deferred tax asset	18,944	16,988
Prepayments and other current assets	63,606	67,292
Total current assets	762,292	685,061
Property, plant and equipment:		
Land	16,561	16,561
Buildings and improvements	133,689	134,327
Machinery and equipment	631,506	630,446
Construction in progress	651	1,440
Total	782,407	782,774
Less: Accumulated depreciation	536,045	484,325
Net property, plant and equipment	246,362	298,449
Marketable securities	55,130	51,613
Intangible assets, net	152,192	186,998
Other assets	19,361	19,534
Total assets	\$ 1,235,337	\$ 1,241,655
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable	66,765	61,164
Accrued employees' compensation and withholdings	55,356	73,521
Deferred revenue and customer advances	104,439	58,030
Other accrued liabilities	54,640	51,748
Current debt	2,157	122,500
Total current liabilities	283,357	366,963
Retirement plans liabilities	115,101	125,877
Deferred tax liabilities	8,041	8,730
Long-term other accrued liabilities	23,159	30,366
Long-term debt	141,100	
Total liabilities	570,758	531,936
Commitments and contingencies (Note J)		

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**SHAREHOLDERS EQUITY**

Common stock, \$0.125 par value, 1,000,000 shares authorized, 174,908 and 169,651 shares issued and outstanding at December 31, 2009 and 2008, respectively	21,864	21,206
Additional paid-in capital	1,202,426	1,124,390
Accumulated other comprehensive loss	(138,105)	(148,108)
Accumulated deficit	(421,606)	(287,769)
<b>Total shareholders equity</b>	<b>664,579</b>	<b>709,719</b>
Total liabilities and shareholders equity	\$ 1,235,337	\$ 1,241,655

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

## TERADYNE, INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2009	2008	2007
	(in thousands, except per share amounts)		
Net revenue:			
Products	\$ 595,304	\$ 836,045	\$ 861,583
Services	224,103	270,997	240,697
Total net revenue	819,407	1,107,042	1,102,280
Cost of revenues:			
Cost of products	386,807	451,225	430,464
Cost of services	120,967	157,625	158,383
Total cost of revenue	507,774	608,850	588,847
Gross profit	311,633	498,192	513,433
Operating expenses:			
Engineering and development	164,835	216,461	204,344
Selling and administrative	200,430	247,789	248,096
Acquired intangible assets amortization	32,296	20,633	3,667
In-process research and development		1,600	16,700
Restructuring and other	36,493	62,775	(659)
Goodwill impairment		329,674	
Total operating expenses	434,054	878,932	472,148
(Loss)/Income from operations	(122,421)	(380,740)	41,285
Interest income	3,417	12,558	39,066
Interest expense and other, net	(23,633)	(14,236)	(1,108)
(Loss)/Income from continuing operations before income taxes	(142,637)	(382,418)	79,243
(Benefit)/Provision for income taxes	(8,800)	12,577	7,360
(Loss)/Income from continuing operations	(133,837)	(394,995)	71,883
Income from discontinued operations before income taxes		768	6,346
Provision for income taxes			518
Income from discontinued operations		768	5,828
Net (Loss)/Income	\$ (133,837)	\$ (394,227)	\$ 77,711
(Loss)/Income from continuing operations:			
Basic	\$ (0.77)	\$ (2.32)	\$ 0.39
Diluted	\$ (0.77)	\$ (2.32)	\$ 0.39
Net (Loss)/Income per common share:			
Basic	\$ (0.77)	\$ (2.31)	\$ 0.42
Diluted	\$ (0.77)	\$ (2.31)	\$ 0.42

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Weighted average common shares basic	173,604	170,593	184,020
Weighted average common shares diluted	173,604	170,593	185,374

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

## TERADYNE, INC.

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)

Years Ended December 31, 2009, 2008 and 2007

	Shares Issued	Common Stock Par Value	Additional Paid-in Capital	Accumulated Other Compre- hensive Loss (in thousands)	Retained Earnings (Accumulated Deficit)	Total Shareholders Equity	Compre- hensive Income (Loss)
Balance, December 31, 2006	188,952	\$ 23,619	\$ 1,179,015	\$ (66,309)	\$ 224,862	\$ 1,361,187	
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$2,653	2,454	307	20,211			20,518	
Stock-based compensation expense			23,142			23,142	
Repurchase of stock	(18,318)	(2,290)	(116,927)		(154,448)	(273,665)	
Comprehensive income:							
Net income					77,711	77,711	\$ 77,711
Foreign currency translation adjustment				(741)		(741)	(741)
Unrealized gain on investments, net of tax of \$0				3,454		3,454	3,454
Actuarial gain arising during period, net of tax of \$817				13,216		13,216	13,216
Amortization included in net periodic pension and postretirement costs:							
Actuarial losses, net of tax of \$112				3,788		3,788	3,788
Prior service costs, net of tax of \$0				613		613	613
Net transition asset net of tax of (\$19)				(49)		(49)	(49)
Total comprehensive income							\$ 97,992
Balance, December 31, 2007	173,088	21,636	1,105,441	(46,028)	148,125	1,229,174	
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$4,395	4,036	504	12,918			13,422	
Stock-based compensation expense			22,250			22,250	
Stock options and restricted stock units issued in purchase acquisitions			32,372			32,372	
Repurchase of stock	(7,473)	(934)	(48,591)		(41,667)	(91,192)	
Comprehensive income:							
Net loss					(394,227)	(394,227)	\$ (394,227)
Foreign currency translation adjustment				(4,878)		(4,878)	(4,878)
Unrealized loss on investments, net of tax of \$0				(1,997)		(1,997)	(1,997)
Actuarial loss arising during period, net of tax of (\$2,408)				(97,220)		(97,220)	(97,220)
Amortization included in net periodic pension and postretirement costs:							
Actuarial losses, net of tax of \$34				1,421		1,421	1,421
Prior service costs, net of tax of \$0				613		613	613
Net transition asset, net of tax of (\$8)				(19)		(19)	(19)
Total comprehensive loss							\$ (496,307)
Balance, December 31, 2008	169,651	21,206	1,124,390	(148,108)	(287,769)	709,719	
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$2,433	5,257	658	12,612			13,270	
Convertible note hedge			39,736			39,736	
Stock-based compensation expense			24,639			24,639	
Tax benefit related to stock options and restricted stock units			1,049			1,049	
Comprehensive income:							
Net loss					(133,837)	(133,837)	\$ (133,837)
Unrealized gain on investments, net of tax of \$0				2,779		2,779	2,779
Foreign currency translation adjustment				816		816	816
Actuarial gains arising during period, net of tax of \$589				1,836		1,836	1,836

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Amortization included in net periodic pension and  
postretirement costs:

Actuarial losses, net of tax of \$221	4,007		4,007	4,007
Prior service costs, net of tax of \$0	565		565	565

Total comprehensive loss				\$ (123,834)
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Balance, December 31, 2009	174,908	\$ 21,864	\$ 1,202,426	\$ (138,105)	\$ (421,606)	\$ 664,579
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The accompanying notes are an integral part of the consolidated financial statements.

## TERADYNE, INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2009	2008	2007
	(in thousands)		
Cash flows from operating activities:			
Net (Loss)/Income	\$ (133,837)	\$ (394,227)	\$ 77,711
Less: Income/(Loss) from discontinued operations		768	(68)
Less: Gain on disposal of discontinued operations (Note D)			5,896
(Loss)/Income from continuing operations	(133,837)	(394,995)	71,883
Adjustments to reconcile (loss)/income from continuing operations to net cash (used for) provided by operating activities:			
Depreciation	60,094	71,255	59,384
Amortization	45,987	23,505	8,111
Provision for excess and obsolete inventory	27,981	29,363	1,835
Stock-based compensation	24,639	22,250	23,474
Non cash charge for the sale of inventories revalued at the date of acquisition	15,413	5,046	
Revolving credit facility issue costs		2,488	
Loss on sale and impairment of marketable securities	2,186	16,240	
Tax benefit related to stock options and restricted stock units	(1,049)		
Goodwill impairment		329,674	
Loss/(gain) on sale of land and buildings		20,883	(3,597)
In-process research and development		1,600	16,700
Other	(1,058)	(304)	(2,053)
Changes in operating assets and liabilities, net of businesses and product lines sold and acquired:			
Accounts receivable	(15,565)	118,196	(33,717)
Inventories	63,377	(3,074)	45,179
Other assets	(726)	(32,709)	(24,958)
Accounts payable, deferred revenue, retirement plans liabilities and other accrued expenses	46,678	(31,597)	8,047
Retirement plan contributions	(15,291)	(7,158)	(7,910)
Accrued income taxes		(5,008)	(30,865)
Net cash provided by continuing operations	121,317	163,167	131,513
Net cash provided by (used for) discontinued operations		768	(3,552)
Net cash provided by operating activities	121,317	163,935	127,961
Cash flows from investing activities:			
Investments in property, plant and equipment	(41,932)	(87,202)	(86,088)
Acquisition of businesses, net of cash acquired	(3,741)	(574,342)	
Proceeds from life insurance	1,076	14,832	
Proceeds from sale of land and buildings		44,072	7,888
Proceeds from sale of equity investments and product lines		2,811	906
Acquisition of technology			(17,600)
Proceeds from sales of trading marketable securities	3,000		
Purchases of available-for-sale marketable securities	(90,369)	(135,475)	(388,385)
Proceeds from sales and maturities of available-for-sale marketable securities	38,036	286,206	589,167
Net cash (used for) provided by continuing operations	(93,930)	(449,098)	105,888
Net cash provided by discontinued operations			10,765
Net cash (used for) provided by investing activities	(93,930)	(449,098)	116,653
Cash flows from financing activities:			
Net proceeds from long-term debt	172,914		
Repayment of revolving credit facility	(122,500)		
Payments of long-term debt and notes payable	(1,069)		
Tax benefit related to stock options and restricted stock units	1,049		
Net proceeds from revolving credit facility		119,674	



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Repurchase of common stock		(91,192)	(273,665)
Issuance of common stock under stock option and stock purchase plans	15,703	17,817	23,171
Net cash provided by (used for) financing activities	66,097	46,299	(250,494)
Effect of exchange rate changes on cash and cash equivalents	548	(802)	226
Increase (decrease) in cash and cash equivalents	94,032	(239,666)	(5,654)
Cash and cash equivalents at beginning of year	322,705	562,371	568,025
Cash and cash equivalents at end of year	\$ 416,737	\$ 322,705	\$ 562,371
Supplementary disclosure of cash flow information:			
Cash paid during the year for:			
Interest	\$ 7,106	\$ 1,063	\$ 1,286
Income taxes (refunds) payments	\$ (5,838)	\$ 17,952	\$ 31,584

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

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TERADYNE, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**A. THE COMPANY**

Teradyne, Inc. is a leading global supplier of automatic test equipment. Teradyne's automatic test equipment products and services include:

semiconductor test ( Semiconductor Test ) systems; and

military/aerospace ( Mil/Aero ) test instrumentation and systems, hard disk drive test ( HDD ) systems, circuit-board test and inspection ( Commercial Board Test ) systems and automotive diagnostic and test ( Diagnostic Solutions ) systems (collectively these products represent Systems Test Group ).

**B. ACCOUNTING POLICIES**

**Basis of Presentation**

The consolidated financial statements include the accounts of Teradyne and its wholly-owned subsidiaries. All significant intercompany balances and transactions are eliminated. Certain prior years' amounts were reclassified to conform to the current year presentation.

In August 2007, Teradyne sold Broadband Test Division, its Digital Subscriber Line and telephone network test division. The results of operations of Broadband Test Division have been classified as discontinued operations in the consolidated statement of operations (see Note D: Discontinued Operations ).

**Preparation of Financial Statements and Use of Estimates**

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to inventories, investments, goodwill, intangible and other long-lived assets, doubtful accounts, income taxes, pensions, warranties, and loss contingencies. Management bases its estimates on historical experience and on appropriate and customary assumptions that are 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 may differ significantly from these estimates.

**Revenue Recognition**

Teradyne recognizes revenue when there is persuasive evidence of an arrangement, title and risk of loss have passed, delivery has occurred or the services have been rendered, the sales price is fixed or determinable and collection of the related receivable is reasonably assured. Title and risk of loss generally pass to Teradyne's customers upon shipment or at delivery destination point. In circumstances where either title or risk of loss pass upon destination, acceptance or cash payment, Teradyne defers revenue recognition until such events occur.

Teradyne's equipment includes embedded software which is considered incidental to the product. Revenue is recognized upon shipment or at delivery destination point, provided that customer acceptance criteria can be demonstrated prior to shipment. Certain contracts require Teradyne to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, revenue is deferred until customer acceptance has been received.

## TERADYNE, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## B. ACCOUNTING POLICIES (Continued)

For multiple element arrangements Teradyne defers the fair value of any undelivered elements of the contract. Teradyne also defers the portion of the sales price that is not due until acceptance, which represents deferred profit. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered item must be considered probable and substantially in the control of Teradyne. Fair value is the price charged when the element is sold separately. Teradyne's post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customer's ability to use the product. Teradyne defers revenue for the fair value of installation and training.

As of December 31, 2009 and 2008, deferred revenue and customer advances consisted of:

	2009	2008
	(in thousands)	
Customer advances	\$ 72,569	\$ 11,565
Installation and training	22,616	22,153
Undelivered elements	5,551	19,815
Acceptance	530	1,324
Other		