

### **UNITED STATES FIES 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 |X|**SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2010

OR

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

Commission file number 001-06462

(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 (Address of Principal Executive Offices)

01864 (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** 

Common Stock, par value \$0.125 per share

Name of Each Exchange on Which Registered 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 proceeding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 🕅 No 🗌

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or 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 Yes 🗍 No 🖂 Act).

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 2, 2010 was approximately \$1.5 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, 2011 was 185,346,619 shares.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement in connection with its 2011 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 semiconductor 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.

### **Investor Information**

We are a Massachusetts corporation incorporated on September 23, 1960. We are subject to the informational requirements of the Securities Exchange Act of 1934 ("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 documents 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. 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 worldwide 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<sup>TM</sup> 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 2,700 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<sup>TM</sup> 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<sup>TM</sup> 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 3,500 systems and it continues to grow.

We have continued to invest in the J750 platform with a set of J750Ex<sup>TM</sup> 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 1,000 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<sup>TM</sup> 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 2,100 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. In 2010, we expanded our Neptune product line to address the enterprise 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**

Our test and inspection systems are sold to the electronics manufacturers of cell phones, servers, computers, Internet switches, automobiles and military avionics systems worldwide.

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<sup>TM</sup> and Spectrum<sup>TM</sup> product families used in a variety of in-line, high-volume PCB test applications. Supporting technologies such as our patented SafeTest<sup>TM</sup> 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.

### **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<sup>TM</sup> 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.

On February 16, 2011, we announced the sale of our Diagnostic Solutions business unit to SPX Corporation.

### **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. Broadband Test Division has 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:

	2010	2009	2008
Semiconductor Test	88%	67%	81%
Systems Test Group			
Total	100%	100%	100%

#### Sales and Distribution

In fiscal years 2010 and 2008, no single customer accounted for more than 10% of our consolidated net revenue. In 2009, revenues from Western Digital Corporation accounted for more than 10% of our consolidated net revenue. Western Digital Corporation is a customer of our Systems Test Group. In each of the years: 2010, 2009 and 2008, our three largest customers in aggregate accounted for 21%, 26% and 14% of our consolidated net revenue, respectively.

Direct sales to United States government agencies accounted for 1%, 4% and 2% of our consolidated net revenue in 2010, 2009 and 2008, respectively. Approximately 6%, 12% and 11% of Systems Test Group's revenue in 2010, 2009 and 2008, respectively, was to United States government agencies and 27%, 18% and 27% of Systems Test Group's revenue in 2010, 2009 and 2009, 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 85%, 74% and 78% of our consolidated net revenue in 2010, 2009 and 2008, respectively. Sales to customers located in Taiwan were 18%, 14% and 18% of consolidated net revenue in 2010, 2009 and 2008, respectively. Sales to customers located in Malaysia were 13%, 11% and 6% of our consolidated net revenue in 2010, 2009 and 2008, respectively. Sales to customers located in Malaysia were located in the Philippines were 11%, 5% and 5% of our consolidated net revenue in 2010, 2009 and 2008, respectively. Sales are attributed to geographic areas based on the location of the customer site.

See also "Item 1A: Risk Factors" and "Note P: Operating Segment, Geographic and Significant Customer 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 ("Advantest"), Verigy Inc. ("Verigy") and LTX–Credence Corporation ("LTX"). The potential mergers between Verigy and LTX, or between Advantest and Verigy, may result in a combined company that may be a stronger competitor in certain markets. 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 emerging Asian equipment companies and 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, 2010 and 2009, our backlog of unfilled orders in our two reportable segments was as follows:

	2010	2009
		llions)
Semiconductor Test	\$334.2	\$276.8
Systems Test Group	180.1	95.2
	\$514.3	\$372.0

Of the backlog at December 31, 2010, approximately 98% of the Semiconductor Test backlog and 88% of Systems Test Group backlog is expected to be delivered in 2011.

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, 2010, we employed approximately 3,000 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, 2010, 2009 and 2008 were \$197.0 million, \$164.8 million, and \$216.5 million, respectively. These expenditures amounted to approximately 12%, 20%, and 20% of consolidated net revenue in 2010, 2009, and 2008, respectively.

### **Environmental Affairs**

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.

### **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.

Executive Officer	Age	Position	Business Experience For The Past 5 Years
Michael A. Bradley	62	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	53	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	49	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	63	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	50	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. We are unable to predict the likely duration and severity of 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. 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. If our business has another downturn, we may need to take further cost control and reduction measures.

### 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 2009 and 2008 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 fiscal 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 emerging Asian equipment companies and internal development 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.

The potential mergers between Verigy and LTX-Credence or between Advantest and Verigy may result in a combined company that may be a stronger competitor in certain markets. Moreover, increased competitive pressure resulting from one of these mergers 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:

- a worldwide economic slowdown or 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 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 dependent upon the ability of our suppliers and contractors to help meet increased product or delivery requirements. 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 acquisitions or strategic alliances.

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 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 was 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 represented 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 purchased 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 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 have taken measures to significantly lower our fixed costs, 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, 2010, 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 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 I: 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 U.S. defined benefit pension plan currently holds a significant amount of fixed income and equity securities. As of December 31, 2010, our U.S. qualified defined benefit pension plan had a funded status of approximately 104%. Due to significant declines in financial markets and deterioration in the value of our plan assets in 2008, we made additional discretionary contributions to our U.S. Defined Benefit Pension Plan in 2009 and 2010 and may have to make additional contributions in future reporting periods, which may 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. We, as well as 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.

There are 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
Properties Owned:		<u>.</u>	
North Reading, Massachusetts	Semiconductor Test, Systems Test		
	Group & Corporate	1-2-3-4-5-6	413,000
Agoura Hills, California	Semiconductor Test	3-5	120,000
Kumamoto, Japan	Semiconductor Test	2-3-4-5	77,000
Subtotal of Owned Properties	· · · · · · · · · · · · · · · · · · ·		610,000
Properties Leased:			
Cebu, Philippines	Semiconductor Test	2-6	135,000
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	85,000
Stockport, England	Systems Test Group (Diagnostic		
	Solutions business unit)	2-3-4-5-6	75,000
North Reading, Massachusetts	Corporate	1	60,000
Shanghai, China	Semiconductor Test & Systems Test		
	Group	2-5-6	44,000
Tai Yuan, Taiwan	Semiconductor Test & Systems Test		
	Group	5	43,000
Heredia, Costa Rica	Semiconductor Test	2-6	42,000
San Jose, California	Semiconductor Test	4-5	36,000
Subtotal of Leased Properties			648,000
Total Square Feet of Floor Space			1,258,000

+ 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, 6. Storage and Distribution.

### Item 3: Legal Proceedings

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
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
2010		
First Quarter	\$11.57	\$ 8.95
Second Quarter	13.37	9.25
Third Quarter	11.64	8.84
Fourth Quarter	14.44	10.51

The number of record holders of our common stock at February 22, 2011 was 2,502.

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. This stock repurchase program was suspended by the Board on November 4, 2008. The cumulative repurchases as of December 31, 2008, totaled 8.5 million shares of common stock for \$102.6 million at an average price of \$12.14 per share.

In November 2010, the Board cancelled the November 2007 stock repurchase program and authorized a new stock repurchase program for up to \$200 million. During the year ended December 31, 2010, Teradyne did not repurchase any shares of common stock.

The following table includes information with respect to repurchases we made of our common stock during the quarter ended December 31, 2010 (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 4, 2010 – October 31, 2010		\$		\$297,375
November 1, 2010 – November 28, 2010		\$ —	_	\$200,000
November 29, 2010 – December 31, 2010		\$ —	·	\$200,000

### Item 6: Selected Financial Data

	Years Ended December 31,				
	2010	2009	2008	2007	2006
	(d	ollars in thousa	nds, except pe	r share amount	ts)
Consolidated Statement of Operations Data (1)(2):	¢1 (00 (50	¢ 010 407	¢1 107 042	¢1 102 280	\$1,356,249
Net revenues	\$1,608,650	<u>\$ 819,407</u>	\$1,107,042	\$1,102,200	\$1,330,249
Income (loss) from continuing operations	379,730	(133,837)	(394,995)	71,883	208,162
Net income (loss)	379,730	(133.837)	(394,227)	77,711	198,757
Income (loss) from continuing operations per common share—basic	2.11	(0.77)	(2.32)	0.39	1.07
Income (loss) from continuing operations per common sharediluted	1.73	(0.77)	(2.32)	0.39	1.06
Net income (loss) per common share—basic	2.11	(0.77)	(2.31)	0.42	1.02
Net income (loss) per common share— diluted	1.73	(0.77)	(2.31)	0.42	1.01
Consolidated Balance Sheet Data (1): Total assets	1,810,355	1,235,337	1,241,655	1,555,288	_1,721,055
Long-term debt obligations	150,182	141,100			

(1) As a result of the divestiture of Broadband Test Division in 2007, we are reporting Broadband Test Division as discontinued operations for all periods presented.

(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 are 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.

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 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.

Commencing in the fourth quarter of 2009, we experienced improvement in our Semiconductor Test business. 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 to expand further our addressable markets while tightly managing our costs. As 2010 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, deferred tax assets, 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

In October 2009, the Financial Accounting Standards Board ("FASB") amended the accounting standards for revenue recognition to remove tangible products containing non-software and software components that function together to deliver the product's essential functionality from the scope of industry-specific software revenue recognition guidance. In October 2009, the FASB also amended the accounting standards for arrangements with multiple deliverables. We elected to early adopt this accounting guidance at the beginning of our first quarter of 2010 on a prospective basis. Adoption had no material impact on our financial position or results of operations in 2010.

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 has non-software and software components that function together to deliver the equipment's essential functionality. 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. We also defer the portion of the sales price that is not due until acceptance, which represents deferred profit.

For multiple element arrangements, we allocate revenue to all deliverables based on their relative selling prices. In such circumstances, a hierarchy is used to determine the selling price for allocating revenue to deliverables as follows: (i) vendor-specific objective evidence of selling price ("VSOE"), (ii) third-party evidence of selling price ("TPE"), and (iii) best estimate of the selling price ("BESP"). For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis and the delivery or performance of the undelivered item must be considered probable and substantially in our control.

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 customers' ability to use the product. We defer revenue for the selling price 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, 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

Stock-based compensation expense 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.

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, 2010 and 2009. We will assess the level of the valuation allowance required in future periods. Should more positive than negative evidence regarding the realizability of tax attributes exist in a future period, the valuation allowance may be reduced or eliminated altogether. Reduction of the valuation allowance, in whole or in part, would result in a non-cash income tax benefit during the period of reduction.

### 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, respectively, in the years ended December 31, 2009 and 2008, primarily related to mortgage and asset backed debt securities.

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. We classified the ARS as trading securities under ASC 320-10. The ARS portfolio was repurchased by UBS in 2010 and we no longer own any ARS securities.

On November 14, 2008, we also recognized the UBS Put as an asset measured at a fair value of \$2.7 million. The UBS Put was exercised in June 2010. At December 31, 2009, the fair value of the UBS Put was \$2.8 million. During 2009, we recorded a \$0.5 million loss in interest expense for the decrease in the fair value of the UBS Put. During 2008, we recorded \$0.6 million gain in interest income for an increase in the fair value.

### 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. No impairment indicators were present in 2010 or 2009.

### SELECTED RELATIONSHIPS WITHIN THE CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2010	2009	2008
Percentage of net revenue:			
Net revenue:			
Products	83.9%	72.7%	75.5%
Services	16.1	27.3	24.5
Total net revenue	100.0	100.0	100.0
Cost of revenues:	20010	100.0	100.0
Cost of products	37.4	47.2	40.8
Cost of services	8.3	14.8	14.2
Total cost of revenue	45.7	62.0	55.0
Gross profit	54.3	38.0	45.0
Operating expenses:			
Engineering and development	12.2	20.1	19.6
Selling and administrative	14.3	24.5	22.4
Acquired intangible assets amortization	1.8	3.9	1.9
In-process research and development			0.1
Restructuring and other, net	0.2	4.5	5.6
Goodwill impairment			29.8
Total operating expenses	28.6	53.0	79.4
Income (loss) from operations	25.7	(14.9)	(34.4)
Interest and other, net	(1.2)	(2.4)	(0.2)
Income (loss) from continuing operations before income taxes	24.5	(17.4)	(34.6)
Provision (benefit) for income taxes	0.9	(1.1)	1.1
Income (loss) from continuing operations	23.6%	(16.3)%	(35.7)%

### **Results of Operations**

### 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 mon	Three months ended December 31,		
	2010	2009	2008	
Semiconductor Test		1.3	0.7	
Systems Test Group	1.2	0.6	1.5	
Total Company	1.1	1.1	0.9	

### Revenues

Net revenues for our two reportable segments were as follows:

		2010	2009	2008	2009-2010 Dollar Change	2008-2009 Dollar Change
				(in millions)		
Semiconductor Test	•••••••••••••••••••••••••••••••••••••••	\$1,413.3	\$552.4	\$ 900.3	\$860.9	\$(347.9)
Systems Test Group	•••••••••••••••••••••••••••••••••••••••	195.4	267.0	206.7	(71.6)	60.3
		\$1,608.7	\$819.4	\$1,107.0	\$789.3	\$(287.6)

Semiconductor Test revenue increased \$860.9 million or approximately 156% from 2009 to 2010, due to a strong recovery in the semiconductor market, particularly in SOC Test, and due to our strong market share in the higher growth Semiconductor Test segments such as power management, wireless and microcontroller.

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.

The decrease in Systems Test Group revenue of \$71.6 million or approximately 27% from 2009 to 2010 was primarily due to the decrease in sales of Hard Disk Drive test systems and Mil/Aero systems and instruments, partially offset by an increase in Commercial Board Test sales, while Diagnostic Solutions product and service sales remained flat.

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.

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

	2010	2009	2008	
Semiconductor Test	88%	67%	81%	
Systems Test Group	_12	33	_19	
			100%	

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

	2010	2009	2008
Taiwan	18%	14%	18%
United States	15	26	22
Malaysia	13	11	6
Philippines		5	5
Singapore	9	8	10
China	8	5	5
Europe	8	10	10
Korea	8	5	7
Japan	5	6	11
Thailand	4	9	3
Rest of the World	1	1	3
	100%	100%	100%

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

	2010	2009	2008 (in millions)	2009-2010 Dollar Change	2008-2009 Dollar Change
Product Revenue	\$1,349.3 259.4	\$595.3 224.1	\$ 836.0 271.0	\$754.0 35.3	\$(240.7) (46.9)
	\$1,608.7	\$819.4	\$1,107.0	\$789.3	\$(287.6)

Our product revenue increased \$754.0 million or 127% in 2010 from 2009 primarily due to higher sales across all Semiconductor Test products. The increase was partially offset by a decrease in sales of Hard Disk

Drive test systems and Mil/Aero systems and instruments. 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, increased \$35.3 million or 16%.

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 decreased \$46.9 million or 17% due to the global economic downturn.

In 2010 and 2008, no single customer accounted for more than 10% of our consolidated net revenue. In 2009, revenues from one customer accounted for approximately 12% of our consolidated net revenue. In 2010, 2009 and 2008, our three largest customers in the aggregate accounted for 21%, 26%, and 14% of consolidated net revenue, respectively.

### **Gross Profit**

	2010	_2009	2008	2009-2010 Dollar / Point Change	2008-2009 Dollar / Point Change
			ollars in mil		
Gross Profit	\$872.7	\$311.6	\$498.2	\$561.1	\$(186.6)
Percent of Total Revenue	54.3%	38.0%	45.0%	16.3	(7.0)

Gross profit as a percentage of revenue increased from 2009 to 2010 by 16.3 percentage points. This increase in gross profit was the result of an increase of 8.9 points due to higher product sales volume, an increase of 6.6 points related to product mix and an increase of 1.8 points due to lower inventory provisions. These increases were partially offset by a decrease of 1.2 points primarily due to higher variable compensation.

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.

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

	2010	2009	2008	2009-2010 Dollar / Point Change	2008-2009 Dollar / Point Change
		lions)			
Product Gross Profit	\$746.9	\$208.5	\$384.8	\$538.4	\$(176.3)
Percent of Product Revenue	55.4%	35.0%	46.0%	20.4	(11.0)
Service Gross Profit	\$125.8	\$103.1	\$113.4	\$ 22.7	\$ (10.3)
Percent of Service Revenue	48.5%	46.0%	41.8%	2.5	4.2

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, 2010, we recorded an inventory provision of \$6.2 million included in cost of revenues, due to the downward revisions to previously forecasted demand levels. Of the \$6.2 million of total excess and obsolete provisions recorded in 2010, \$4.5 million was related to Semiconductor Test and \$1.7 million was related to Systems Test Group.

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 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.

During the year ended December 31, 2010, 2009 and 2008, we scrapped \$5.3 million, \$31.6 million and \$9.8 million of inventory, respectively, and sold \$8.6 million, \$4.3 million and \$2.4 million of previously written-down or written-off inventory, respectively. As of December 31, 2010, we had inventory related reserves for amounts which had been written-down or written-off totaling \$126.1 million. We have no pre-determined timeline to scrap the remaining inventory.

### **Engineering and Development**

Engineering and development expenses were as follows:

	2010	<u>2009</u> (d	2008 ollars in mil	2009-2010 Change lions)	2008-2009 Change
Engineering and Development		\$164.8 5 20.1%	\$216.5 5 19.6%	\$32.2	\$(51.7)

The increase of \$32.2 million in engineering and development expenses from 2009 to 2010 was due primarily to an \$18.6 million increase in variable compensation and \$6.2 million increase from the restoration of temporary salary reductions.

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 in November 2008.

### Selling and Administrative

Selling and administrative expenses were as follows:

	2010	2009	2008	2009-2010 Change	2008-2009 Change
Selling and Administrative Percent of Total Revenue	\$230.1 14.3%	\$200.4	ollars in mil \$247.8 6 22.4%	\$29.7	\$(47.4)

The increase of \$29.7 million in selling and administrative expenses from 2009 to 2010 was due primarily to a \$25.1 million increase in variable compensation and \$9.9 million from the restoration of temporary salary reductions, partially offset by a \$5.3 million decrease in other spending related to workforce reductions and other cost reduction initiatives taken in 2009.

The decrease in selling and administrative spending of \$47.4 million from 2008 to 2009 was 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 in November 2008.

### **Acquired Intangible Assets Amortization**

Acquired intangible assets amortization expense was as follows:

	2010	2009	2008	2009-2010 Change	2008-2009 Change
Acquired Intangible Assets Amortization	\$20.3		lollars in 1 \$20-6		\$11.7
Percent of Total Revenue	427.5 1.8%		\$20.0 6 1.9%	• •	<b>ΦΠ.</b> /

Acquired intangible assets amortization expense decreased from 2009 to 2010 because intangible assets related to the 2001 GenRad acquisition were fully amortized in 2009. Acquired intangible assets amortization expense increased from 2008 to 2009 due to the Eagle Test acquisition which was completed in November of 2008.

### **Goodwill Impairment**

We experienced a worsening in our demand outlook during the fourth quarter of 2008. This sharp decline led to a \$329.7 million non-cash impairment of all our goodwill balance.

### **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.

#### **Restructuring and Other**

### Restructuring

In response to a downturn in the industry in 2008 and 2009, 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 \$1.8 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 first quarter of 2011. The remaining accrual for lease payments on vacated facilities of \$3.9 million 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 \$1.9 million against the lease accruals over the next twelve months. Our future lease commitments, as of December 31, 2010, are net of expected sublease income of \$1.0 million. As of December 31, 2010, we have subleased approximately 53% of our unoccupied space.

During the year ended December 31, 2010, we recorded restructuring charges of \$5.3 million related to ongoing efforts to lower expenses and our cost structure, S(2.7) million credit related to the early exit of previously impaired facilities and \$0.3 million related to a change in estimated severance benefits for the Q2 2009 action. The restructuring charges consisted of the following activities:

Q1 2010 Actions:

 \$0.8 million of severance charges related to headcount reductions of approximately 14 people, of which \$0.4 million and 10 people were in Systems Test Group and \$0.4 million and 4 people were in Semiconductor Test.

Q2 2010 Actions:

- \$1.3 million of severance charges related to headcount reductions of approximately 10 people in Systems Test Group; and
- \$0.8 million of facility charges in Systems Test Group related to the early exit of leased facilities in Kontich, Belgium and Stockport, United Kingdom.

Q3 2010 Actions:

 \$1.4 million of severance charges related to headcount reductions of approximately 22 people in Systems Test Group.

Q4 2010 Actions:

 \$1.0 million of severance charges related to headcount reductions of approximately 9 people in Systems Test Group.

Q2 2009 Actions:

 \$0.3 million related to a change in the estimated severance benefits related to headcount reduction activities across both segments.

Pre-2008 Actions:

 \$(2.7) million credit related to the early exit of previously impaired leased facilities in Westford, Massachusetts.

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 Q2 2008 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 for a revision in estimated sublease income at an exited leased facility in Ontario, Canada.

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-2008 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 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-2008 Activity:

 \$2.7 million charge in Systems Test Group for a revision in estimated sublease income at a facility in Westford, Massachusetts.

### 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.

### **Interest and Other**

	2010	2009	2008	2009-2010 Change	2008-2009 Change
			(in millio	ns)	
Interest income	\$ 8.1	\$ 3.4	\$ 12.6	\$ 4.7	\$(9.2)
Interest expense and other	\$(27.1)	\$(23.6)	\$(14.2)	\$(3.5)	\$(9.4)

Interest income increased by \$4.7 million, from \$3.4 million in 2009 to \$8.1 million in 2010, due primarily to a gain on sale of auction rate securities of \$2.7 million and an increase in cash and marketable securities balances in 2010. 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 expense and other increased by \$3.5 million, from \$23.6 million in 2009 to \$27.1 million in 2010, due primarily to a \$6.0 million increase in interest expense related to our convertible senior notes, a loss of \$2.7 million on the exercise of the auction rate security related UBS Put, and a \$2.6 million increase primarily in marketable securities amortization due to the higher marketable securities balance. In 2009, interest expense and other included \$2.5 million for the write off of the remaining revolving credit facility issue costs due to the termination of our revolving credit facility agreement, \$2.1 million in interest expense related to the revolving credit facility, and \$2.8 million realized loss on sale and impairment of marketable securities.

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.

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

	2010	2009	2008	2009-2010 Change	2008-2009 Change
			(in millions	3)	
Semiconductor Test	\$422.4	\$(129.1)	\$(291.8)	\$551.5	\$162.7
Systems Test Group				(19.5)	95.2
Corporate				5.1	(18.1)
Total					\$239.8

The increase in income from continuing operations before income taxes from 2009 to 2010 was primarily due to higher revenue in 2010 compared to 2009 and lower restructuring and other costs in 2010. The decrease in loss from continuing operations before income taxes from 2008 to 2009 was 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.

### **Income Taxes**

The income tax expense from continuing operations for 2010, of \$14.8 million, was related primarily to tax provisions for foreign 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, of \$12.6 million, was related primarily to tax provisions for foreign taxes.

### **Contractual Obligations**

The following table reflects our contractual obligations as of December 31, 2010:

Payments Due by Period	Purchase Obligations	Non-cancelable Lease Commitments (1)	Debt	Interest on Debt	Pension Contributions	Total
			(in thousa	nds)		
2011	\$205,100	\$12,072	\$ 2,450	\$ 8,661	\$5,576	\$233,859
2012		10,284	2,448	8,627	~	21,359
2013		6,759	2,449	8,592	·	17,800
2014		5,292	191,225	4,307		200,824
2015		3,293				3,293
Beyond 2015		1,976		_		1,976
Total	\$205,100	\$39,676	\$198,572	\$30,187	\$5,576	\$479,111

(1) Non-cancelable lease payments have not been reduced by sublease income of \$1.0 million due in the future under non-cancelable sublease agreements.

(2) As of December 31, 2010, the total amount of unrecognized tax benefit for uncertain tax positions and the accrual for the related interest, net of the federal benefit, was \$7.5 million and \$1.1 million, respectively, and was included in 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 \$536.7 million in 2010 from 2009 to \$1,055.5 million. Cash activity for 2010, 2009 and 2008 was as follows (in millions):

		2009	2008	2009-2010 Change	2008-2009 Change
Cash provided by operating activities:					
Income (loss) from continuing operations, adjusted for non cash items	\$ 515.2	\$ 42.8	\$ 124.5	\$ 472.4	\$(81.7)
Change in operating assets and liabilities, net of businesses and product lines sold and acquired	51.6	78.5	38.6	(26.9)	39.9
Cash provided by discontinued operations			0.8		(0.8)
Total cash provided by operating activities	\$ 566.8	\$121.3	\$ 163.9	\$ 445.5	<u>\$(42.6)</u>
Total cash used for investing activities	\$(627.7)	<u>\$(93.9</u> )	<u>\$(449.1)</u>	<u>\$(533.8)</u>	\$355.2
Total cash provided by financing activities	\$ 42.4	\$ 66.1	\$ 46.3	<u>\$ (23.7)</u>	<u>\$ 19.8</u>
Effect of exchange rate changes on cash and cash					
equivalents	(0.5)	0.5	(0.8)	(1.0)	1.3
Total	\$ (19.0)	<u>\$ 94.0</u>	\$(239.7)	<u>\$(113.0)</u>	\$333.7

In 2010, changes in operating assets and liabilities, net of businesses acquired, provided cash of \$51.6 million. This was due to a \$38.2 million increase in operating assets and an \$89.8 million increase in operating liabilities. The increase in operating assets was due to an increase in accounts receivable of \$51.2 million due to higher sales volume, partially offset by a \$4.6 million decrease in inventories, and a decrease in other current assets of \$8.4 million. The increase in operating liabilities was due to a \$57.7 million increase in customer advance payments due primarily to an advanced payment received from one of our Semiconductor Test customers, a \$44.5 million increase in accrued employee compensation due to higher variable compensation, a \$15.2 million increase in accounts payable, a \$13.7 million increase in deferred revenue, an \$8.5 million increase in accrued income taxes, and a \$2.7 million increase in other accrued liabilities, partially offset by \$52.5 million of retirement plan contributions.

Investing activities during 2010 used cash of \$627.7 million, due to \$870.8 million used for purchases of marketable securities and \$76.0 million used for purchases of property, plant and equipment, partially offset by proceeds from sales and maturities of marketable securities that provided cash of \$318.1 million, and proceeds from life insurance that provided cash of \$1.1 million.

Financing activities during 2010 provided cash of \$42.4 million due to \$44.7 million from the issuance of common stock under stock option and stock purchase plans which was partially offset by \$2.3 million of cash used for payments on long-term debt related to the Japan loan.

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 and maturities 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 2008, investing activities used cash of \$449.1 million. 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. Capital expenditures were \$87.2 million in 2008. Proceeds from asset disposals were \$61.7 million and primarily consisted of sales of real estate.

In 2008, financing activities provided cash of \$46.3 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 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.

In 2008, issuances of common stock under stock option and stock purchase plans provided cash of \$17.8 million.

In November 2007, our Board of Directors authorized a 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. In November 2010, our Board cancelled the November 2007 stock repurchase program and authorized a new stock repurchase program for up to \$200 million. During the year ended December 31, 2010, we did not repurchase any shares of common stock.

We expect that our cash, cash equivalents and marketable securities balance of \$1,055.5 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 plans, the liability is the difference between the fair value of the plans.

Our pension expense, which includes the U.S. Qualified Pension Plan ("U.S. Plan"), certain qualified plans for non-U.S. subsidiaries, and a U.S. Supplemental Executive Defined Benefit Plan, was approximately \$7.8 million for the year ended December 31, 2010. The largest portion of our 2010 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 U.S. Plan assets assumption, we evaluated input from our investment managers and pension consultants, including their review of asset class return expectations. Based on this review, we believe that 7.5% was an appropriate rate to use for 2010. We will continue to evaluate the expected return on plan assets at least annually, and will adjust the rate as necessary. The December 31, 2010 asset allocation for our U.S. Plan is 57% invested in fixed income securities, 37% invested in equity securities, and 6% invested in other securities. The February 18, 2011 asset allocation for our U.S. Plan is 69% invested in fixed income securities, 30% invested in equity securities and 1% invested in other securities. Our investment managers regularly review the actual asset allocation and periodically rebalance 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, 2010, under the U.S. Plan, we had cumulative losses of approximately \$20.1 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. Plan is based on the Citigroup Pension Index adjusted for the U.S. Plan's expected cash flows and was 5.3% at December 31, 2010, down from 5.85% at December 31, 2009. We estimate that in 2011 we will recognize approximately \$6.9 million of pension expense for the U.S. Plan assets. Future pension expense estimate for 2011 is based on a 5.3% discount rate, and 5.5% return on U.S. 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, 2010, we had unrecognized pension losses and prior service costs of \$129.5 million, of which \$120.1 million is for the U.S. Plan.

We performed a sensitivity analysis, which expresses the potential change in our U.S. Plan expense for the year ending December 31, 2011, that would result from changes to either the discount rate or the expected return on plan assets.

		Discount Rate		
Return on Plan Assets	4.8%	5.3%	5.8%	
<b>5</b> 0.00	(in millions)			
5.0%	\$9.8	\$8.4	\$7.0	
5.5%	8.3	6.9	5.5	
6.0%	6.9	5.5	4.1	

The assets of the U.S. Plan consist primarily of fixed income and equity securities. The value of our U.S. Plan assets has increased from \$217.1 million at December 31, 2009 to \$275.7 million at December 31, 2010. 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 2010, we made a discretionary contribution of \$45.0 million to the U.S. Plan, \$1.7 million contribution to the U.S. Supplemental Executive Defined Benefit Pension Plan and \$3.8 million contribution to certain qualified plans for non-U.S. subsidiaries. We expect to contribute approximately \$1.7 million to the U.S. Supplemental Executive Defined Benefit Pension Plan in 2011. Contributions that will be made in 2011 to certain qualified plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$2.2 million. We do not expect to make any contributions to the U.S. Plan in 2011.

### **Equity Compensation Plans**

In addition to our 1996 Employee Stock Purchase Plan discussed in "Note M: 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, 2010 (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 Equity plans not approved by	8,680(1)	\$13.26	15,183(3)
shareholders(4,5,6)	5,465(2)	\$17.37	
Total	14,145	\$16.32	15,183

(1) Includes 6,820,402 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.

- (2) Includes 142,720 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.
- (3) Consists of 9,850,491 securities available for issuance under the 2006 Equity Plan and 5,332,860 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, 2010, there were outstanding options exercisable for an aggregate of 3,034 shares of our common stock pursuant to the GenRad Plans, with a weighted average exercise price of \$48.80 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, 2010, there were outstanding options exercisable for an aggregate of 1,333,398 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, 2010, there were outstanding restricted stock units covering an aggregate of 142,720 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, 2010, there were outstanding options exercisable for an aggregate of 651,652 shares of our common stock pursuant to the Eagle Plans, with a weighted average exercise price of \$3.61 per share.

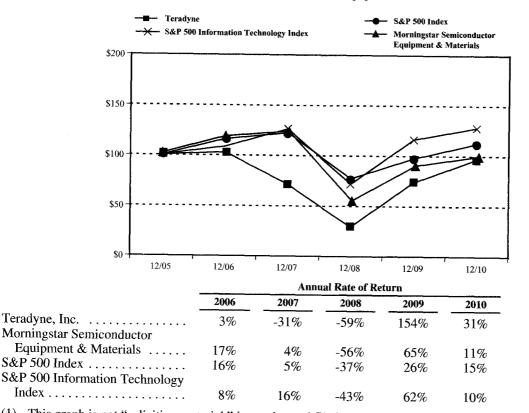
The purpose of the 2006 Equity Plan is to motivate employees, officers, directors, consultants and advisors by providing equity ownership and compensation opportunities in Teradyne. The aggregate number of shares available under the 2006 Equity Plan as of December 31, 2010 was 15,183,151 shares of our 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 2010 and 2009, we granted restricted stock units to employees and directors and restricted stock units and stock options to executive officers. In 2008, we granted restricted stock unit awards to our employees, executive officers and directors.

As of December 31, 2010, total unrecognized compensation expense related to non-vested awards and options totaled \$38.2 million, and is expected to be recognized over a weighted average period of 2.4 years.

### **Performance Graph**

The following graph compares the change in our cumulative total shareholder return in our common stock with each of (i) the Standard & Poor's 500 Index, (ii) the S&P 500 Information Technology Index, and (iii) the

Morningstar Semiconductor Equipment & Materials Industry Group. The comparison assumes \$100.00 was invested on December 31, 2005 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. This is the last year that we will compare ourselves to the S&P 500 Information Technology Index. Going forward, we will compare ourselves instead against the Morningstar Semiconductor Equipment & Materials Industry Group as this better aligns us with companies in the semiconductor equipment industry.



### Teradyne, S&P 500 Information Technology Index, S&P 500 Index and Morningstar Semiconductor Equipment & Materials

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 Aon Hewitt Associates, a source believed to be reliable, but we are not responsible for any errors or omissions in such information.

# **Recently Issued Accounting Pronouncements**

In March 2010, FASB issued an Accounting Standards Update ("ASU") 2010-17, "Milestone Method of Revenue Recognition", to Accounting Standards Codification ("ASC") 605, "Revenue Recognition." The guidance in this consensus allows the milestone method as an acceptable revenue recognition methodology when an arrangement includes substantive milestones. The guidance provides a definition of substantive milestone and should be applied regardless of whether the arrangement includes single or multiple deliverables or units of accounting. The scope of this consensus is limited to the transactions involving milestones relating to research and development deliverables. The guidance includes enhanced disclosure requirements about each arrangement, individual milestones and related contingent consideration, information about substantive milestones and factors considered in the determination. The consensus is effective prospectively to milestones achieved in fiscal years, and interim periods within those years, after June 15, 2010. We adopted this final consensus prospectively in January 2011 and the adoption did 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. Our fixed income available-for-sale marketable securities 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 approximately one month. 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, 2010, 2009 and 2008, 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. The potential change in fair value from changes in interest rates is immaterial as of December 31, 2010 and 2009.

### 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, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010 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, 2010, 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, 2011

# TERADYNE, INC. CONSOLIDATED BALANCE SHEETS

# December 31, 2010 and 2009

	2010	2009
	(in thousands share info	
ASSETS		
Current assets: Cash and cash equivalents Marketable securities	\$ 397,737 409,061	\$ 416,737 46,933
Accounts receivable, less allowance for doubtful accounts of \$3,752 and \$3,770 in 2010 and 2009, respectively	176,483	125,236
Inventories: Parts Assemblies in process Finished goods	91,094 17,048 9,500	43,691 37,161 9,984
Deferred tax assets Prepayments and other current assets	117,642 22,730 52,965	90,836 18,944 63,606
Total current assets	1,176,618	762,292
Property, plant and equipment: Land Buildings and improvements Machinery and equipment Construction in progress	16,561 130,962 631,477 1,073	16,561 133,689 631,506 651
Total property, plant and equipment	780,073	782,407
Less: Accumulated depreciation	548,496	536,045
Net property, plant and equipment	231,577 248,696 13,981 122,941 16,542	246,362 55,130 152,192 19,361
Total assets	\$1,810,355	\$1,235,337
LIABILITIES		
Current liabilities: Accounts payable Accrued employees' compensation and withholdings Deferred revenue and customer advances. Other accrued liabilities Accrued income taxes Current debt	81,979 106,490 106,579 57,741 8,465 2,450	66,765 55,356 104,439 54,640 
Total current liabilities         Long-term deferred revenue and customer advances         Retirement plans liabilities         Deferred tax liabilities         Long-term other accrued liabilities         Long-term debt	363,704 71,558 73,310 9,849 19,564 150,182	283,357 2,318 115,101 8,041 20,841 141,100
Total liabilities	688,167	570,758
Commitments and contingencies (Note I) SHAREHOLDERS' EQUITY Common stock, \$0.125 par value, 1,000,000 shares authorized, 182,035 and 174,908 shares issued and outstanding at December 31, 2010 and 2009, respectively	22,755 1,269,525 (128,216) (41,876)	21,864 1,202,426 (138,105) (421,606)
Total shareholders' equity	1,122,188	664,579
Total liabilities and shareholders' equity	\$1,810,355	\$1,235,337

# CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,			
	2010	2009	2008	
Net revenues:	(in thousand	s, except per sh	are amounts)	
Products	\$1,349,257 259,393	\$ 595,304 224,103	\$ 836,045 270,997	
Total net revenues Cost of revenues:	1,608,650	819,407	1,107,042	
Cost of products	602,330 133,571	386,807 120,967	451,225 157,625	
Total cost of revenues	735,901	507,774	608,850	
Gross profit	872,749	311,633	498,192	
Engineering and development Selling and administrative Acquired intangible assets amortization In-process research and development Restructuring and other Goodwill impairment	197,022 230,101 29,251  2,907 	164,835 200,430 32,296  36,493	216,461 247,789 20,633 1,600 62,775 329,674	
Total operating expenses	459,281	434,054	878,932	
Income (loss) from operations Interest income Interest expense and other, net	413,468 8,104 (27,060)	(122,421) 3,417 (23,633)	(380,740) 12,558 (14,236)	
Income (loss) from continuing operations before income taxes Provision (benefit) for income taxes	394,512 14,782	(142,637) (8,800)	(382,418) 12,577	
Income (loss) from continuing operations	379,730	(133,837)	(394,995)	
Income from discontinued operations before income taxes Provision for income taxes			768	
Income from discontinued operations			768	
Net income (loss)	\$ 379,730	\$(133,837)	\$ (394,227)	
Income (loss) from continuing operations: Basic	<u></u>			
	\$ 2.11	\$ (0.77)	\$ (2.32)	
Diluted	<u>\$ 1.73</u>	<u>(0.77)</u>	<u>(2.32)</u>	
Net income (loss) per common share: Basic	<u>\$ 2.11</u>	\$ (0.77)	\$ (2.31)	
Diluted	\$ 1.73	\$ (0.77)	\$ (2.31)	
Weighted average common shares—basic	179,924	173,604	170,593	
Weighted average common shares—diluted	226,807	173,604	170,593	

	Total Compre- Shareholders' Income Equity (Loss)	\$1,229,174	13.422 22.250 32.372 (91.192)	$\begin{array}{cccc} (394,227) & \$(394,227) \\ (4,878) & (4,878) \\ (1,997) & (1,997) \\ (1,971) & (1,997) \\ (97,220) & (97,220) \end{array}$	$\begin{array}{cccc} 1,421 & 1,421 \\ 613 & 613 \\ (19) & (19) \\ \hline & \hline \\ \\ \\ & \hline \\ \\ \\ \\$	(100;064)¢	13.270 39.736 24.639 1,049	(133,837) \$(133,837) 2,779 2,779 816 816 1,836 1,836	$\begin{array}{r} 4.007 \\ 565 \\ \overline{565} \\ $	664,579	37,410 30,580	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5,378 5,378 310 310 310	\$ 589,019
NCOME (LOSS)	Retained Earnings To (Accumulated Shareh Deficit) Eq	148,125	2 2 3 3 (91,667)	(394,227) (39 (() () ()		(287,769) 70		(133,837) (15		(421,606) 60		379,730 3		\$ (41,876) \$1,1
HENSIVE II	Accumulated Other Compre- ( hensive Loss	(in thousands) \$ (46,028) \$		(4,878) (1,997) (97,220)	1,421 613 (19)	(148,108)		2,779 816 1,836	4,007 565	(138,105)		1,559 (349) (349) (2,991)	5,378 310	\$(128,216)
OMPREI 2008	Additional Paid-in Capital	\$1,105,441	12,918 22,250 32,372 (48,591)			1.124.390	12,612 39,736 24,639 1,049			1,202,426	36,519 30,580			\$1,269,525
Y AND C 2009 and 2	Common Stock Par Value	\$21,636	504 (934)			21.206	658			21,864	891			\$22,755
, п. с. ЕQUIT . 2010, 2	Common Stock Shares Issued	173,088	4,036 (7,473)			169,651	5,257			174,908	7,127			. 182,035
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS) Years Ended December 31, 2010, 2009 and 2008		Balance, December 31, 2007	Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$4,395	Acquirements of second: Comprehensive income: Net loss Foreign currency translation adjustment Unrealized loss on investments, net of tax of \$0 Armarial loss arising during net of tax of \$0	Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$34 Prior service costs, net of tax of \$80 Net transition asset, net of tax of (\$8)	Total comprehensive loss	Datance, December 31, 2000 Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$2,433 Convertible note hedge Stock-based compensation expense Tax benefit related to stock options and restricted stock units	Comprehensive income: Net loss	Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$221 Prior service costs, net of tax of \$0	Balance, December 31, 2009	Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$7,269	Comprehensive income: Net income	Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$133	Total comprehensive incomeBalance, December 31, 2010

# CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years	Ended Decen	nber 31,
	2010	2009	2008
Cash flows from operating activities:		(in thousands	s) (i
Net income (loss) Less: Income from discontinued operations	\$ 379,730 	\$(133,837)	\$(394,227) 768
Income (loss) from continuing operations Adjustments to reconcile income (loss) from continuing operations to net cash provided by operating activities:	379,730	(133,837)	(394,995)
Depreciation Amortization Provision for excess and obsolete inventory Stock-based compensation Non cash charge for the sale of inventories revalued at the date of accusition	53,497 46,390 6,193 30,580	60,094 45,987 27,981 24,639 15,413	71,255 23,505 29,363 22,250 5,046
Revolving credit facility issue costs Loss on sale and impairment of marketable securities Tax benefit related to stock options and restricted stock units		2,488 2,186 (1,049)	16,240
Loss on sale of land and buildings In-process research and development Deferred taxes	(3,881)	(1,049)	329,674 20,883 1,600 1,258
Changes in operating assets and liabilities, net of businesses and product lines sold and acquired:	2,666	1,587	(1,562)
Accounts receivable Inventories Other assets Deferred revenue and customer advances Accounts payable and other accrued expenses Retirement plan contributions Accrued income taxes	(51,247) 4,624 8,446 71,380 62,409 (52,452) 8,465	$(15,565) \\ 63,377 \\ (726) \\ 42,764 \\ 3,914 \\ (15,291)$	$118,196 \\ (3,074) \\ (32,709) \\ 13,574 \\ (45,171) \\ (7,158) \\ (5,008)$
Net cash provided by continuing operations Net cash provided by discontinued operations	566,800	121,317	<u>163,167</u> 768
Net cash provided by operating activities	566,800	121,317	163,935
Cash flows from investing activities: Investments in property, plant and equipment Purchases of available-for-sale marketable securities Proceeds from sales and maturities of available-for-sale marketable securities Proceeds from sales of trading marketable securities Proceeds from sales of trading marketable securities Proceeds from sales of trading marketable securities Proceeds from sale of land and buildings Proceeds from sale of equity investments and product lines	(76,044) (870,777) 291,740 26,330 1,091	(41,932) (90,369) 38,036 3,000 1,076 (3,741)	(87,202) (135,475) 286,206 14,832 (574,342) 44,072 2,811
Net cash used for investing activities	(627,660)	(93,930)	(449,098)
Cash flows from financing activities: Issuance of common stock under stock option and stock purchase plans Payments of long-term debt Net proceeds from long-term debt Repayment of revolving credit facility Tax benefit related to stock options and restricted stock units Net proceeds from revolving credit facility Repurchase of common stock	44,679 (2,305)	15,703 (1,069) 172,914 (122,500) 1,049	17,817 
Net cash provided by financing activities	42,374	66,097	$\frac{(91,192)}{46,299}$
Effect of exchange rate changes on cash and cash equivalents	(514)	548	(802)
(Decrease) increase in cash and cash equivalents Cash and cash equivalents at beginning of year	(19,000) 416,737	94,032 322,705	(39,666) 562,371
Cash and cash equivalents at end of year	\$ 397,737	\$ 416,737	\$ 322,705
Supplementary disclosure of cash flow information: Cash paid during the year for:			
Interest Income taxes (refunds) payments	\$ 9,745 \$ (2,091)	\$ 7,106 \$ (5,838)	\$ 1,063 \$ 17,952

# 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.

### **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, deferred tax assets, 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**

In October 2009, the Financial Accounting Standards Board ("FASB") amended the accounting standards for revenue recognition to remove tangible products containing non-software and software components that function together to deliver the product's essential functionality from the scope of industry-specific software revenue recognition guidance. In October 2009, the FASB also amended the accounting standards for arrangements with multiple deliverables. Teradyne elected to early adopt this accounting guidance at the beginning of its first quarter of 2010 on a prospective basis. Adoption had no material impact on its financial position or results of operations in 2010.

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 its 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 has non-software and software components that function together to deliver the equipment's essential functionality. 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 also defers the portion of the sales price that is not due until acceptance, which represents deferred profit.

For multiple element arrangements, Teradyne allocates revenue to all deliverables based on their relative selling prices. In such circumstances, a hierarchy is used to determine the selling price for allocating revenue to deliverables as follows: (i) vendor-specific objective evidence of selling price ("VSOE"), (ii) third-party evidence of selling price ("TPE"), and (iii) best estimate of the selling price ("BESP"). For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis and the delivery or performance of the undelivered item must be considered probable and substantially in Teradyne's control.

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 customers' ability to use the product. Teradyne defers revenue for the selling price of installation and training. Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 605-20, "Separately Priced Extended Warranty and Product Maintenance Contracts."

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

Teradyne generally does not provide its customers with contractual rights of return for any of its products.

For transactions involving the sale of software, revenue is recognized in accordance with ASC 985-605, *"Software Revenue Recognition."* Teradyne recognizes 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. As of December 31, 2010 and 2009, Teradyne had \$0.1 million and \$1.0 million, respectively, in unbilled amounts on long-term contracts included in accounts receivable. These amounts will be billed on a milestone basis in accordance with contractual terms. As of December 31, 2010 and 2009, deferred revenue and customer advances consisted of the following and are included in the short and long-term deferred revenue and customer advances:

	2010	2009
	(in tho	usands)
Customer advances	\$132,592	\$ 74,887
Service, training and installation	37,026	22,616
Undelivered elements	1,839	5,551
Acceptance	2,083	530
Other	4,597	3,173
Total deferred revenue and customer advances	\$178,137	\$106,757

### **Product Warranty**

Teradyne generally provides a one-year warranty on its products, commencing upon installation or shipment. A provision is recorded upon revenue recognition to cost of revenues for estimated warranty expense based on historical experience. Related costs are charged to the warranty accrual as incurred. The balance below is included in other accrued liabilities.

	Amount
	(in thousands)
Balance at December 31, 2007	\$ 9,340
Acquisitions	1,872
Accruals for warranties issued during the period	12,589
Accruais for warranties issued during the period	386
Accruals related to pre-existing warranties	(15,815)
Settlements made during the period	(15,015)
Balance at December 31, 2008	8,372
Accruals for warranties issued during the period	8,907
Accruais for warranties issued during the period	(674)
Accruals related to pre-existing warranties	(9,519)
Settlements made during the period	(),51)
Balance at December 31, 2009	7,086
Accruals for warranties issued during the period	17,353
Actuals for warrantee issued during the period	(1,313)
Accruals related to pre-existing warranties	(12,870)
Settlements made during the period	
Balance at December 31, 2010	\$ 10,256

When Teradyne receives revenue for extended warranties, beyond one year, it is deferred and recognized on a straight-line basis over the contract period. Related costs are expensed as incurred. The balance below is included in short and long-term deferred revenue and customer advances.

	Amount
	(in thousands)
Balance at December 31, 2007         Deferral of new extended warranty revenue         Recognition of extended warranty deferred revenue	\$ 6,610 4,530 (4,536)
Balance at December 31, 2008         Deferral of new extended warranty revenue         Recognition of extended warranty deferred revenue	6,604 2,552 (4,694)
Balance at December 31, 2009         Deferral of new extended warranty revenue         Recognition of extended warranty deferred revenue	4,462 7,696 (3,186)
Balance at December 31, 2010	\$ 8,972

### Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The volatility of the industries that Teradyne serves can cause certain of its customers to experience shortages of cash flows, which can impact their ability to make required payments. Teradyne maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. Estimated allowances for doubtful accounts are reviewed periodically taking into account the customer's recent payment history, the customer's current financial statements and other information regarding the customer's credit worthiness. Account balances are charged off against the allowance when it is determined the receivable will not be recovered.

### 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, Teradyne uses consistent methodologies to evaluate all inventories for net realizable value. Teradyne records 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.

### Investments

Teradyne accounts for its investments in debt and equity securities in accordance with the provisions of ASC 320-10, "*Investments—Debt and Equity Securities*." ASC 320-10 requires that certain debt and equity securities be classified into one of three categories; trading, available-for-sale or held-to-maturity securities. On a quarterly basis, Teradyne reviews its 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.

Effective January 1, 2008, Teradyne 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. Teradyne uses the market and income approach techniques to value its financial instruments and there were no changes in valuation techniques during the year ended December 31, 2010 and 2009. 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.

In accordance with ASC 820-10, Teradyne measures its debt and equity investments at fair value. Teradyne's debt and equity investments are primarily classified within Level 2 with the exception of Teradyne's investments in auction rate securities, which were classified within Level 3. Teradyne's investments in auction rate securities were classified within Level 3 because there were no active markets for the auction rate securities and therefore Teradyne was unable to obtain independent valuations from market sources. The valuation technique used under Level 3 consisted of a discounted cash flow analysis which included numerous factors, such as type of security, tax status, credit quality, duration, insurance and the portfolio composition as well as observable market data including yield or spreads of trading instruments.

### Goodwill, Intangible and Long-Lived Assets

Teradyne accounts for goodwill and intangible assets in accordance with ASC 350-10, "Intangibles-Goodwill and Other." Intangible assets are amortized over their estimated useful economic life and are carried at cost less accumulated amortization. Goodwill is assessed 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.

In accordance with ASC 360-10, "Impairment or Disposal of Long-Lived Assets," Teradyne reviews longlived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows to the recorded value of the asset. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis. The cash flow estimates used to determine the impairment, if any, contain management's best estimates using appropriate assumptions and projections at that time.

#### **Property, Plant and Equipment**

Property, plant and equipment are stated at cost and depreciated over the estimated useful lives of the assets. Leasehold improvements and major renewals are capitalized and included in property, plant and equipment accounts while expenditures for maintenance and repairs and minor renewals are charged to expense. When assets are retired, the assets and related allowances for depreciation and amortization are removed from the accounts and any resulting gain or loss is reflected in operations.

Teradyne provides for depreciation of its assets principally on the straight-line method with the cost of the assets being charged to expense over their useful lives as follows:

Buildings	40 years
Building improvements	5 to 10 years
Leasehold improvements	Lesser of lease term or useful life
Furniture and fixtures	10 years
Test systems manufactured internally	6 years
Machinery and equipment	3 to 5 years
Software	

Test systems manufactured internally are used by Teradyne for customer evaluations and manufacturing and support of its customers. Teradyne depreciates the test systems manufactured internally over a six-year life to cost of revenues and selling and administrative expenses. Teradyne often sells internally manufactured test equipment to customers. Upon the sale of an internally manufactured test system, the net book value of the system is transferred to inventory and expensed as cost of revenues. The net book value of internally manufactured test systems sold in the years ended December 31, 2010, 2009 and 2008 was \$12.2 million, \$14.5 million and \$29.4 million, respectively.

### **Engineering and Development Costs**

Teradyne's products are highly technical in nature and require a large and continuing engineering and development effort. Software development costs incurred prior to the establishment of technological feasibility are charged to expense. Software development costs incurred subsequent to the establishment of technological feasibility are capitalized until the product is available for release to customers. To date, the period between achieving technological feasibility and general availability of the product has been short and software development costs eligible for capitalization have not been material. Engineering and development costs are expensed as incurred and consist primarily of salaries, contractor fees, building costs, depreciation, and tooling costs.

# Stock Compensation Plans and Employee Stock Purchase Plan

# Equity Plans and Employee Stock Purchase Plan

Stock-based compensation expense is based on the grant-date fair value estimated in accordance with the provisions of ASC 718-10. As required by ASC 718-10, Teradyne has made an estimate of expected forfeitures and is recognizing compensation costs only for those stock-based compensation awards expected to vest.

On May 26, 2005, the 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 Teradyne's various stock option plans. The stock options that were accelerated had exercise prices that were in excess of \$13.26, the closing price of Teradyne's 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 Teradyne reduced the compensation expense it otherwise would have been required to record under ASC 718-10 by approximately \$48.6 million on a pre-tax basis over fiscal years 2006, 2007 and 2008.

Under its stock compensation plans, Teradyne has granted stock options and restricted stock units, and employees are eligible to purchase Teradyne's common stock through its Employee Stock Purchase Plan ("ESPP").

Stock options to purchase Teradyne's common stock at 100% of the fair market value on the grant date generally vest in equal installments over four years from the grant date and have a maximum term of seven years.

Restricted stock unit awards granted to employees vest in equal annual installments over four years. Restricted stock unit awards granted to non-employee directors vest after a one year period, with 100% of the award vesting on the first anniversary of the grant date. A portion of restricted stock unit awards granted to executive officers is subject to time-based vesting and a portion of the 2010 and 2008 awards is subject to performance-based vesting. The percentage level of performance satisfied for performance-based grants is assessed on or near the anniversary of the grant date and, in turn, that percentage level determines the number of performance-based restricted stock units available for vesting over the vesting period; portions of the performance-based grants not available for vesting will be forfeited. The performance criteria were not met for the 2008 performance-based award and the performance-based restricted stock units were forfeited. Restricted stock units do not have common stock voting rights, and the shares underlying the restricted stock units are not considered issued and outstanding until they become vested. Teradyne expenses the cost of the restricted stock unit awards subject to time-based vesting, which is determined to be the fair market value of the shares at the date of grant, ratably over the period during which the restrictions lapse.

Under the ESPP, eligible employees may purchase shares of common stock through regular payroll deductions of up to 10% of their eligible compensation, to a maximum of shares with a fair market value of \$25,000 per calendar year, not to exceed 6,000 shares. The price paid for the common stock is equal to 85% of the lower of the fair market value of Teradyne's common stock on the first business day and the last business day of the purchase period. There are two six-month purchase periods in each fiscal year.

The effect to income (loss) from continuing operations for recording stock-based compensation for the years ended December 31 was as follows (in thousands):

	2010	2009	2008
Cost of revenue	\$ 6,712	\$ 4,186	\$ 3,480
Engineering and development		7,738	6,912
Selling and administrative		12,715	11,858
Stock-based compensation	30,580	24,639	22,250
Income tax benefit		(1,049)	
Total stock-based compensation expense after income taxes	\$30,580	\$23,590	\$22,250

#### Valuation Assumptions

The total number of stock options granted in 2010 and 2009 were 0.3 million and 1.1 million, respectively, at the weighted average grant date fair value of \$4.10 and \$1.97, respectively. There were no stock options granted in 2008. The fair value of the stock options at grant date was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2010	2009
Expected life (years) Interest rate Volatility-historical	4.75 2.4% 48.8%	4.75 1.6% 44.9%
Dividend yield	0.0%	0.0%

Teradyne determined the stock option's expected life based upon historical exercise data for executive officers, the age of executives and the terms of the stock option award. Volatility was determined using historical volatility for a period equal to the expected life. The interest rate was determined using the U.S. Treasury yield curve in effect at the time of grant.

The weighted-average fair value of employee stock purchase rights granted pursuant to the ESPP in the first and last six months of 2010 was \$3.05 and \$2.77, respectively, the first and last six months of 2009 was \$1.66 and \$2.49, respectively, and the first and last six months of 2008 was \$2.38 and \$1.27, respectively. The fair value of the employees' purchase rights was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2010	2009	2008
Expected life (years)	0.5	0.5	0.5
Interest rate	0.2%	0.3%	2.8%
Volatility-historical	48.0%	73.6%	24.4%
Dividend yield	0.0%	0.0%	0.0%

As of December 31, 2010, there were 5.3 million shares available for grant under the ESPP.

### **Income Taxes**

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The measurement of deferred tax assets is reduced by a valuation allowance if, based upon weighted available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. U.S. income taxes are not provided for on the earnings of non-U.S. subsidiaries, which are expected to be reinvested indefinitely in operations outside the U.S. For intra-period tax allocations, Teradyne first utilizes non-equity related tax attributes, such as net operating losses and credit carryforwards and then equity-related tax attributes.

### **Advertising Costs**

Teradyne expenses all advertising costs as incurred. Advertising costs were \$0.6 million, \$0.8 million and \$1.5 million in 2010, 2009 and 2008, respectively.

### **Translation of Non-U.S. Currencies**

The functional currency for all non-U.S. subsidiaries is the U.S. dollar, except for the Systems Test Group business unit Diagnostic Solutions for which the local currency is its functional currency. All foreign currency denominated monetary assets and liabilities are re-measured on a monthly basis into the functional currency using exchange rates in effect at the end of the period. All foreign currency denominated non-monetary assets and liabilities are re-measured using historical exchange rates. Net foreign exchange gains and losses resulting from re-measurement are included in interest expense and other and were a gain of \$2.2 million, a loss of \$2.5 million and a gain of \$7.2 million, respectively, for the years ended December 31, 2010, 2009 and 2008. These amounts do not reflect the corresponding gain (loss) from foreign exchange contracts. See Note E "Financial Instruments" regarding foreign exchange rates in effect at the end of U.S. dollars using exchange rates in effect at the end of the period. Revenue and expense amounts are translated using an average of exchange rates in effect during the period. Translation adjustments are recorded within accumulated other comprehensive loss.

### Net Income (Loss) per Common Share

Basic net income (loss) per common share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Except where the result would be antidilutive, diluted net income (loss) per common share is calculated by dividing net income (loss) by the sum of the weighted average number of common shares plus common stock equivalents, if applicable.

With respect to the Teradyne's convertible debt, Teradyne intends to settle its conversion spread (i.e., the intrinsic value of the embedded option feature contained in the convertible debt) in shares. Teradyne accounts for its conversion spread using the treasury stock method. In the fourth quarter of 2010, Teradyne determined that it had the ability and intent to settle the principal amount of the convertible debt in cash; accordingly as of the fourth quarter of 2010, the principal amount has been excluded from the determination of diluted earnings per share.

#### **Comprehensive Income (Loss)**

Comprehensive income (loss) includes net income (loss), unrealized pension gains and losses, unrealized gains and losses on certain investments in debt and equity securities and cumulative translation adjustments.

# C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In March 2010, FASB issued an Accounting Standards Update ("ASU") 2010-17, "Milestone Method of Revenue Recognition", to Accounting Standards Codification ("ASC") 605, "Revenue Recognition." The guidance in this consensus allows the milestone method as an acceptable revenue recognition methodology when an arrangement includes substantive milestones. The guidance provides a definition of substantive milestone and should be applied regardless of whether the arrangement includes single or multiple deliverables or units of accounting. The scope of this consensus is limited to the transactions involving milestones relating to research and development deliverables. The guidance includes enhanced disclosure requirements about each arrangement, individual milestones and related contingent consideration, information about substantive milestones and factors considered in the determination. The consensus is effective prospectively to milestones achieved in fiscal years,

and interim periods within those years, after June 15, 2010. Teradyne adopted this final consensus prospectively in January 2011 and the adoption did not have a material impact on Teradyne's financial position or results of operations.

### D. ACQUISITIONS

#### **Business**

#### Nextest Systems Corporation

On January 24, 2008, Teradyne completed its acquisition of Nextest Systems Corporation ("Nextest") of San Jose, California for a total purchase price of \$399.8 million, which consisted of \$367.8 million of cash paid to acquire the outstanding common stock of Nextest, at a price of \$20.00 per share, \$25.9 million in fair value of assumed vested stock options and restricted stock units, which were converted into stock options and restricted stock units to purchase Teradyne's common stock, and \$6.1 million of acquisition related transaction costs, which primarily consisted of fees incurred for financial advisory and legal services. The fair value of stock options was estimated using the following weighted average assumptions:

Expected life	3.6 years
Expected volatility	
Risk-free interest rate	2.8%
Dividend yield	0.0%

Nextest designs, develops, manufactures, sells and services low-cost, high throughput automated test equipment systems for the semiconductor industry. Nextest competes in the flash memory, flash card, and flash memory based system-on-chip ("SOC") markets. Nextest's products are used to test flash memory, microcontrollers, image sensors, smart cards and field programmable logic devices. The acquisition allowed Teradyne to enter the flash memory test segment. Nextest is included within Teradyne's Semiconductor Test segment.

The Nextest acquisition was accounted for as a purchase business combination and, accordingly, the results have been included in Teradyne's consolidated results of operation from the date of acquisition. The allocation of the total purchase price of Nextest's net tangible and identifiable intangible assets was based on their estimated fair values as of the acquisition date. The excess of the purchase price over the identifiable intangible and net tangible assets in the amount of \$170.5 million was allocated to goodwill, which is not deductible for tax purposes. The following represents the allocation of the purchase price:

	Amount
	(in thousands)
Goodwill	\$170,492
Other intangible assets	99,800
Tangible assets acquired and liabilities assumed:	00 710
Cash and cash equivalents	88,513
Other current assets	55,550
Non-current assets	16,306
Accounts payable and current liabilities	(26,448)
Other long-term liabilities	(5,542)
In-process research and development	1,100
Total purchase price	\$399,771

Teradyne estimated the fair value of other intangible assets using the income approach. Acquired other intangible assets are amortized on a straight-line basis over their estimated useful lives. The following table represents components of these other intangible assets and their estimated useful lives at the acquisition date:

	Fair Value	Estimated Useful Life
	(in thousands)	(in years)
Developed technology	\$53,600	5.8
Customer relationships	45,900	6.8
Tradenames	300	1.0
Total intangible assets	\$99,800	6.2

During the year ended December 31, 2009, Teradyne reduced the gross amount of the Nextest intangible assets by \$0.9 million for the excess tax benefit realized due to the exercise of the stock options vested as of the acquisition date.

As a result of Teradyne's annual goodwill impairment test performed in December 2008, Teradyne recorded an impairment charge in the amount of \$329.7 million, which included the goodwill related to Nextest. See Note H "Goodwill and Intangible Assets".

### Eagle Test Systems, Inc

On November 14, 2008, Teradyne completed its acquisition of Eagle Test Systems, Inc. ("Eagle Test") of Buffalo Grove, Illinois, for a total purchase price of \$374.4 million, which consisted of \$362.8 million of cash paid to acquire the outstanding common stock of Eagle Test, at a price of \$15.65 per share, \$6.5 million in fair value of assumed vested stock options, which were converted into stock options to purchase Teradyne's common stock, and \$5.1 million of acquisition related transaction costs, which primarily consisted of fees incurred for financial advisory and legal services. The fair value of stock options was estimated using the following weighted average assumptions:

Expected life	4 1 years
Expected volatility	ni years
Dial face to define the second s	42.5%
Risk-free interest rate	2.0%
Dividend yield	0.0%
· · · · · · · · · · · · · · · · · · ·	0.0%

Eagle Test designs, manufactures, sells and services high-performance automated test equipment for the semiconductor industry. Their customers, including semiconductor manufacturers and assembly and test subcontractors, use their products to test analog, mixed-signal, and radio frequency semiconductors. Eagle Test's proprietary SmartPin<sup>™</sup> 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 systems are incorporated into a wide range of products, including digital cameras, MP3 players, cellular telephones, video/multimedia products, automotive electronics, computer peripherals, and notebook and desktop computers. Eagle Test is included within Teradyne's Semiconductor Test segment.

The Eagle Test acquisition was accounted for as a purchase business combination and, accordingly, the results have been included in Teradyne's consolidated results of operation from the date of acquisition. The allocation of the total purchase price of Eagle Test net tangible and identifiable intangible assets was based on their estimated fair values as of the acquisition date. The excess of the purchase price over the identifiable intangible assets in the amount of \$90.0 million was allocated to goodwill, which is not deductible for tax purposes. The purchase price allocation below reflects this adjustment. The following represents the allocation of the purchase price:

	Amount
	(in thousands)
Goodwill	\$ 90,048
Other intangible assets	102,400
Tangible assets acquired and liabilities assumed:	00.051
Cash, cash equivalents and short term marketable securities	88,051
Other current assets	64,673
Non-current assets	45,275
Accounts payable and current liabilities	(14,487)
Accounts payable and current nabilities	(2,064)
Other long-term liabilities	500
In-process research and development	
Total purchase price	\$374,396

Teradyne estimated the fair value of other intangible assets using the income approach. Acquired other intangible assets are amortized on a straight-line basis over their estimated useful lives. The following table represents components of these other intangible assets and their estimated useful lives at the acquisition date:

	Fair Value	Estimated Useful Life
	(in thousands)	(in years)
Developed technology	\$ 49,600	6.0
Customer relationships	41,600	10.7
Tradenames	10,900	13.0
Customer backlog	300	0.5
Total intangible assets	\$102,400	8.7

During the year ended December 31, 2009, Teradyne reduced the gross amount of the Eagle Test intangible assets by \$1.6 million for the excess tax benefit realized due to the exercise of the stock options vested as of the acquisition date.

As a result of Teradyne's annual goodwill impairment test performed in December 2008, Teradyne recorded an impairment charge in the amount of \$329.7 million, which included the goodwill related to Eagle Test. See Note H "Goodwill and Intangible Assets".

The following pro forma information gives effect to the acquisition of Nextest and Eagle Test as if both acquisitions occurred on January 1, 2008. The pro forma results are not necessarily indicative of what actually would have occurred had the acquisitions been in effect for the periods presented:

	For the Year Ended December 31, 2008	
Revenue	\$1,225,441 (418,618)	
Net loss per common share: Basic	\$ (2.45)	
Diluted	\$ (2.45)	

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The pro forma results above include the following non recurring expense items: in-process research and development charge of \$1.6 million and acquired inventory fair value adjustment of \$20.4 million.

### E. FINANCIAL INSTRUMENTS

### **Cash Equivalents**

Teradyne considers all highly liquid investments with maturities of three months or less at the date of acquisition to be cash equivalents.

### **Marketable Securities**

Teradyne classifies investments in marketable securities as trading, available-for-sale or held-to-maturity at the time of purchase and periodically re-evaluates such classification. There were no securities classified as held-to-maturity at December 31, 2010 or 2009. There were no securities classified as trading at December 31, 2010. At December 31, 2009, Teradyne's investments in auction rate securities were classified as trading securities. At December 31, 2010 and 2009, Teradyne's investments in equity and debt mutual funds, commercial paper, corporate debt securities and U.S. Treasury and government agency securities were classified as available-for-sale securities. Securities classified as available-for-sale and trading are reported at fair value. Realized gains are recorded in interest income. Realized losses and other-than-temporary unrealized losses on available-for-sale securities are included in interest expense and other. For the years ended December 31, 2009 and 2008, Teradyne recorded realized losses of \$2.1 million and \$5.0 million, respectively, on the sale of its marketable securities. There were no realized losses recorded in 2010. Unrealized gains and losses are included in accumulated other comprehensive income (loss). The cost of securities sold is based on the specific identification method.

As a result of Teradyne's November 14, 2008 acquisition of Eagle Test, Teradyne acquired \$26.5 million of auction rate securities ("ARS") at fair value (\$30.0 million par value). In addition, Teradyne acquired (1) the right ("UBS Put") to sell its ARS back to UBS at par plus interest, at its 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. The ARS portfolio was repurchased by UBS in 2010 and Teradyne no longer owns any ARS securities. During 2009, Teradyne recorded a net gain of \$0.7 million in interest income, in its consolidated statement of operations for the changes in the ARS fair value.

On November 14, 2008, Teradyne also recognized the UBS Put as an asset measured at a fair value of \$2.7 million. The UBS Put was exercised in June 2010. At December 31, 2009, the fair value of the UBS Put was \$2.8 million. During 2009, Teradyne recorded a \$0.5 million loss in interest expense for a decrease in the fair value of the UBS Put. During 2008, Teradyne recorded a \$0.6 million gain in interest income for an increase in the UBS Put fair value.

In determining the fair value of Teradyne's ARS and other investments Teradyne utilized the provisions of ASC 820-10, "*Fair Value Measurement and Disclosures*". In determining the value of its ARS as of December 31, 2009, Teradyne utilized a discounted cash flow valuation model with the major inputs to such model based on its estimates of the assumptions that market participants would use in valuing these instruments. Teradyne used the following key inputs to its valuation model as of December 31, 2009:

- Term Teradyne estimated a four to five-year expected life of the instruments, based on its
  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 Teradyne determined the probability of default using market credit spreads.
- Discount Rate Teradyne 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 instability in the financial markets and the low demand for auction rate securities, it was unclear as to when these securities would become liquid again. Without

the auction process functioning again, it was extremely difficult to estimate the expected holding period for these instruments. As a result, Teradyne included a 400 to 600 basis point premium to the discount rate to reflect the illiquidity of these bonds.

Based on these key inputs, Teradyne estimated the fair value of its ARS portfolio at \$23.6 million as of December 31, 2009.

In determining the fair value of the UBS Put Teradyne utilized the provisions of ASC 825-10, "Financial Instruments." The UBS Put was the only instrument of this nature or type that Teradyne held and for which Teradyne has elected the fair value option under ASC 825-10. In determining the fair value of the UBS Put as of December 31, 2009, Teradyne assumed it would redeem the auction rate securities at par at the earliest possible time, June 30, 2010. Teradyne 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 it expected 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.

The following table sets forth by fair value hierarchy Teradyne's financial assets and liabilities that were measured at fair value on a recurring basis as of December 31, 2010 and 2009.

	December 31, 2010			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
		(in thou	sands)	
Assets				
Available for sale securities:				
U.S. government agency securities	s —	\$341,510	\$	\$341,510
Money market funds	238,607	_		238,607
U.S. Treasury securities	138,707			138,707
Commercial paper		103,448	with the second s	103,448
Corporate debt securities		92,578		92,578
Certificates of deposit and time deposits		11,076		11,076
Equity and debt mutual funds	8,003			8,003
Non-U.S. government securities	278			278
Total	\$385,595	\$548,612	<u>\$ —</u>	\$934,207
Liabilities				
Derivatives	<u>\$</u>	\$ 632	<u>\$</u>	<u>\$ 632</u>
Total	<u>\$                                    </u>	\$ 632	<u>\$ —</u>	\$ 632

#### Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
Assets				
Cash and cash equivalents	\$238,607	\$ 37,843	\$	\$276,450
Marketable securities	62,294	346,767	_	409,061
Long-term marketable securities	84,694	164,002		248,696
	\$385,595	\$548,612	\$	\$934,207
Liabilities				
Other accrued liabilities	<u>\$                                    </u>	\$ 632	\$	\$ 632

	December 31, 2009				
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total	
Agosto		(in thou	isands)		
Assets Available for sale securities:					
	\$204 226	s —	s —	\$204 22C	
Money market funds Corporate debt securities	\$284,236	\$ <u></u> 21,224	» —	\$284,236 21,224	
U.S. government agency securities		16,418		16,418	
Certificates of deposit and time deposits		15,855		15,855	
U.S. Treasury securities	12,010	15,855		12,010	
Commercial paper	12,010	8,245		8,245	
Equity and debt mutual funds	7,499			7,499	
Municipal bonds		528		528	
Non-U.S. government securities	287			287	
Total	304,032	62,270	<u></u>	366,302	
Trading securities:	504,052	02,270		500,502	
Auction rate securities			23,649	23,649	
UBS Put			2,830	2,830	
	<u></u>				
Total	\$304,032	\$62,270	\$26,479	\$392,781	
Liabilities					
Derivatives	\$ —	\$ 143	\$ —	\$ 143	
Total	\$	\$ 143	\$	\$ 143	

# Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
		(in tho	usands)	
Assets				
Cash and cash equivalents	\$284,237	\$ 3,651	\$	\$287,888
Marketable securities	8,001	38,932	_	46,933
Long-term marketable securities	11,794	19,687	23,649	55,130
Other assets			2,830	2,830
	\$304,032	\$62,270	\$26,479	\$392,781
Liabilities				
Other accrued liabilities	<u>\$                                    </u>	<u>\$ 143</u>	\$	<u>\$ 143</u>

Changes in the fair value of Level 3 financial assets for the year ended December 31, 2010 and 2009 were as follows:

	Level 3 Finan	cial Assets
	Long-Term Auction Rate Securities	Long-Term UBS Put
	(in thous	ands)
Balance at December 31, 2008	\$ 25,968	\$ 3,330
Sale of auction rate securities	(3,000)	
Change in unrealized gain included in earnings	1,128	
Change in unrealized loss included in earnings	(447)	(500)
Balance at December 31, 2009	23,649	2,830
Sale of auction rate securities and exercise of UBS Put	(23,849)	(2,687)
Change in unrealized gain included in earnings	200	
Change in unrealized loss included in earnings		(143)
Balance at December 31, 2010	\$	<u>\$                                    </u>

On a quarterly basis, Teradyne reviews its 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.

Teradyne determined that it 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, respectively, in the years ended December 31, 2009 and 2008, primarily related to mortgage and asset backed debt securities.

The carrying amounts and fair values of financial instruments at December 31, 2010 and 2009 were as follows:

	December 31, 2010		December 3	31, 2009	
	Carrying Value Fair Valu		Carrying Value	Fair Value	
		(in tho	isands)		
Marketable securities	\$657,757	\$657,757	\$102,063	\$102,063	
Cash equivalents	276,450	276,450	287,888	287,888	
UBS Put			2,830	2,830	
Convertible debt (1)	144,059	506,350	133,554	392,113	
Japan loan	8,573	8,573	9,703	9,703	

(1) The carrying value represents the bifurcated debt component only, while the fair value is based on quoted market prices for the convertible note which includes the equity conversion feature.

The fair values of cash and cash equivalents, accounts receivable, net and accounts payable approximate the carrying amount due to the short term maturities of these instruments.

Short-term marketable securities mature in less than one year. Long-term marketable securities have maturities of one to three years. At December 31, 2010 and 2009, these investments are reported as follows:

	December 31, 2010						
		Availabl		Fair Market			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Value of Investments with Unrealized Losses		
			(in tho	usands)			
U.S. government agency securities	\$341,349	\$ 334	\$(173)	\$341,510	\$ 97,542		
Money market funds	238,607	·		238,607			
U.S. Treasury securities	138,354	360	(7)	138,707	10,030		
Commercial paper	103,472	1	(25)	103,448	33,210		
Corporate debt securities	92,464	170	(56)	92,578	43,434		
Certificates of deposit and time							
deposits	11,068	8	_	11,076	·		
Equity and debt mutual funds	7,056	1,378	(431)	8,003	1,088		
Non-U.S. government securities	261	17		278			
	\$932,631	\$2,268	\$(692)	\$934,207	\$185,304		

Reported as follows:

	Cost	Unrea Ga		Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
				(in tho	usands)	
Cash and cash equivalents	\$276,447	\$	3	\$	\$276,450	\$ —
Marketable securities	408,934	1	78	(51)	409,061	103,761
Long-term marketable securities	247,250	2,0	)87	(641)	248,696	81,543
	\$932,631	\$2,2	268	<u>\$(692</u> )	\$934,207	\$185,304

	December 31, 2009						
		Availab	le-for-Sale		Fair Market		
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Value of Investments with Unrealized Losses		
			(in tho	usands)			
Money market funds	\$284,236	\$	\$	\$284,236	\$		
Corporate debt securities	21,243	11	(30)	21,224	11,091		
U.S. government agency securities	16,418	5	(5)	16,418	6,155		
Certificates of deposit and time					,		
deposits	15,854	1		15,855	_		
U.S. Treasury securities	12,014		(4)	12,010	10,508		
Commercial paper	8,246		(1)	8,245	2,397		
Equity and debt mutual funds	7,430	622	(553)	7,499	4,139		
Municipal bonds	532		(4)	528	528		
Non-U.S. government securities	269	18		287			
	\$366,242	\$657	<u>\$(597)</u>	\$366,302	\$34,818		

### Reported as follows:

Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
		(in tho	usands)	
\$287,888	\$	\$ —	\$287,888	\$ —
46,928	7	(2)	46,933	16,425
31,426	650	(595)	31,481	18,393
\$366,242	\$ 657	\$(597)	\$366,302	\$34,818
	\$287,888 46,928 31,426	Cost         Gain           \$287,888         \$           46,928         7           31,426         650	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

As of December 31, 2010, the fair market value of investments with unrealized losses totaled \$185.3 million. Of this value, \$5.0 million had unrealized losses for greater than one year and \$180.3 million had unrealized losses for less than one year. As of December 31, 2009, the fair market value of investments with unrealized losses totaled \$34.8 million. Of this value, \$4.1 million had unrealized losses for greater than one year and \$30.7 million had unrealized losses for less than one year. Teradyne reviews its investments to identify and evaluate investments that have an indication of possible impairment. Based on this review, Teradyne determined that the unrealized losses related to these investments, at December 31, 2010 and 2009, were temporary.

#### Derivatives

Teradyne conducts business in a number of foreign countries, with certain transactions denominated in local currencies. The purpose of Teradyne's foreign currency management is to minimize the effect of exchange rate fluctuations on certain foreign currency denominated net monetary assets. Teradyne does not use derivative financial instruments for trading or speculative purposes.

To minimize the effect of exchange rate fluctuations associated with the remeasurement of net monetary assets denominated in foreign currencies, Teradyne enters into foreign currency forward contracts. The change in fair value of these derivatives is recorded directly in earnings, and is used to offset the change in value of the net monetary assets denominated in foreign currencies.

At December 31, 2010 and 2009, Teradyne had the following contracts to buy and sell non-U.S. currencies for U.S. dollars and other non-U.S. currencies with the following notional amounts:

	December 31, 2010		December 31, 20		009	
	Buy Position	Sell Position	Net Total	Buy Position	Sell Position	Net Total
			(in mil	lions)		
Japanese Yen	s —	\$10.6	\$10.6	\$	\$ 5.6	\$ 5.6
Taiwan Dollar	(1.4)	8.6	7.2	(0.2)	6.8	6.6
British Pound Sterling	(11.6)	7.6	(4.0)	(9.1)	7.7	(1.4)
Euro	(22.7)	20.1	(2.6)	(14.6)	12.9	(1.7)
Total	\$(35.7)	\$46.9	\$11.2	\$(23.9)	\$33.0	<u>\$ 9.1</u>

The fair value of the outstanding contracts was \$0.6 million and \$0.1 million at December 31, 2010 and 2009, respectively, which represented unrealized losses on the outstanding contracts.

In 2010 and 2008, Teradyne recorded net realized losses of \$2.3 million and \$8.1 million, respectively, related to foreign currency forward contracts hedging net monetary positions. In 2009, Teradyne recorded net realized gains of \$1.6 million related to foreign currency forward contracts hedging net monetary positions. Gains and losses on foreign currency forward contracts and foreign currency remeasurement gains and losses on monetary assets and liabilities are included in interest expense and other.

The following table summarizes the fair value of derivative instruments as of December 31, 2010 and 2009:

	Asset Derivatives				
	<b>Balance Sheet Location</b>	December 31, 2010	December 31, 2009		
		(in thousands)			
Derivatives not designated as hedging					
instruments:					
Foreign exchange contracts	Other accrued liabilities	\$632	\$143		
Total derivatives		\$632	\$143		

The following table summarizes the effect of derivative instruments in the statement of operations recognized for the years ended December 31, 2010, 2009 and 2008 (the table does not reflect the corresponding gain (loss) from the remeasurement of the balance sheet):

	Location of Gains (Losses) Recognized in Statement of Operations	December 31, 2010	December 31, 2009	December 31, 2008
			(in thousands)	
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	Interest expense and other	\$(2,289)	\$1,590	\$(8,124)
Total derivatives		\$(2,289)	\$1,590	\$(8,124)

See Debt Note F regarding derivatives related to the convertible senior notes.

### **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. Teradyne's cash equivalents consist primarily of money market funds invested in U.S. Treasuries and government agencies. Teradyne's fixed income available-for-sale marketable securities have a minimum rating of AA by one or more of the major credit rating agencies. Teradyne places foreign currency forward 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. Teradyne performs ongoing credit evaluations of its customers' financial condition and from time to time may require customers to provide a letter of credit from a bank to secure accounts receivable.

### F. DEBT

Long-term debt at December 31, 2010 and 2009 consisted of the following:

	2010	2009
	(in tho	usands)
Convertible senior notes		
Japan loan	8,573	9,703
Total debt	152,632	143,257
Current portion of long-term debt	2,450	2,157
Long-term debt	\$150,182	\$141,100

Payments Due by Period	Amount
2011	\$ 2,450
2012	2,448
2013	2,449
2014	
2015	
Beyond 2015	
Total	\$198,572

The debt principal payments for the next 5 years and thereafter are as follows:

#### Loan Agreement

On March 31, 2009, Teradyne K. K., Teradyne's wholly-owned subsidiary in Japan, entered into a loan agreement with a local bank in Japan to borrow approximately \$10.0 million (the loan is denominated in Japanese Yen). The loan has a term of 5 years and a fixed interest rate of 1.4%. Approximately \$6.0 million of the loan is collateralized by a real estate mortgage on Teradyne K.K.'s building and land in Kumamoto, Japan (which had a net book value of \$11.7 million as of December 31, 2010) and approximately \$4.0 million is unsecured. Teradyne, Inc. has guaranteed payment of the loan obligation. The loan is amortized over the term of the loan with semi-annual principal payments of approximately \$1 million payable on September 30 and March 30 each year. At December 31, 2010, approximately \$2.5 million of the outstanding loan principal is included in current debt and approximately \$6.1 million is classified as long-term debt.

#### **Convertible Senior Notes**

On March 31, 2009, Teradyne entered into an underwriting agreement regarding a public offering of \$175.0 million aggregate principal amount of 4.50% convertible senior notes due March 15, 2014 (the "Notes"). On April 1, 2009, the underwriters exercised their option to purchase an additional \$15.0 million aggregate principal amount of the Notes for a total aggregate principal amount of \$190.0 million. 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, beginning on September 15, 2009. The Notes will mature on March 15, 2014, unless earlier repurchased by Teradyne or converted. The Notes are senior unsecured obligations and rank equally with all of Teradyne's existing and future senior debt and senior to any of Teradyne's subordinated debt.

The Notes may be converted, under certain circumstances and during certain periods, at an initial conversion rate of approximately 182.65 shares of Teradyne's common stock per \$1,000 principal amount of Notes, which is equivalent to an initial conversion price of approximately \$5.48, a 25% conversion premium based on the last reported sale price of \$4.38 per share of Teradyne's common stock on March 31, 2009. The conversion rate is subject to adjustment in certain circumstances.

Holders may convert their Notes at their option prior to the close of business on the business day immediately preceding December 15, 2013, under the following circumstances: (1) during the five business-day period after any five consecutive trading day period (the "measurement period") in which the price per Note for each day of that measurement period was less than 98% of the product of the last reported sale price of Teradyne's common stock and the conversion rate for such date; (2) during any calendar quarter, if the last reported sale price of Teradyne's common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeds 130% of the applicable conversion price in effect on the last trading day of the immediately preceding calendar quarter; or (3) upon the occurrence of certain specified events. Additionally, the Notes are convertible during the last three months prior to the March 15, 2014 maturity date. Upon conversion, holders will receive, at Teradyne's option, shares of Teradyne common stock, cash or a combination of cash and shares of Teradyne common stock, subject to Teradyne's option to irrevocably elect to settle all future conversions in cash up to the principal amount of the Notes and shares of common stock for any excess.

During each calendar quarter of 2010, one of the above described circumstances that allows holders to convert their Notes at their option prior to December 15, 2013 had occurred (the last reported sale price of Teradyne's common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeded 130% of the conversion price in effect on the last trading day of the immediately preceding calendar quarter). As of March 1, 2011, no holders have exercised the option to convert their Notes.

Teradyne may not redeem the Notes prior to their maturity. Holders of the Notes may require Teradyne 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 Teradyne (which include, among others, the liquidation or dissolution of Teradyne, the acquisition of 50% or more of the total voting shares of Teradyne, certain mergers and consolidations, and the delisting of Teradyne's stock).

Concurrently with the offering of the Notes, Teradyne entered into a convertible note hedge transaction with a strike price equal to the initial conversion price of the Notes, or approximately \$5.48. The convertible note hedge allows Teradyne to receive shares of its common stock and/or cash related to the excess conversion value that it would pay to the holders of the Notes upon conversion. The convertible note hedges will cover, subject to customary antidilution adjustments, approximately 34,703,196 shares of Teradyne's common stock. Teradyne paid approximately \$64.6 million for the convertible note hedges.

Separately, Teradyne entered into a warrant transaction with a strike price of approximately \$7.67 per share, which is 75% higher than the closing price of Teradyne's common stock on March 31, 2009. The warrants will be net share settled and will cover, subject to customary antidilution adjustments, approximately 34,703,196 shares of Teradyne's common stock. Teradyne received approximately \$43.0 million for the warrants.

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 Teradyne's common stock, representing a 75% conversion premium based upon the closing price of Teradyne's common stock on March 31, 2009.

On April 6, 2009, Teradyne completed its registered public offering of the \$190.0 million aggregate principal amount convertible senior notes and settled the related convertible bond hedge and warrant transaction and received approximately \$163.0 million as a result of these financing transactions.

Teradyne considered the guidance of ASC 815-40, "Derivatives and Hedging—Contracts in Entity's Own Equity" and concluded that the convertible note hedge is both indexed to Teradyne's stock and should be classified in stockholders' equity in its statement of financial position. The convertible note hedge is considered indexed to Teradyne's stock as the terms of the convertible note hedge do not contain an exercise contingency and the settlement amount equals the difference between the fair value of a fixed number of Teradyne's stock price, which is an input to the fair value of a fixed-for-fixed option contract, the convertible note hedge is considered indexed to Teradyne's stock.

Teradyne assessed whether the convertible note hedge should be classified as equity under ASC 815-40. In the convertible note hedge contract the settlement terms permit net cash settlement or net share settlement, at the option of Teradyne. Therefore, the criteria as set forth in ASC 815-40 were evaluated by Teradyne. In reviewing the criteria, Teradyne noted the following: (1) the convertible note hedge does not require Teradyne to issue shares; (2) there are no cash payments for failure to make timely filings with the SEC; (3) in the case of termination, the convertible note hedge is settled in the same consideration as the holders of the underlying stock; (4) the counterparty does not have rights that rank higher than those of a shareholder of the stock underlying the convertible note hedge; and (5) there is no requirement to post collateral. Based on its analysis of those criteria, Teradyne concluded that the convertible note hedge should be recorded in equity and no further adjustment should be made in future periods to adjust the value of the convertible note hedge.

Teradyne analyzed the warrant transaction under ASC 815-40, "Derivatives and Hedging – Contracts in Entity's Own Equity" and other relevant literature, and determined that it met the criteria for classification as an equity transaction and is considered indexed to Teradyne's stock. As a result, Teradyne recorded the proceeds from the warrants as an increase to additional paid-in capital. Teradyne does not recognize subsequent changes in fair value of the warrant in its financial statements.

The provisions of ASC 470-20, "*Debt with Conversion and Other Options*" are applicable to the Notes. ASC 470-20 requires Teradyne to separately account for the liability (debt) and equity (conversion feature) components of the Notes in a manner that reflects Teradyne's nonconvertible debt borrowing rate at the date of issuance when interest cost is recognized in subsequent periods. Teradyne allocated \$63.4 million of the \$190.0 million principal amount of the Notes to the equity component, which represents a discount to the debt and will be amortized into interest expense using the effective interest method through March 2014. Accordingly, Teradyne's effective annual interest rate on the Notes will be approximately 14.5%. The Notes are classified as long-term debt in the balance sheet based on their March 15, 2014 maturity date. Debt issuance costs of approximately \$4.1 million are being amortized to interest expense over the five year term of the Notes. As of December 31, 2010, debt issuance costs were approximately \$2.6 million.

The below tables represent the key components of Teradyne's convertible senior notes:

	December 31, 2010	December 31, 2009
	(in tho	usands)
Debt principal	\$190,000	\$190,000
Unamortized discount	45,941	56,446
Net carrying amount of the convertible debt	\$144,059	\$133,554
	For the year ended December 31, 2010	For the year ended December 31, 2009
	(in tho	usands)
Contractual interest expense on the coupon	\$ 8,550	\$ 6,294
expense	11,319	7,601
Total interest expense on the convertible debt	\$ 19,869	\$ 13,895

As of December 31, 2010, the unamortized discount was \$46.0 million, which will be amortized over approximately 3.25 years, and the carrying amount of the equity component was \$63.4 million. As of December 31, 2010, the conversion rate was equal to the initial conversion price of approximately \$5.48 per share and the if-converted value of the Notes was \$487.2 million.

### **Revolving Credit Facility**

On November 14, 2008, in connection with the acquisition of Eagle Test, Teradyne entered into a credit agreement (the "Credit Agreement") among Teradyne, as borrower, a syndicate of banks and certain direct and indirect domestic subsidiaries of Teradyne. The Credit Agreement provided for a senior secured revolving credit facility of \$122.5 million. On November 14, 2008 and December 31, 2008, Teradyne borrowed \$100.0 million and \$22.5 million, respectively. The weighted average interest rate on the outstanding amount was 5.4% at December 31, 2008. Teradyne incurred \$2.8 million in costs related to the revolving credit facility. These costs were being amortized over the three year term of the revolving credit facility.

At Teradyne's option, loans under the Credit Agreement bore interest at a rate per annum equal to (i) the Eurodollar rate plus a margin which will vary between 3.00% and 3.50% based on Teradyne's consolidated leverage ratio or (ii) the Base Rate, the rate of interest in effect for such day as announced by Bank of America,

N.A. as its "prime rate", plus a margin which will vary between 2.00% and 2.50% based on Teradyne's consolidated leverage ratio. In addition, Teradyne was required to pay the Lenders a commitment fee at a rate per annum of 0.75% on the actual daily unused amount of the credit facility commitments of such Lenders during the period for which payment is made, payable quarterly in arrears. The credit facility would have been available on a revolving basis until November 14, 2011. Teradyne had an option to prepay loans or reduce the credit facility commitments at any time, without penalty.

On April 7, 2009, Teradyne repaid and terminated its revolving credit facility agreement. Teradyne 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 the year ended December 31, 2009, Teradyne expensed the remaining revolving credit facility debt issue costs of approximately \$2.5 million.

# G. ACCUMULATED OTHER COMPREHENSIVE LOSS

At December 31, 2010 and 2009, the accumulated other comprehensive loss balances were as follows:

	2010	2009
	(in thousands)	
Retirement plans net actuarial loss, net of tax of \$(811) and \$(2,747)	\$(130,685)	\$(135,775)
Retirement plans prior service cost, net of tax of \$0 and \$0	3,115	(474)
Unrealized gain on investments, net of tax of \$0 and \$0	1,620	61
Foreign currency translation adjustments	(2,266)	(1,917)
Total accumulated other comprehensive loss	\$(128,216)	\$(138,105)

### H. GOODWILL AND INTANGIBLE ASSETS

### Goodwill

Teradyne performs its annual goodwill impairment test as required under the provisions of ASC 350-10, "*Intangibles* — *Goodwill and Other*" on December 31 of each fiscal year unless interim indicators of impairment exist. Goodwill is considered to be impaired when the net book value of a reporting unit exceeds its estimated fair value. Fair values are estimated using a discounted cash flow methodology.

Teradyne performed its 2008 annual goodwill impairment test at the Semiconductor Test reporting unit level and the Assembly Test reporting unit level. The Semiconductor Test reporting unit is an operating segment that consists of an aggregation of three components (System on a Chip/High Speed Memory, Nextest and Eagle Test). The Assembly Test reporting unit is the aggregation of two components (Commercial Board Test and Mil/Aero Test) which are included in the Systems Test Group operating segment.

In performing the annual goodwill impairment test, the income and market approaches were used to determine the fair value of the reporting units. With respect to the income approach, Teradyne used the discounted cash flow method which included ten year future cash flow projections and an estimated terminal value. The cash flow projections were prepared using Teradyne's forecast which was based upon underlying estimates of the total market size and Teradyne's market share that were developed using Teradyne and independent third party data. The estimated terminal value was calculated using the Gordon Growth model. The market approach used a revenue multiple to develop an estimate of fair value. The revenue multiple was estimated using enterprise value as a ratio of last twelve months revenue for comparable companies. Teradyne equally weighted the income and market approaches to determine the fair value of the reporting units. Teradyne reviewed the reasonableness of the reporting unit fair value estimates by performing a reconciliation of Teradyne's December 31, 2008 market capitalization with a 20% control premium to the sum of the fair value of all of Teradyne's reporting units. The carrying amount of the Semiconductor Test and Assembly Test reporting units exceeded their fair value; therefore, the second step of the goodwill impairment test was performed to calculate implied goodwill and to measure the amount of the impairment loss.

Teradyne allocated the fair value of the reporting units to all of the assets and liabilities of the reporting unit (including unrecognized intangible assets). The net book value of raw materials inventory was estimated as an approximation of current replacement costs. The fair value of finished goods inventory was estimated as the present value of selling price less direct selling costs and profit on the selling effort. Work in progress inventory was estimated at the present value of selling price less direct selling costs, costs to complete and profit on the selling and completion efforts. The selling price used in the inventory fair values was based upon the product gross margins included in Teradyne's forecast. The fair value of the deferred revenue liability was estimated by assessing the costs required to service the obligation plus a reasonable profit margin. The fair value for personal property assets, which consisted of furniture and fixtures, machinery and equipment, computer equipment, software and leasehold improvements, was estimated using the reproduction cost approach. Land was valued using the market approach. Buildings were valued using the replacement cost approach with a comparison to results using the market and income approach to verify reasonableness. The fair value of intangible assets was estimated using the income approach and, in particular, developed technology and trademarks/trade names were valued using the relief-from-royalty method and customer relationships and customer backlog were valued using the discounted cash flow method. Royalty rates were estimated using rates applicable to semiconductor testing equipment and other similar technologies. For the Nextest and Eagle Test developed technologies, which were acquired by Teradyne in 2008, the royalty rates selected were consistent with those used in the purchase price allocations. Based upon this allocation, Teradyne determined that there was no implied goodwill and recorded an impairment loss of \$329.7 million for the total amount of Teradyne's goodwill.

Two of the factors that contributed to the rapid decline in the goodwill associated with the Nextest and Eagle Test acquisitions were the significant decrease in forecasted future annual sales in comparison to the forecasted annual sales as of the acquisition dates and the significant decrease in forecasted annual sales for the System on a Chip/High Speed Memory component of the Semiconductor Test reporting unit. The decrease in forecasted annual sales was due to the significant change in market conditions at the end of 2008 and early 2009 as a result of the global economic downturn, which had a severe negative impact on Teradyne's customers and markets. An additional factor was that the purchase prices for both the Nextest and Eagle Test acquisitions were negotiated prior to the global economic downturn.

The changes in the carrying amount of goodwill by reporting units for the years ended December 31, 2010 and 2009 are as follows:

	Semiconductor Test	Systems Test Group	Total
	(in thousands)		
Balance at December 31, 2008: Goodwill	\$ 260,540	\$ 148,183	\$ 408,723
Accumulated impairment losses	(260,540)	(148,183)	(408,723)
Activity during the year			
Balance at December 31, 2009: Goodwill	260,540	148,183	408,723
Accumulated impairment losses	(260,540)	(148,183)	(408,723)
Activity during the year			
Balance at December 31, 2010:			
Goodwill	260,540	148,183	408,723
Accumulated impairment losses	(260,540)	(148,183)	(408,723)
	\$ —	\$ —	\$

### **Intangible Assets**

Amortizable intangible assets consist of the following and are included in intangible assets on the balance sheets:

	December 31, 2010			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
		(in thou	sands)	
Developed technology	\$121,055	\$ 65,610	\$ 55,445	6.1 years
Customer relationships and service and software maintenance				-
contracts	91,271	32,749	58,522	8.6 years
Tradenames and trademarks	14,840	5,866	8,974	11.5 years
Customer backlog	300	300		0.5 years
Total intangible assets	\$227,466	\$104,525	\$122,941	7.6 years
		December	31, 2009	
	Gross Carrying Amount	December Accumulated Amortization	31, 2009 Net Carrying Amount	Weighted Average Useful Life
	Carrying	Accumulated	Net Carrying Amount	Average
Developed technology	Carrying	Accumulated Amortization	Net Carrying Amount	Average
Customer relationships and service and software maintenance	Carrying Amount	Accumulated Amortization (in thou	Net Carrying Amount sands)	Average Useful Life
Customer relationships and service and software maintenance contracts	Carrying Amount	Accumulated Amortization (in thou	Net Carrying Amount sands)	Average Useful Life
Customer relationships and service and software maintenance contracts Tradenames and trademarks	Carrying Amount \$121,055	Accumulated Amortization (in thou \$ 47,746	Net Carrying Amount sands) \$ 73,309	Average Useful Life 6.1 years
Customer relationships and service and software maintenance contracts	Carrying Amount \$121,055 91,271	Accumulated Amortization (in thou \$ 47,746 22,187	Net Carrying Amount sands) \$ 73,309 69,084	Average Useful Life 6.1 years 8.6 years

During the year ended December 31, 2009, Teradyne reduced the gross amount of intangible assets by \$2.5 million for the excess tax benefit realized due to the exercise of stock options vested as of the Nextest and Eagle Test acquisition dates.

Aggregate intangible assets amortization expense for the years ended December 31, 2010, 2009 and 2008 was \$29.3 million, \$32.3 million, and \$20.6 million, respectively. Estimated intangible assets amortization expense for each of the five succeeding fiscal years is as follows:

Year	Amount (in thousands)
2011	\$27,821
2012	25,732
2013	24,683
2014	21,598
2015	4,575

Teradyne considered the significant adverse change in the business climate for its products at the end of 2008 a triggering event for testing the recoverability of the carrying amount of its long-lived assets. Based upon a review of the operations and activities associated with its long-lived assets, Teradyne determined that its longlived 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. Teradyne 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 Assembly Test asset group.

Teradyne tested the recoverability of its 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 Teradyne's 2008 goodwill impairment evaluation except that the undiscounted 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. No impairment indicators were present in 2010 or 2009.

### I. COMMITMENTS AND CONTINGENCIES

### **Purchase Commitments**

As of December 31, 2010, Teradyne had entered into non-cancelable purchase commitments for certain components and materials. The purchase commitments covered by the agreements are for less than one year and aggregate to approximately \$205.1 million.

### Lease Commitments

Rental expense for the years ended December 31, 2010, 2009 and 2008 was \$15.8 million, \$18.5 million and \$18.4 million, respectively.

Teradyne leases portions of its office and operating facilities under various operating lease arrangements. The following table reflects Teradyne's non-cancelable operating lease commitments:

	Non-cancelable Lease Commitments (1)
	(in thousands)
2011	\$12,072
2012	10,284
2013	6,759
2014	5,292
2015	3,293
Beyond 2015	1,976
Total	\$39,676

(1) Minimum payments have not been reduced by minimum sublease income of \$1.0 million due in the future under non-cancelable subleases.

### Legal Claims

Teradyne is 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. Teradyne believes that it has meritorious defenses against all pending claims and intends 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, Teradyne believes the potential losses associated with all of these actions are unlikely to have a material adverse effect on its business, financial position or results of operations.

### **Guarantees and Indemnification Obligations**

Teradyne provides indemnification, to the extent permitted by law, to its officers, directors, employees and agents for liabilities arising from certain events or occurrences while the officer, director, employee, or agent, is or was serving, at Teradyne's request in such capacity. Teradyne has entered into indemnification agreements with certain of its officers and directors. With respect to acquisitions, Teradyne provides indemnifications to or assumes indemnification obligations for the current and former directors, officers and employees of the acquired companies in accordance with the acquired companies' bylaws and charter. As a matter of practice, Teradyne has maintained directors' and officers' liability insurance coverage including coverage for directors and officers of acquired companies.

Teradyne enters into agreements in the ordinary course of business with customers, resellers, distributors, integrators and suppliers. Most of these agreements require Teradyne to defend and/or indemnify the other party against intellectual property infringement claims brought by a third party with respect to Teradyne's products. From time to time, Teradyne also indemnifies customers and business partners for damages, losses and liabilities they may suffer or incur relating to personal injury, personal property damage, product liability and environmental claims relating to the use of Teradyne's products and services or resulting from the acts or omissions of Teradyne, its employees, authorized agents or subcontractors. On occasion, Teradyne has also provided guarantees to customers regarding the performance of its products in addition to the warranty described below.

As a matter of ordinary business course, Teradyne warrants that its products, including software products, will substantially perform in accordance with its standard published specifications in effect at the time of delivery. Most warranties have a one year duration commencing from installation. A provision is recorded upon revenue recognition to cost of revenue for estimated warranty expense upon historical experience. When Teradyne receives revenue for extended warranties beyond the standard duration, it is deferred and recognized on a straight line basis over the contract period. Related costs are expensed as incurred. As of December 31, 2010 and 2009, Teradyne had a product warranty accrual of \$10.3 million and \$7.1 million, respectively, included in other accrued liabilities, and revenue deferrals related to extended warranties of \$7.6 million and \$4.1 million, respectively, included in short and long-term deferred revenue and customer advances.

In addition, and in the ordinary course of business, Teradyne provides minimum purchase guarantees to certain of its vendors to ensure continuity of supply against the market demand. Although some of these guarantees provide penalties for cancellations and/or modifications to the purchase commitments as the market demand decreases, most of the guarantees do not. Therefore, as the market demand decreases, Teradyne re-evaluates these guarantees and determines what charges, if any, should be recorded.

With respect to its agreements covering product, business or entity divestitures and acquisitions, Teradyne provides certain representations, warranties and covenants to purchasers and agrees to indemnify and hold such purchasers harmless against breaches of such representations, warranties and covenants. Many of the indemnification claims have a definite expiration date while some remain in force indefinitely. With respect to its acquisitions, Teradyne may, from time to time, assume the liability for certain events or occurrences that took place prior to the date of acquisition.

As a matter of ordinary course of business, Teradyne occasionally guarantees certain indebtedness obligations of its subsidiary companies, limited to the borrowings from financial institutions, purchase commitments to certain vendors, and lease commitments to landlords.

Based on historical experience and information known as of December 31, 2010, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations as of December 31, 2010 because the amount would be immaterial.

### J. NET INCOME (LOSS) PER COMMON SHARE

The following table sets forth the computation of basic and diluted net income (loss) per common share from continuing and discontinued operations:

	2010	2009	2008
	(in thousands, except per share amounts)		
Income (loss) from continuing operations	\$379,730	\$(133,837)	\$(394,995)
Income from discontinued operations, net			768
Net income (loss) for basic net income (loss) per share	379,730	(133,837)	(394,227)
Income impact of assumed conversion of convertible notes	13,203		
Net income (loss) for diluted net income (loss) per share	\$392,933	\$(133,837)	\$(394,227)
Shares used in income (loss) from continuing operations per common			
share—basic	179,924	173,604	170,593
Stock options	443		
Restricted stock units	5,001		
Convertible note shares	30,848		—
Convertible note hedge warrant shares	10,492		
Employee stock purchase rights	99		
Dilutive potential common shares	46,883		
Shares used in income (loss) from continuing operations per common			
share—diluted	226,807	173,604	170,593
Net income (loss) per common share—basic:			
Continuing operations	\$ 2.11	\$ (0.77)	\$ (2.32)
Discontinued operations	0.00	0.00	0.00
	\$ 2.11	\$ (0.77)	\$ (2.31)
Net income (loss) per common share—diluted:			
Continuing operations	\$ 1.73	\$ (0.77)	\$ (2.32)
Discontinued operations	0.00	0.00	0.00
	\$ 1.73	\$ (0.77)	\$ (2.31)

The computation of diluted net income per common share for the year ended December 31, 2010 excludes the effect of the potential exercise of outstanding stock options to purchase approximately 5.3 million shares because the effect would have been anti-dilutive. The computation of diluted net loss per common share for the year ended December 31, 2009 excludes the effect of the potential exercise of all outstanding stock options, restricted stock units, warrants, and shares related to the Notes because Teradyne had a net loss and inclusion would be anti-dilutive. The computation of diluted net loss per common share for the year ended December 31, 2008 excludes the effect of the potential exercise of all outstanding stock options, share stricted stock units, warrants, and shares related to the Notes because Teradyne had a net loss and inclusion would be anti-dilutive. The computation of diluted net loss per common share for the year ended December 31, 2008 excludes the effect of the potential exercise of all outstanding stock options and restricted stock units because Teradyne had a net loss and inclusion would be anti-dilutive.

Teradyne's call option on its common stock (convertible note hedge transaction) is excluded from the calculation of diluted shares because the effect would be anti-dilutive. See Debt Note F regarding the convertible note hedge transaction.

### K. RESTRUCTURING AND OTHER

#### Restructuring

In response to a downturn in the industry in 2008 and 2009, Teradyne initiated restructuring activities across all segments to reduce costs, principally through headcount reductions and facility consolidations. The tables below represent activity related to these actions. The remaining accrual for severance and benefits of \$1.8 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 2011. The remaining accrual for lease payments on vacated facilities of \$3.9 million is reflected in the other accrued liabilities account and the long-term other accrued liabilities account and is expected to be paid over the lease terms, the latest of which expires in 2013. Teradyne expects to pay approximately \$1.9 million against the lease accruals over the next twelve months. Teradyne's future lease commitments are net of expected sublease income of \$1.0 million as of December 31, 2010. Teradyne has subleased approximately 53% of its unoccupied space as of December 31, 2010.

Pre-2008 Activities	Severance and Benefits	Facility Exit Costs	Total
	¢ 1 250	¢ 7 000	¢ 0.160
Balance at December 31, 2007	\$ 1,358	\$ 7,802	\$ 9,160
Change in estimate	(132) (1,144)	2,676 (2,006)	2,544 (3,150)
Balance at December 31, 2008	82	8,472	8,554
Cash payments	(82)	(2,341)	(2,423)
Balance at December 31, 2009		6,131	6,131
Change in estimate		(2,672)	(2,672)
Cash payments		(3,038)	(3,038)
Balance at December 31, 2010	\$	\$ 421	\$ 421
2008 Activities			
Q1 2008 Activities:			
Provision	\$ 7,432	\$ 700	\$ 8,132
Cash payments	(7,432)	(478)	(7,910)
Balance at December 31, 2008		222	222
Cash payments		(222)	(222)
Balance at December 31, 2009	\$	\$ —	\$
Q2 2008 Activities:			
Provision	\$ 8,137	\$ 706	\$ 8,843
Cash payments	(8,137)	(97)	(8,234)
Balance at December 31, 2008		609	609
Change in estimate		(417)	(417)
Cash payments		(82)	(82)
Balance at December 31, 2009		110	110
Cash payments		(110)	(110)
Balance at December 31, 2010	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>
Q4 2008 Activity:			
Provision	\$ 8,853	\$	\$ 8,853
Cash payments	(3,512)		(3,512)
Balance at December 31, 2008	5,341		5,341
Cash payments	(5,341)		(5,341)
Balance at December 31, 2009	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>

	Severance and Benefits	Facility Exit Costs	-	
2009 Activities				
<i>Q1 2009 Activity:</i> Provision Cash payments Balance at December 31, 2009	\$ 17,630 (17,630) \$	\$  \$	\$ 17,630 (17,630) \$	
Q2 2009 Activity:				
Provision	\$ 15,940 (13,035)	\$	\$ 15,940 (13,035)	
Balance at December 31, 2009      Change in estimate      Cash payments	2,905 240 (3,145)		2,905 240 (3,145)	
Balance at December 31, 2010	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>	
Q3 2009 Activity: Provision Cash payments Other	\$	\$ 4,420 (285) 100	\$ 4,420 (285) 100	
Balance at December 31, 2009 Change in estimate Cash payments		4,235 (123) (1,270)	4,235 (123) (1,270)	
Balance at December 31, 2010	<u>\$                                    </u>	\$ 2,842	\$ 2,842	
2010 Activities				
<i>Q1 2010 Activity:</i> Provision Cash payments Balance at December 31, 2010	\$ 766 (766) <u>\$</u>	\$  \$	\$ 766 (766) <u>\$ —</u>	
<i>Q2 2010 Activities:</i> Provision Cash payments	\$ 1,264 (776)	\$ 814 (148)	\$ 2,078 (924)	
Balance at December 31, 2010	\$ 488	\$ 666	\$ 1,154	
<i>Q3 2010 Activity:</i> Provision Cash payments	\$ 1,400 (713)	\$	\$ 1,400 (713)	
Balance at December 31, 2010	<u>\$ 687</u>	<u>\$                                    </u>	<u>\$ 687</u>	
<i>Q4 2010 Activity:</i> Provision Cash payments Balance at December 31, 2010	\$ 1,035 (397) \$ 638	\$  \$	\$ 1,035 (397) \$ 638	

During the year ended December 31, 2010, Teradyne recorded restructuring charges of \$5.3 million related to ongoing efforts to lower expenses and our cost structure, \$(2.7) million credit related to the early exit of previously impaired facilities and \$0.3 million related to a change in the estimated severance benefits for the Q2 2009 action. The restructuring charges consisted of the following activities:

# Q1 2010 Actions:

 \$0.8 million of severance charges related to headcount reductions of approximately 14 people, of which \$0.4 million and 10 people were in Systems Test Group and \$0.4 million and 4 people were in Semiconductor Test.

# Q2 2010 Actions:

- \$1.3 million of severance charges related to headcount reductions of approximately 10 people in Systems Test Group; and
- \$0.8 million of facility charges in Systems Test Group related to the early exit of leased facilities in Kontich, Belgium and Stockport, United Kingdom.

# Q3 2010 Actions:

 \$1.4 million of severance charges related to headcount reductions of approximately 22 people in Systems Test Group.

# Q4 2010 Actions:

 \$1.0 million of severance charges related to headcount reductions of approximately 9 people in Systems Test Group.

# Q2 2009 Actions:

 \$0.3 million related to a change in the estimated severance benefits related to headcount reduction activities across both segments.

# Pre-2008 Actions:

 \$(2.7) million credit related to the early exit of previously impaired leased facilities in Westford, Massachusetts.

During the year ended December 31, 2009, Teradyne recorded restructuring charges of 37.9 million related to 2009 activities, as part of ongoing efforts to lower expenses and its 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 Q2 2008 activity. The restructuring charges (credits) 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 Activities:

- \$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 for a revision in estimated sublease income at an exited leased facility in Ontario, Canada.

During the year ended December 31, 2008, Teradyne 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 its service infrastructure. Teradyne also recorded an additional charge of \$2.7 million as a result of a change in sublease income estimate related to Pre-2007 activity. The restructuring charges recorded in 2008 consisted of the following activities:

#### Q1 2008 Activities:

- \$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 Activities:

- \$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 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.

#### Other

During the year ended December 31, 2009, Teradyne 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 Teradyne's 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, Teradyne 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 the acquisition financing costs; and
- \$0.6 million charge in the Semiconductor Test segment for a long-lived asset impairment related to acquired intangible assets.

#### L. RETIREMENT PLANS

Teradyne adopted the funded status recognition provision of ASC 715, "*Compensation — Retirement Benefits*" effective December 31, 2006. ASC 715 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. The pension asset or liability represents a difference between the fair value of the pension plan's assets and the projected benefit obligation at 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 at December 31.

#### **Defined Benefit Pension Plans**

Teradyne has defined benefit pension plans covering a portion of domestic employees and employees of certain non-U.S. subsidiaries. Benefits under these plans are based on employees' years of service and compensation. Teradyne's funding policy is to make contributions to the plans in accordance with local laws and to the extent that such contributions are tax deductible. The assets of these plans consist primarily of fixed income and equity securities. In addition, Teradyne has an unfunded supplemental executive defined benefit plan in the United States to provide retirement benefits in excess of levels allowed by the Employment Retirement Income Security Act ("ERISA") and the Internal Revenue Code (the "IRC"), as well as unfunded foreign plans.

Teradyne uses a December 31 measurement date for all of its plans. The December 31 balances of these defined benefit pension plan assets and obligations are shown below:

	2010	2009
Assets and Obligations	(in tho	usands)
Change in benefit obligation:		
Projected benefit obligation:		
Beginning of year	\$333,663	\$310,927
Service cost	3,655	3,993
Interest cost	17,716	18,442
Actuarial loss	7,937	16,533
Benefits paid	(13,129)	(11,878)
Curtailment	(3,113)	(1,897)
Settlement	(8,580)	(4,170)
Transfers		323
Non-U.S. currency movement	(353)	1,390
End of year	337,796	333,663
Change in plan assets:		
Fair value of plan assets:		
Beginning of year	239,797	205,745
Company contributions	50,526	12,417
Plan participants' contributions	23	24
Actual return on plan assets	25,608	36,525
Benefits paid	(13,129)	(11,878)
Settlement	(8,580)	(4,170)
Non-U.S. currency movement	743	1,134
End of year	294,988	239,797
Funded status	\$(42,808)	\$(93,866)

The following table provides amounts recorded within the account line items of the statement of financial position as of December 31:

	2010	2009
	(in thou	sands)
Retirement plans assets	\$ 13,981	\$ —
Accrued employees' compensation and withholdings	(2,658)	(2,350)
Retirement plans liabilities	(54,131)	(91,516)
Funded status	<u>\$(42,808</u> )	\$(93,866)

The following table provides amounts recognized in accumulated other comprehensive loss as of December 31:

	2010	2009	
	(in thousands)		
Net actuarial loss	\$128,004	\$134,433	
Prior service cost	1,509	2,235	
Total recognized in other comprehensive loss before tax	129,513	136,668	
Deferred tax asset	(811)	(2,747)	
Total recognized in other comprehensive loss, net of tax	\$128,702	\$133,921	

The estimated portion of net actuarial loss and prior service cost remaining in accumulated other comprehensive loss that is expected to be recognized as a component of net periodic pension cost in 2011 is \$8.2 million, and \$0.6 million, respectively.

The accumulated benefit obligation for all defined benefit pension plans was \$324.0 million and \$317.5 million at December 31, 2010 and 2009, respectively.

Information for pension plans with an accumulated benefit obligation and projected benefit obligation in excess of plan assets as of December 31, 2010:

	2010	2009
	(in m	illions)
Projected benefit obligation	\$58.2	\$317.9
Accumulated benefit obligation	50.1	304.4
Fair value of plan assets	1.4	223.9

#### Expense

For the years ended December 31, 2010, 2009 and 2008, Teradyne's net periodic pension costs were comprised of the following:

	2010	2009	2008
		)	
Components of Net Periodic Pension Cost:			
Service cost	\$ 3,655	\$ 3,993	\$ 4,800
Interest cost	17,716	18,442	17,320
Expected return on plan assets	(20,189)	(19,300)	(20,400)
Amortization of:			
Net transition asset		_	(27)
Prior service cost	726	799	847
Net actuarial loss	5,425	4,000	1,315
Settlement loss	452	1,616	
Curtailment gain		(550)	(433)
Total net periodic pension cost	\$ 7,785	\$ 9,000	\$ 3,422
Changes in Plan Assets and Benefit Obligations Recognized in Other			. <u></u>
Comprehensive Income:			
Net actuarial (gain) loss arising during period	(1,001)	(3,156)	99,812
Reversal of amortization items:			
Net transition asset	_		27
Prior service cost	(726)	(799)	(847)
Net actuarial loss	(5,425)	(4,000)	(1,315)
Total recognized in other comprehensive income	(7,152)	(7,955)	97,677
Total recognized in net periodic pension cost and other comprehensive			
income	<u>\$ 633</u>	\$ 1,045	\$101,099

# Weighted Average Assumptions to Determine Net Periodic Pension Cost at January 1

	<b>United States Plans</b>			Foreign Plans		
	2010	2009	2008	2010	2009	2008
Discount rate	5.8%	6.2%	6.5%	5.4%	4.9%	4.8%
Expected return on plan assets	7.5	7.75	7.75	2.8	3.7	4.0
Salary progression rate	4.0	4.0	4.0	3.4	3.4	3.6

	<b>United States Plans</b>		Foreign Plans	
	2010 2009		2010	2009
Discount rate				

In developing the expected return on plan assets assumption, Teradyne evaluated input from its investment manager and pension consultants, including their review of asset class return expectations. Based on this review, Teradyne believes that 7.5% was an appropriate rate to use for fiscal 2010 for the U.S. Qualified Pension Plan ("U.S. Plan").

Teradyne bases its 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, 2010, under the U.S. Plan, Teradyne had cumulative losses of approximately \$20.1 million, which remain to be recognized in the calculation of the market-related value of assets. The discount rate utilized to determine future pension obligations for the U.S. Plan is based on Citigroup Pension Index adjusted for the plan's expected cash flows and was 5.3% at December 31, 2010, down from 5.85% at December 31, 2009.

#### **Plan Assets**

As of December 31, 2010, the fair value of Teradyne's pension plans' assets totaled \$295.0 million of which \$275.7 million was related to the U.S. Plan, \$17.9 million was related to the U.K. Defined Benefit Pension Plan, and \$1.4 million was related to other foreign defined benefit pension plans. Teradyne's pension plans' assets consisted primarily of investments in fixed-income and equity securities. Included in other pension plan assets is a real assets common trust fund with underlying investments in REITs (real estate investment trusts), TIPS (U.S. Treasury Inflation-Protected Securities), equity securities of natural resource companies, and commodities. Substantially all our pension plans' assets are held in individual trusts, which were established for the investment of assets of Teradyne's sponsored retirement plans.

Teradyne's weighted average pension asset allocation at December 31, 2010 and 2009, by asset category is as follows:

	United States Plan		Foreign Plans	
	2010	2009	2010	2009
Fixed Income Securities	56.8%	42.6%	46.1%	33.7%
Equity Securities	37.0	46.0	45.3	54.5
Other				
Total	100.0%	100.0%	100.0%	100.0%

The assets of the U.S. Plan are overseen by the Teradyne Fiduciary Committee which is comprised of members of senior management drawn from appropriate diversified levels of the management team. The Fiduciary Committee is responsible for setting the policy that provides the framework for management of the U.S. Plan assets. In accordance with its responsibilities, the Fiduciary Committee meets on a regular basis to review the performance of the U.S. Plan assets and compliance with the investment policy. The policy sets forth an investment structure for managing U.S. Plan assets, including setting the asset allocation ranges, which are expected to provide an appropriate level of overall diversification required to maximize the long-term return on

plan assets for a prudent and reasonable level of risk given prevailing market conditions, total investment return over the long term, and preservation of capital, while maintaining sufficient liquidity to pay the benefits of the U.S. Plan. The investment portfolio will not, at any time, have a direct investment in Teradyne stock. It may have indirect investment in Teradyne stock, if one of the funds selected by the investment manager invests in Teradyne stock. In developing the asset allocation ranges, third party asset allocation studies are periodically performed that consider the current and expected positions of the plan assets and funded status. Based on this study and other appropriate information, the Fiduciary Committee establishes asset allocation ranges taking into account acceptable risk targets and associated returns. The investment return objectives are to avoid excessive volatility and produce a rate of return that at least matches the Policy Index identified below. The manager's investment performance is reviewed at least annually. Results for the total portfolio and for each major category of assets are evaluated in comparison with appropriate market indices, the Policy Index, other similarly managed portfolios and the Consumer Price Index.

The target asset allocation at different funded status levels and the index for each asset category for the U.S. Plan, per the investment policy, is as follows:

			Target Allocation at			
Asset Category:	Policy Index:	< 100%	≥100% - <105%	≥105%		
Passive and Active Fixed Income	Barclays Capital Long Government Credit Index	60%	70%	85%		
Equity (Large cap)		22	20	10		
International Equity	MSCI EAFE Index (Net Dividends)	10	10	5		
Real Assets	Real Asset Custom Index	5	_			
Equity (Small cap)	Russell 2000 Index	3		_		

The assets of Teradyne's foreign pension plans are invested in funds which seek to combine long-term growth potential offered through equity exposure with the relative security provided by bonds and cash, and are governed locally by local management in accordance with specific jurisdictional requirements. Investments in the non-U.S. plans consist primarily of fixed-income and equity securities. These investments are valued using significant observable inputs (Level 2). The fair market value of assets for the international pension plans was \$19.3 million as of December 31, 2010. There were no investments with significant unobservable inputs (Level 3) in the non-U.S. pension plans.

Teradyne's U.S. Plan invests primarily in common trust funds. Units held in the common trust funds are valued at the unit price as reported by the investment managers based on the asset value of the underlying investments; underlying investments in equity securities are valued at the last reported sales price, and underlying investments in fixed-income securities are generally valued using methods based upon market transactions for comparable securities and various relationships between securities which are generally recognized by institutional traders. These investments are valued using significant observable inputs (Level 2). The fair market value of assets for the U.S. Plan was \$275.7 million as of December 31, 2010. There were no investments with significant unobservable inputs (Level 3) in the U.S. Plan as of December 31, 2010.

	As of December 31, 2010			)
	Level 1	Level 2	Level 3	Total
(in thousands)				
Fixed income securities:				
Corporate debt securities	\$ —	\$ 98,922	\$	\$ 98,922
U.S. government securities		56,138		56,138
U.K. government securities	—	6,675		6,675
Asset backed securities		3,636		3,636
U.S. equity (large cap)		63,718		63,718
International equity		37,453		37,453
Real assets		13,790		13,790
U.S. equity (small cap)	_	9,721		9,721
Guarantee annuity contract		2,843		2,843
Other		1,419		1,419
Cash and cash equivalents		673		673
Total	\$	\$294,988	<u>\$                                    </u>	\$294,988
		As of December 31, 2009		
		As of Decem	ıber 31, 2009	
	Level 1	As of Decem Level 2	ber 31, 2009 Level 3	Total
	Level 1	Level 2		
Fixed income securities:	Level 1	Level 2 (in tho	Level 3 usands)	Total
Corporate debt securities	Level 1 \$ —	Level 2 (in tho \$ 19,568	Level 3	Total \$ 59,763
Corporate debt securities		Level 2 (in tho	Level 3 usands)	Total
Corporate debt securities		Level 2 (in tho \$ 19,568 21,354 13,393	Level 3 usands)	Total \$ 59,763 21,354 13,393
Corporate debt securities	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692	Level 3 usands)	<b>Total</b> \$ 59,763 21,354 13,393 5,692
Corporate debt securities	\$	Level 2 (in tho \$ 19,568 21,354 13,393	Level 3 usands) \$40,195 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034 24,821	Level 3 usands) \$40,195 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034 44,236
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity Real assets	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034	Level 3 usands) \$40,195   19,415 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity Real assets U.S. equity (small cap)	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034 24,821	Level 3 usands) \$40,195 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034 44,236
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity Real assets U.S. equity (small cap) Guarantee annuity contract	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034 24,821 21,808	Level 3 usands) \$40,195   19,415 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034 44,236 21,808 20,870 2,961
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity Real assets U.S. equity (small cap) Guarantee annuity contract Other	\$	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034 24,821 21,808 4,965	Level 3 usands) \$40,195   19,415 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034 44,236 21,808 20,870
Corporate debt securities High-yield fixed income securities U.S. government securities U.K. government securities U.S. equity (large cap) International equity Real assets U.S. equity (small cap) Guarantee annuity contract	\$  	Level 2 (in thou \$ 19,568 21,354 13,393 5,692 47,034 24,821 21,808 4,965 2,961	Level 3 usands) \$40,195   19,415 	<b>Total</b> \$ 59,763 21,354 13,393 5,692 47,034 44,236 21,808 20,870 2,961

The fair value of pensions assets by asset category and by level at December 31, 2010 and December 31, 2009 were as follows:

Changes in the fair value of Level 3 pension assets for the year ended December 31, 2010 and December 31, 2009 were as follows:

	Level 3 Pension Plans' Assets			
	Fixed income – corporate bonds	(in thou U.S. equity (small cap)	usands) International equity	Total
Balance at December 31, 2008Realized gains (losses)Change in unrealized (losses) gainsSales and purchases, net	\$ 58,170 1,974 (1,978) (17,971)	\$ 18,922 (371) 3,725 (6,371)	\$ 21,087 658 3,808 (6,138)	\$98,179 2,261 5,555 (30,480)
Balance at December 31, 2009Realized gainsChange in unrealized lossesSales and purchases, net	40,195 10,912 (5,749) (45,358)	15,905 1,721 (1,417) (16,209)	19,415 4,129 (5,054) (18,490)	75,515 16,762 (12,220) (80,057)
Balance at December 31, 2010	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>

#### **Contributions**

Teradyne's funding policy is to make contributions to the plans in accordance with local laws and to the extent that such contributions are tax deductible. During 2010, Teradyne contributed \$50.5 million, which included a \$45.0 million discretionary contribution to the U.S. Plan. During 2009, Teradyne contributed \$12.4 million, which included a \$7.5 million discretionary contributions to the U.S. Plan. During 2008, Teradyne contributed \$4.3 million to the plans. 2011 contributions to certain Qualified Plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$2.2 million. 2011 contributions to the U.S. Supplemental Executive Defined Benefit Pension Plan will be approximately \$1.7 million. Teradyne does not expect to make any contributions to the U.S. Plan in 2011.

# **Expected Future Pension Benefits Payments**

The following benefit payments, which reflect future service, as appropriate, are expected to be paid as follows:

:	<b>United States</b>	Foreign
	(in thous	ands)
2011		\$ 983
2012	13,657	1,736
2013	14,667	1,126
2014		1,536
2015	16,684	1,679
2016-2020	97,381	12,087

#### **Postretirement Benefit Plans**

In addition to receiving pension benefits, U.S. Teradyne employees who meet early retirement eligibility requirements as of their termination dates may participate in Teradyne's Welfare Plan, which includes death, and medical and dental benefits up to age 65. Death benefits provide a fixed sum to retirees' survivors and are available to all retirees. Substantially all of Teradyne's current U.S. employees could become eligible for these benefits, and the existing benefit obligation relates primarily to those employees.

Teradyne uses a December 31 measurement date for its plan. The December 31 balances of the postretirement assets and obligations are shown below:

	2010	2009
	(in thousands)	
Assets and Obligations		
Change in benefit obligation:		
Projected benefit obligation:		
Beginning of year	\$ 18,699	\$ 19,640
Service cost	57	109
Interest cost	668	1,093
Actuarial loss (gain)	(882)	731
Benefits paid	(2,367)	(2,874)
Plan amendment	(3,279)	—
End of year	12,896	18,699
Change in plan assets:		
Fair value of plan assets:		
Beginning of year	_	_
Company contributions	2,367	2,874
Benefits paid	(2,367)	(2,874)
End of year		
Funded status	\$(12,896)	\$(18,699)

The following table provides amounts recorded within the account line items of financial position as of December 31:

	2010	2009
	(in thou	sands)
Accrued employees' compensation and withholdings	\$ (1,720)	\$ (2,730)
Long-term retirement plans liability		
Funded status	<u>\$(12,896</u> )	\$(18,699)

The following table provides amounts recognized in accumulated other comprehensive loss as of December 31:

	2010	2009
	(in thou	isands)
Net actuarial loss	\$ 3,492	\$ 4,460
Prior service credit	(4,623)	(1,761)
Total recognized in other comprehensive loss	<u>\$(1,131</u> )	\$ 2,699

The estimated portion of net loss and prior service credit remaining in accumulated other comprehensive income that is expected to be recognized as a component of net periodic postretirement benefit cost in 2011 is \$0.2 million and \$0.6 million, respectively.

#### Expense

For the years ended December 31, 2010, 2009 and 2008, Teradyne's net periodic postretirement benefit costs were comprised of the following:

	2010	2009	2008
	(in thousands)		)
Components of Net Periodic Postretirement Benefit Cost:			
Service cost	\$ 57	\$ 109	\$ 167
Interest cost	668	1,092	1,227
Amortization of:			
Prior service credit	(416)	(234)	(234)
Net actuarial loss	86	228	140
Total net periodic postretirement benefit cost	395	1,195	1,300
Changes in Plan Assets and Benefit Obligations Recognized in Other			
Comprehensive Income:			
Net actuarial (gain) loss arising during period	(882)	731	(184)
Net prior service credit arising during period	(3,279)		
Reversal of amortization items:			
Prior service credit	416	234	234
Net actuarial loss	(86)	(228)	(140)
Total recognized in other comprehensive income	(3,831)	737	(90)
Total recognized in net periodic postretirement benefit cost and other			
comprehensive income	<u>\$(3,436)</u>	\$1,932	\$1,210

# Weighted Average Assumptions to Determine Net Periodic Postretirement Benefit Cost as of January 1

	2010	2009	2008
Discount rate	5.1%	6.1%	6.5%
Initial Health Care Cost Trend Rate			
Ultimate Health Care Cost Trend Rate	5.0	5.0	5.0
Year in which Ultimate Health Care Cost Trend Rate is reached	2018	2018	2018

# Weighted Average Assumptions to Determine Postretirement Benefit Obligation as of December 31

	2010	2009	2008
Discount rate	4.5%	5.1%	6.1%
Initial Medical Trend			
Ultimate Health Care Trend			
Medical cost trend rate decrease to ultimate rate in year	2018	2018	2018

Assumed health care trend rates could have a significant effect on the amounts reported for health care plans. A one percentage point change in the assumed health care cost trend rates for the year ended December 31, 2010, would have the following effects:

	1 Percentage Point Increase	1 Percentage Point Decrease
		isands)
Effect on total service and interest cost components	\$ 23	\$ (21)
Effect on postretirement benefit obligations	338	(315)

#### **Expected Future Benefits Payments**

The following benefit payments, which reflect future service, as appropriate, are expected to be paid:

	Benefits
	(in thousands)
2011	
2012	
2013	1,440
2014	1,310
2015	1,190
2016-2020	4,640

#### M. STOCK BASED COMPENSATION

#### **Stock Compensation Plans**

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

Restricted stock unit awards granted to employees vest in equal annual installments over four years. Restricted stock unit awards granted to non-employee directors vest after a one year period, with 100% of the award vesting on the first anniversary of the grant date. A portion of the restricted stock unit awards granted to executive officers is subject to time-based vesting and a portion of the 2010 and 2008 awards was subject to performance-based vesting. The percentage level of performance satisfied for performance-based grants is assessed on or near the anniversary of the grant date and, in turn, that percentage level determines the number of performance-based restricted stock units available for vesting over the vesting period; portions of the performance-based grants not available for vesting will be forfeited. The performance criteria were not met for the 2008 performance-based award and the performance-based restricted stock units were forfeited.

In 2010 and 2009, Teradyne granted service based stock options to executive officers. These stock options vest in equal installments over four years and have a term of seven years.

Stock compensation plan activity for the years 2010, 2009 and 2008 follows:

	2010	2009	2008
	(in thousands)		
Restricted Stock Units:			
Non-vested at January 1	6,896	5,147	2,199
Awarded	2,626	4,074	3,453
Assumed from acquisitions			1,092
Vested	(2,406)	(1,381)	(1,213)
Forfeited	(153)	(944)	(384)
Non-vested at December 31	6,963	6,896	5,147
Stock Options:			
Outstanding at January 1	11,238	16,791	17,142
Granted	329	1.071	
Assumed from acquisitions			6,920
Exercised	(4,031)	(1,848)	(1,725)
Forfeited	_	(17)	(25)
Cancelled	(342)	(4,759)	(5,521)
Outstanding at December 31	7,194	11,238	16,791
Vested and expected to vest at December 31	7,193	11,234	16,776
Exercisable at December 31	6,046	9,865	16,067

Total shares available for the years 2010, 2009 and 2008:

	2010	2009	2008
	(in	thousand	s)
Shares available:			
Available for grant at January 1	12,653	6,875	9,980
Options granted	(329)	(1,071)	—
Restricted stock units granted		(4,074)	(3,453)
Restricted stock units forfeited	153	923	348
Additional shares reserved		10,000	
Available for grant at December 31	9,851	12,653	6,875

Weighted-average restricted stock unit award date fair value information for the years 2010, 2009 and 2008 follows:

	2010	2009	2008
Non-vested at January 1	\$7.31	\$10.55	\$15.47
Awarded			9.39
Assumed from acquisition			10.18
Vested	7.73	10.87	10.72
Forfeited	8.11	8.02	11.93
Non-vested at December 31	\$7.92	\$ 7.31	\$10.55

 $\langle \cdot \rangle$ 

Restricted stock unit awards aggregate intrinsic value information at December 31 for the years 2010, 2009 and 2008 follows:

	2010	2009	2008
	(	in thousands	)
Outstanding	\$97,762	\$73,990	\$21,719
Expected to vest	90,283	67,476	19,558

Restricted stock units weighted average contractual terms (in years) information at December 31, for the years 2010, 2009 and 2008 follows:

		2009	
Outstanding	1.13	1.31	2.79
Expected to vest	1.12	1.30	2.78

Weighted average stock options exercise price information for the years 2010, 2009 and 2008 follows:

	2010	2009	2008
Outstanding at January 1	\$13.87	\$14.66	\$20.78
Options granted	9.34	4 92	
Assumed from acquisition			3.21
Options exercised	8.65	3.52	2.74
Options forfeited		5.35	9.91
Options cancelled	19.54	18.73	22.91
Outstanding at December 31	16.32	13.87	14.66
Exercisable at December 31	18.24	15.10	15.09

Stock option aggregate intrinsic value information for the years ended December 31, 2010, 2009 and 2008 follows:

	2010	2009	2008
	(	in thousands	s)
Exercised	\$15,096	\$ 5,126	\$10,829
Outstanding	30,871	30,533	5,506
Vested and expected to vest	30,868	30,510	5,493
Exercisable	21,872	22,726	5,122

Stock options weighted average contractual terms (in years) information at December 31, for the years 2010, 2009 and 2008 follows:

		2009	
Outstanding	2.3	2.9	3.1
vested and Expected to vest	5.4	3.4	3.1
Exercisable	1.7	2.4	2.9

Significant option groups outstanding at December 31, 2010 and related weighted average price and remaining contractual life information follow:

	Options Outstanding		Options Exercisable		
Range Of Exercise Prices	Weighted- Average Remaining Contractual Life (Years)	Shares	Weighted- Average Exercise Price	Shares	Weighted- Average Exercise Price
		(sha	res in thousands)		
\$ 0.47 - \$2.92	3.56	1,003	\$ 1.81	1,003	\$ 2.00
\$ 3.23 - \$4.83	5.42	1,383	4.44	640	4.44
\$5.04 - \$26.66	3.27	1,609	14.17	1,205	14.17
\$27.06 - \$56.26	0.08	3,199	27.08	3,198	27.08
Total		7,194	\$16.32	6,046	\$18.24

As of December 31, 2010, total unrecognized expense related to non-vested restricted stock unit awards and stock options totaled \$38.2 million, and are expected to be recognized over a weighted average period of 2.4 years.

#### **Employee Stock Purchase Plan**

Under the Teradyne 1996 Employee Stock Purchase Plan, eligible employees (including executive officers) may purchase shares of common stock through regular payroll deductions of up to 10% of their compensation, to a maximum of shares with a fair market value of \$25,000 per calendar year. Under the plan, the price paid for the common stock is equal to 85% of the lower of the fair market value of Teradyne's common stock on the first business day and the last business day of each six month purchase period within each year. In July 2010, 0.6 million shares of common stock were issued to employees who participated in the plan during the first half of 2010, at the price of \$8.29 per share. In January 2011, Teradyne issued 0.8 million shares of common stock to employees who participated in the plan during the second half of 2010, at the price of \$8.12 per share.

#### N. SAVINGS PLAN

Teradyne sponsors a defined contribution employee retirement Savings Plan covering substantially all U.S. employees. Under the Savings Plan, employees may contribute up to 20% of their compensation (subject to Internal Revenue Service limitations). In January 2009, Teradyne amended the Savings Plan to eliminate a fixed formula used to calculate the match and provide for a variable discretionary match to be determined each year. In 2010, Teradyne matched 100% of eligible employee contributions up to 4% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. There was no match for employees still actively accruing benefits in the U.S. Qualified Pension Plan. In 2009, Teradyne matched 100% of eligible employee contributions up to 2% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. In 2009, Teradyne matched 100% of eligible employee contributions up to 2% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. In 2009, Teradyne matched 100% of eligible employee contributions up to 2% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. In 2009, Teradyne matched 100% of eligible employee contributions up to 2% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. In 2008, Teradyne matched 50% of eligible employee contributions up to 6% of their compensation for employees in the U.S. Qualified Pension Plan, and for all other employees, Teradyne matched 100% of up to 5% of their compensation.

Teradyne's contributions vest 25% per year for the first four years of employment, and contributions for those employees with four years of service vest immediately. Teradyne also has established an unfunded Supplemental Savings Plan to provide savings benefits in excess of those allowed by ERISA and the IRC. The provisions of this plan are the same as the Savings Plan. Under Teradyne's savings plans, amounts charged to the statement of operations were \$4.9 million in 2010, \$1.7 million in 2009 and \$7.5 million in 2008.

# **O. INCOME TAXES**

The components of income (loss) from continuing operations before income taxes and the provision (benefit) for income taxes from continuing operations as shown in the consolidated statements of operations were as follows:

	2010	2009	2008
	(in thousands)		
Income (loss) from continuing operations before income taxes:			
U.S	\$118,075	\$ (18,910)	\$(417,403)
Non-U.S.	276,437	(123,727)	34,985
	\$394,512	\$(142,637)	\$(382,418)
Provision (benefit) for income taxes from continuing operations:			
Current:			
U.S. Federal	\$ (1,555)	\$ (6,612)	\$ (1,574)
Non-U.S.	16,825	1,852	9,246
State	553	716	(109)
	15,823	(4,044)	7,563
Deferred:			
U.S. Federal			
Non-U.S.	(1,041)	(4,756)	5,014
State			
	(1,041)	(4,756)	5,014
Total provision (benefit) for income taxes from continuing operations:	\$ 14,782	\$ (8,800)	\$ 12,577

For the year ended December 31, 2010, income tax expense from continuing operations totaled \$14.8 million, primarily related to tax provisions for foreign taxes. For the year ended December 31, 2009, income tax benefit from continuing operations totaled \$8.8 million, primarily related to Federal net operating loss carryback claims. The Federal carryback refund claims are the result of losses incurred by Nextest and Eagle Test since their acquisition by Teradyne and for income taxes paid by Nextest and Eagle Test prior to their acquisition by Teradyne. The claims are due to the change in tax law enacted in November 2009 which extended the carryback period for operating losses from two years to five years. For the year ended December 31, 2008, income tax expense from continuing operations totaled \$12.6 million, primarily related to tax provisions for foreign taxes.

The total income tax provision (benefit) for the years ended December 31, 2010, 2009 and 2008 was as follows:

	2010	2009	2008
	(i	in thousands	)(
Continuing operations	\$14,782	\$(8,800)	\$12,577
Discontinued operations			
			<del></del>
Total income tax provision (benefit)	\$14,782	\$(8,800)	\$12,577

Significant components of Teradyne's deferred tax assets (liabilities) as of December 31, 2010 and 2009 were as follows:

	2010	2009
	(in t	housands)
Deferred tax assets:		
Net operating and capital loss carryforwards	\$ 75,37	5 \$ 135,413
Tax credits	81,32	
Inventory valuations	47,20	3 45,979
Pension liability	17,02	9 35,617
Research and development	20,58	6 33,344
Accruals	19,80	6 18,920
Equity compensation	8,13	9 10,601
Vacation accrual	6,32	2 5,639
Other	1,81	4 2,638
Deferred revenue	31,33	9 1,670
Amortization		1,108
Securities impairment		254
Gross deferred tax assets	308,93	7 373,708
Less: valuation allowance	(241,26	1) (301,051)
Total deferred tax assets	67,67	6 72,657
Deferred tax liabilities:		
Intangible assets	(46,71	7) (57,832)
Excess of tax over book depreciation	(8,07	(3,922)
Total deferred tax liabilities	(54,79	(61,754)
Net deferred assets	\$ 12,88	1 \$ 10,903

At December 31, 2010, Teradyne had operating loss carryforwards that expire in the following years:

	U.S. Federal State Net Operating Loss Carryforwards Carryforwards		Foreign Net Operating Loss Carryforwards
		(in thousands)	
2011	\$	\$ 163	\$
2012		120	
2013		496	
2014		258	
2015		36	—
2016-2021	34,010	2,659	
2022-2024		2,518	
Beyond 2024	120,624	4,308	381
Non-expiring			60,976
Total	\$154,634	\$10,558	\$61,357

Of the U.S. Federal operating loss carryforwards, \$34.0 million relates to the acquisition of GenRad, Inc. in 2001. The GenRad losses are limited in the amount that can be used as a result of "change in ownership" rules as defined in the Internal Revenue Code of 1986. The net operating loss carry forward includes \$76.5 million of excess tax deductions related to stock based compensation which has not been recognized for financial statement purposes.

Teradyne has approximately \$81.3 million of tax credit carry forwards. Business tax credits of approximately \$22.1 million expire in the years 2019 through 2030. Teradyne has foreign tax credits of

approximately \$26.9 million expiring in the years 2013 through 2020 and alternative minimum tax credits of approximately \$6.6 million, which do not expire. In addition, there are state tax credits of \$25.7 million which begin to expire in 2011.

During 2010, Teradyne's valuation allowance decreased by \$60.0 million primarily due to the reduction in the deferred tax assets related to the decrease in net operating loss carryovers. During 2009, Teradyne's valuation allowance increased by \$10.9 million primarily due to the reduction in the deferred tax liability related to purchased intangibles.

Due to the continued uncertainty of realization, Teradyne maintained its valuation allowance at December 31, 2010 and 2009 for deferred tax assets in the U.S. and Singapore. The amount of the deferred tax asset considered realizable is subject to change based on future events, including generating significant operation income in future periods. The Company will continue to assess the need for the valuation allowance based on all available evidence. Therefore, it is possible that in a future period, facts and circumstances could support the reversal of a significant portion or all of the valuation allowance. At that time, a tax benefit would be recorded in the consolidated statement of operations. The valuation allowance includes \$47.6 million for net deferred tax assets resulting from the funded status recognition provision of ASC 715, "Compensation – Retirement Benefits."

A reconciliation of the effective tax rate for the years 2010, 2009 and 2008 follows:

	2010	2009	2008
U.S. statutory federal tax rate	35.0%	35.0%	35.0%
State income taxes, net of federal tax benefit	0.4	(0.4)	
Foreign taxes	(14.3)	(25.9)	0.2
Valuation allowance			(7.0)
Goodwill impairment			(30.2)
Current year tax credits		0.8	
Prior year refund claims	0.1	1.6	
Other U.S. permanent items		0.3	(1.1)
Other, net		0.7	(0.2)
	3.8%	6.2%	(3.3%)

As of December 31, 2010, Teradyne has open tax years beginning in 2005 for major jurisdictions including the U.S., Japan, Singapore and the United Kingdom. Teradyne records all interest and penalties related to income taxes as a component of income tax expense. Accrued interest and penalties related to income tax items at December 31, 2010 were not material.

Teradyne's unrecognized tax benefits for the years ended December 31, 2010, 2009 and 2008 were as follows (in thousands):

	2010	2009	2008
Beginning balance, as of January 1	\$12,767	\$13,918	\$ 9,780
Additions:			
Tax positions for current year	106		601
Tax positions for prior years	2,435	396	6,057
Reductions:			
Tax positions for prior years	(3,280)	(1,547)	(2,520)
Settlements with tax authorities	_	_	
Ending Balance as of December 31	\$12,028	\$12,767	\$13,918

Current year and prior year additions include assessment of potential transfer pricing issues worldwide, foreign income taxes and state income taxes. Reductions for tax positions for prior years relate to statute expiration. Of the \$12.0 million of unrecognized tax benefits as of December 31, 2010, \$8.6 million would impact the consolidate income tax rate if ultimately recognized. The remaining \$3.4 million would impact the valuation allowance if recognized.

As of December 31, 2010, a deferred tax liability has not been established for approximately \$220.6 million of cumulative undistributed earnings of non-U.S. subsidiaries, as Teradyne plans to keep these amounts permanently reinvested overseas. Beginning in 2006, Teradyne received from Singapore tax incentives for earnings from investments and related activities that began in that country in 2005. These incentives extend through 2015.

# P. OPERATING SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION

Teradyne's two reportable segments are Semiconductor Test and Systems Test Group. The Semiconductor Test segment includes operations related to the design, manufacturing and marketing of semiconductor test products and services. The Systems Test Group segment includes operations related to the design, manufacturing and marketing of products and services for military/aerospace instrumentation test, hard disk drive test, circuit-board test, and automotive diagnostic and test.

Teradyne evaluates performance using several factors, of which the primary financial measure is business segment income from continuing operations before taxes. The accounting policies of the business segments are the same as those described in Note B: "Accounting Policies".

Segment information for the years ending December 31, 2010, 2009 and 2008 is as follows (in thousands):

	Semiconductor Test	Systems Test Group	Corporate And Eliminations	Consolidated
2010				
Net revenue	\$1,413,295	\$195,355	\$	\$1,608,650
Income (loss) from continuing operations before				
taxes (1)(2)	422,372	(7,851)	(20,009)	394,512
Total assets (3)	611,694	104,584	1,094,077	1,810,355
Property additions (4)	69,935	3,142	2,967	76,044
Depreciation and intangible amortization				
expense (4)	71,280	3,654	24,953	99,887
2009				
Net revenue	\$ 552,402	\$267,005	\$ —	\$ 819,407
(Loss) income from continuing operations before				
taxes (1)(2)	(129,132)	11,638	(25,143)	
Total assets (3)	602,841	99,125	533,371	1,235,337
Property additions (4)	38,502	3,086	344	41,932
Depreciation and intangible amortization				
expense (4)	82,434	5,926	17,721	106,081
2008				
Net revenue	\$ 900,292	\$206,750	\$	\$1,107,042
Loss from continuing operations before				
taxes (1)(2)	(291,824)	(83,641)	(6,953)	
Total assets (3)	708,736	140,261	392,658	1,241,655
Property additions (4)	75,377	6,833	4,992	87,202
Depreciation and intangible amortization				
expense (4)	78,934	7,807	8,019	94,760

(1) Interest income and interest expense and other are included in Corporate and Eliminations.

- (2) Included in income from continuing operations before taxes are charges and credits related to restructuring and other, net, real estate gains (losses), investments, inventory provision recovery and inventory write downs.
- (3) Total business assets are directly attributable to each business. Corporate assets consist of cash and cash equivalents, marketable securities, unallocated fixed assets of support departments, common facilities and certain other assets.
- (4) Corporate property additions and depreciation and amortization expense include items attributable to the unallocated fixed assets of support departments and common facilities.

Included in the Semiconductor Test segment are charges and credits in the following accounts:

	For the Year Ended December		
	2010	2009	2008
		(in thousand	
Cost of revenues—inventory charge (1)	\$4,521	\$20,317	\$24,923
Cost of revenues—inventory step-up (2)		15,413	5,046
Restructuring and other, net	_1,437	29,512	50,356
Total	\$5,958	\$65,242	\$80,325

(1) Included in the cost of revenues for the year ended December 31, 2009 and 2008 are charges for excess inventory provision recorded as a result of the significant decrease in forecasted semiconductor demand coupled with a product transition.

(2) Included in the cost of revenues for the year ended December 31, 2009 and 2008 is the cost for purchase accounting inventory step-up.

Included in the Systems Test Group segment are charges and credits in the following accounts:

	For the Year Ended December 31,			
	2010	2009	2008	
		(in thousand		
Cost of revenues—inventory charge				
Restructuring and other, net	1,591	3,740	9,756	
Total	\$3,263	\$11,404	\$14,196	

Included in the Corporate and Eliminations segment are charges and credits in the following accounts:

F	For the Yea	r Ended D	ecember 31,	,
	2010	2009	2008	
		n thousand		
Restructuring and other, net charge	\$(121)	\$3,242	\$2,663	
Total	\$(121)	\$3,242	\$2,663	

Information as to Teradyne's revenue in different geographical areas is as follows:

	2010	2009	2008
		(in thousands)	•
Revenue to unaffiliated customers (1):			
Taiwan	\$ 286,241	\$111,895	\$ 198,508
United States	247,163	210,019	236,636
Malaysia	207,606	91,526	62,114
Philippines	185,537	43,728	52,351
Singapore	145,543	67,211	114,301
China	137,377	42,746	54,938
Korea	124,876	40,361	81,441
Europe	123,275	80,116	112,253
Japan Japan	80,756	45,974	119,876
Thailand	57,828	73,455	34,083
Rest of the World	12,448	12,376	40,541
	\$1,608,650	\$819,407	\$1,107,042

(1) Revenues are attributable to geographic areas based on location of customer site.

In 2010 and 2008, no customer accounted for more than 10% of total consolidated revenue. For the year ended December 31, 2009, one Systems Test Group customer accounted for approximately 12% of total consolidated revenue.

Long-lived assets by geographic area:

	United States	Foreign Countries	Total
		(in thousands	)
December 31, 2010	\$196,743	\$34,834	\$231,577
December 31, 2009	197,741	48,621	246,362

#### Q. STOCK REPURCHASE PROGRAM

In November 2007, Teradyne's Board of Directors (the "Board") authorized a \$400 million stock repurchase program. For the year ended December 31, 2008, Teradyne repurchased 7.5 million shares of common stock for \$91.2 million at an average price of \$12.20 per share. The cumulative repurchases under this program as of December 31, 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.

In November 2010, the Board cancelled the November 2007 stock repurchase program and authorized a new stock repurchase program for up to \$200 million. During the year ended December 31, 2010, Teradyne did not repurchase any shares of common stock.

#### **R. SUBSEQUENT EVENTS**

On February 16, 2011, Teradyne announced the sale of its Diagnostic Solutions business unit to SPX Corporation.

# SUPPLEMENTARY INFORMATION (Unaudited)

The following sets forth certain unaudited consolidated quarterly statements of operations data for each of Teradyne's last eight quarters. In management's opinion, this quarterly information reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement for the periods presented. Such quarterly results are not necessarily indicative of future results of operations and should be read in conjunction with the audited consolidated financial statements of Teradyne and the notes thereto included elsewhere herein.

	2010			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1)	(2) iousands, excep	(3) t por share amo	(4)
Net revenues:	(in ti	iousanus, excep	i per share and	unts)
Products	\$268,204	\$391,148	\$436.274	\$253,631
Services	61,419	63,628	65,812	68,534
Total net revenues	329,623	454,776	502,086	322,165
Cost of revenues:				
Cost of products	123,696	167,160	191,860	119,614
Cost of services	32,383	33,313	34,451	33,424
Total cost of revenues	156,079	200,473	226,311	153,038
Gross profit	173,544	254,303	275,775	169,127
Operating expenses:				
Engineering and development	49,052	50,393	50,122	47,455
Selling and administrative	55,871	58,343	61,109	54,778
Acquired intangible assets amortization	7,356	7,313	7,291	7,291
Restructuring and other, net	1,264	1,700	(859)	802
Total operating expenses	_113,543	117,749	117,663	_110,326
Income from operations	60,001	136,554	158,112	58,801
Interest income	842	3,681	1,466	2,115
Interest expense and other	(5,913)	(8,543)	_(5,562)	(7,042)
Income from continuing operations before taxes	54,930	131,692	154,016	53,874
Provision (benefit) for income taxes	4,830	9,543	6,676	(6,267)
Net income	\$ 50,100	\$122,149	\$147,340	\$ 60,141
Net income per common share—basic	\$ 0.28	\$ 0.68	\$ 0.81	\$ 0.33
Net income per common share—diluted	\$ 0.24	\$ 0.55	\$ 0.66	\$ 0.27

(1) Restructuring and other, net includes \$1.3 million of severance charges related to headcount reductions of approximately 14 people across all segments.

(2) Restructuring and other, net includes \$0.9 million of severance charges related to headcount reductions of approximately 10 people in System Test Group and \$0.8 million of charges in System Test Group related to early exit of leased facilities in Kontich, Belgium and Stockport, United Kingdom.

(3) Restructuring and other, net includes \$1.6 million of severance charges related to headcount reduction of approximately 22 people in System Test Group and \$(2.5) million credit related to early exit of previously impaired leased facilities in Westford, Massachusetts.

(4) Restructuring and other, net includes \$1.0 million of severance charges related to headcount reductions of approximately 9 people in System Test group and \$(0.2) million credit related to early exit of previously impaired leased facilities in Westford, Massachusetts.

	2009			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1) (in th	(2) ousands, excep	(3) t per share amo	(4) unts)
Net revenues:				
Products	\$ 64,735	\$115,148	\$205,304	\$210,117
Services	55,873	54,432	56,858	56,940
Total net revenues	120,608	169,580	262,162	267,057
Cost of products	56,160	92.635	125,116	112,896
Cost of services	31,088	29,816	30,291	29,772
Total cost of revenues	87,248	122,451	155,407	142,668
Gross profit	33,360	47,129	106,755	124,389
Operating expenses:				
Engineering and development	47,198	38,451	38,266	40,920
Selling and administrative	55,373	47,257	46,314	51,486
Acquired intangible assets amortization	8,239	8,214	8,214	7,629
Restructuring and other, net	15,965	15,270	5,189	68
Total operating expenses	126,775	109,192	97,983	100,103
(Loss) income from operations	(93,415)	(62,063)	8,772	24,286
Interest income	777	1,141	1,003	496
Interest expense and other	(5,830)	(8,046)	(4,600)	(5,158)
(Loss) income from continuing operations before taxes	(98,468)	(68,968)	5,175	19,624
(Benefit) provision for income taxes	(7,800)	(2,200)	(1,500)	2,700
Net (loss) income	(90,668)	(66,768)	6,675	16,924
Net (loss) income per common share—basic	<u>\$ (0.53)</u>	\$ (0.39)	\$ 0.04	\$ 0.10
Net (loss) income per common share—diluted	\$ (0.53)	<u>\$ (0.39)</u>	\$ 0.04	\$ 0.09

- (1) Restructuring and other, net includes \$16.7 million of severance charges related to headcount reductions of approximately 500 people across all segments, and \$(0.7) million of credits related to finalization of certain Eagle Test purchase accounting items.
- (2) Restructuring and other, net includes \$15.0 million of severance charges related to headcount reductions of approximately 300 people across all segments, \$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 Teradyne's facilities in North Reading, Massachusetts and \$(0.8) million of credits related to finalization of certain Eagle Test purchase accounting items.
- (3) Restructuring and other, net includes \$1.3 million related to headcount reductions across all segments, \$4.4 million of charges across both segments related to the early exit of leased facilities in North Reading, Massachusetts and Novi, Michigan and \$(0.5) million of credits related to finalization of certain Eagle Test purchase accounting items.
- (4) Restructuring and other, net includes \$0.6 million of severance charges related to headcount reductions across all segments, \$(0.4) million reversal of Q208 facility exit costs activity related to an early exit of a leased facility in Ontario, Canada, due to an extension of the sublease, and \$(0.1) million of credits related to finalization of certain Eagle Test purchase accounting items.

# Item 9: Changes in and disagreements with accountants on accounting and financial disclosure

None.

#### Item 9A: Controls and procedures

# **Disclosure Controls and Procedures**

As of the end of the period covered by this report, our management, with the participation of our CEO and CFO, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(b) promulgated under the Exchange Act. Based upon that evaluation, our CEO and CFO concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective in ensuring that material information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, including ensuring that such material information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

# **Changes in Internal Control Over Financial Reporting**

There was no change in our internal control over financial reporting during the fourth fiscal quarter ended December 31, 2010 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

# Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control—Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2010.

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm, as stated in their report which is included under Item 8 of this Annual Report.

# **Inherent Limitations on Effectiveness of Controls**

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.

# Item 9B: Other Information

None.

#### PART III

#### Item 10: Directors, Executive Officers and Corporate Governance.

Certain information relating to our directors and executive officers, committee information, reports and charters, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from our definitive proxy statement in connection with our Annual Meeting of Shareholders to be held on May 24, 2011. The proxy statement will be filed with the SEC not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report included in such proxy statement is specifically not incorporated herein. Also see "Item 1: Business—Our Executive Officers."

#### Item 11: Executive Compensation.

Certain information relating to our directors and executive officers, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from our definitive proxy statement in connection with our Annual Meeting of Shareholders to be held on May 24, 2011. The proxy statement will be filed with the SEC not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report included in such proxy statement is specifically not incorporated herein.

# Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Certain information relating to our directors and executive officers, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from our definitive proxy statement in connection with our Annual Meeting of Shareholders to be held on May 24, 2011. The proxy statement will be filed with the SEC not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report included in such proxy statement is specifically not incorporated herein. Also see "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations—Equity Compensation Plans."

#### Item 13: Certain Relationships and Related Transactions, and Director Independence.

Certain information relating to our directors and executive officers, executive compensation, security ownership of certain beneficial owners and management and related stockholder matters, and certain relationships and related transactions is incorporated by reference herein from our definitive proxy statement in connection with our Annual Meeting of Shareholders to be held on May 24, 2011. The proxy statement will be filed with the SEC not later than 120 days after the close of the fiscal year. For this purpose, the Compensation Committee Report included in such proxy statement is specifically not incorporated herein.

#### Item 14: Principal Accountant Fees and Services.

Certain information relating to audit fees and other of Teradyne's independent registered public accounting firm is incorporated by reference herein from our definitive proxy statement in connection with our Annual Meeting of Shareholders to be held on May 24, 2011. The proxy statement will be filed with the SEC not later than 120 days after the close of the fiscal year. For this purpose, the Audit Committee Report included in such proxy statement is specifically not incorporated herein.

# PART IV

# Item 15: Exhibits and Financial Statement Schedules.

#### 15(a)(1) Financial Statements

The following consolidated financial statements are included in Item 8:

	Page
Report of Independent Registered Public Accounting Firm	41
Balance Sheets as of December 31, 2010 and 2009	42
Statements of Operations for the years ended December 31, 2010, 2009 and 2008	43
Statements of Shareholders' Equity and Comprehensive Income (Loss) for the years ended December 31,	
2010, 2009 and 2008	44
Statements of Cash Flows for the years ended December 31, 2010, 2009 and 2008	

# 15(a)(2) Financial Statement Schedules

The following consolidated financial statement schedule is included in Item 15(c):

Schedule II-Valuation and Qualifying Accounts

Schedules other than those listed above have been omitted since they are either not required or information is otherwise included.

# 15(a)(3) Listing of Exhibits

The Exhibits which are filed with this report or which are incorporated by reference herein are set forth in the Exhibit Index.

# 15(c) Financial Statement Schedules

# TERADYNE, INC.

# SCHEDULE II-VALUATION AND QUALIFYING ACCOUNTS

Column A	Column B	Column C	<u>Column D</u>	Column E	Column F
Description	Balance at Beginning of Period	Additions Charged to Cost and Expenses	Other	Deductions	Balance at End of Period
Valuation reserve deducted in the balance sheet from the asset to which it applies: Accounts receivable:		(in tho	usands)		
2010 Allowance for doubtful accounts	\$ 3,770	<u>\$</u>	<u>\$                                    </u>	<u>\$ 18</u>	\$ 3,752
2009 Allowance for doubtful accounts	\$ 4,712	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$ 942</u>	\$ 3,770
2008 Allowance for doubtful accounts	<u>\$ 4,493</u>	\$ 52	\$ 531	\$ 364	\$ 4,712
Column A	Column B	Column C	Column D	Column E	Column F
Description	Balance at Beginning of Period	Additions Charged to Cost and Expenses (in tho	Other usands)	Deductions	Balance at End of Period
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Inventory: 2010 Inventory reserve	\$129,668	\$ 6,193	\$	\$ 9,768	\$126,093
2009 Inventory reserve      2008 Inventory reserve	\$129,008 \$127,795 \$105,620	\$27,981 \$29,363	\$ \$ \$7,862	\$26,108 \$15,050	\$129,668 \$127,795

# **EXHIBIT INDEX**

The following designated exhibits are, as indicated below, either filed herewith or have heretofore been filed with the Securities and Exchange Commission and are referred to and incorporated by reference to such filings.

lxhibit lo.	Description	SEC Document Reference
.1	Restated Articles of Organization, as amended.	Exhibit 3.01 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 2, 2000
.2	Amended and Restated By-laws, as amended.	Exhibit 3.1 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
.1	Indenture dated as of April 6, 2009 between Teradyne and U.S. Bank National Association as trustee, together with form of Note.	Exhibit 4.1 to Teradyne's Current Report on Form 8-K filed April 6, 2009.
.2	Form of Note.	Included in Exhibit 4.1 to Teradyne's Current Report on Form 8-K filed April 6, 2009.
0.1†	Standard Manufacturing Agreement entered into as of November 24, 2003 by and between Teradyne and Solectron.	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
0.2†	Amendment 1 to Standard Manufacturing Agreement, dated as of January 18, 2007, by and between Teradyne and Solectron.	Exhibit 10.2 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
0.3†	Second Amendment to Standard Manufacturing Agreement, dated as of August 27, 2007, by and between Teradyne and Solectron.	Exhibit 10.3 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
0.4	Fifth Amendment to Standard Manufacturing Agreement, dated as of July 17, 2009, by and between Teradyne and Flextronics Corporation.	Exhibit 10.4 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
0.5†	Sixth Amendment to Standard Manufacturing Agreement, dated as of July 27, 2009, by and between Teradyne and Flextronics Corporation.	Exhibit 10.5 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
0.6	Addendum to Standard Manufacturing Agreement (Authorized Purchase Agreement) – Revised July 1, 2010.	Filed herewith.
0.7	2006 Equity and Cash Compensation Incentive Plan, as amended.*	Exhibit 10.6 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
).8	Form of Performance-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.
0.9	Form of Time-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.

Exhibit No. Description		SEC Document Reference	
10.10	Form of Restricted Stock Unit Agreement for Directors under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.	
10.11	1997 Employee Stock Option Plan, as amended and restated.*	Exhibit 10.2 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 and Exhibit 10.5 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.	
10.12	Form of Option Agreement under the 1997 Employee Stock Option Plan.*	Exhibit 10.47 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.	
10.13	Form of Restricted Stock Unit Agreement for Executive Officers under the 1997 Employee Stock Option Plan.*	Exhibit 10.1 to Teradyne's Current Report on Form 8-K filed January 30, 2006.	
10.14	Form of Restricted Stock Unit Agreement for Directors under the 1997 Employee Stock Option Plan.*	Exhibit 10.2 to Teradyne's Current Report on Form 8-K filed January 30, 2006.	
10.15	1996 Non-Employee Director Stock Option Plan, as amended.*	Exhibit 10.4 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.	
10.16	Form of Option Agreement under 1996 Non- Employee director Stock Option Plan.*	Exhibit 10.48 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.	
10.17	1996 Employee Stock Purchase Plan, as amended.*	Exhibit 10.17 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.	
10.18	1991 Employee Stock Option Plan, as amended.*	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q <sub>5</sub> for the quarter ended June 2, 2002 and Exhibit 10.2 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.	
10.19	Form of Option Agreement under 1991 Employee Stock Option Plan.*	Exhibit 10.46 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended October 3, 2004.	
10.20	Deferral Plan for Non-Employee Directors, as amended.*	Exhibit 10.2 to Teradyne's Quarterly Report on form 10-Q for the quarter ended September 28, 2008.	
10.21	Supplemental Savings Plan, as amended and restated.*	Exhibit 10.18 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.	
10.22	Supplemental Executive Retirement Plan, as restated.*	Exhibit 10.19 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.	

+Exhibit No.	Description	SEC Document Reference	
10.23	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Michael A. Bradley.*	Exhibit 99.5 to Teradyne's Current Report on Form 8-K filed January 6, 2009.	
10.24	Amended and Restated Agreement Regarding Termination Benefits between Teradyne and Michael A. Bradley.*	Exhibit 99.6 to Teradyne's Current Report on Form 8-K filed January 6, 2009.	
10.25	Employment Agreement dated July 30, 2004 between Teradyne and Michael A. Bradley.*	Exhibit 10.38 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.	
10.26	Employment Agreement dated August 9, 2004 between Teradyne and Gregory R. Beecher.*	Exhibit 10.40 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.	
10.27	Employment Agreement dated August 9, 2004 between Teradyne and Jeffrey Hotchkiss.*	Exhibit 10.41 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.	
10.28	Employment Agreement dated May 7, 2004 between Teradyne and Mark Jagiela.*	Exhibit 10.37 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 4, 2004.	
10.29	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Gregory R. Beecher.*	Exhibit 99.1 to Teradyne's Current Report on Form 8-K filed January 6, 2009.	
10.30	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Jeffrey Hotchkiss.*	Exhibit 99.3 to Teradyne's Current Report on Form 8-K filed January 6, 2009.	
10.31	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Mark Jagiela.*	Exhibit 99.4 to Teradyne's Current Report on Form 8-K filed January 6, 2009.	
10.32	Change in Control Agreement dated May 29, 2009 between Teradyne and Charles J. Gray.	Exhibit 10.2 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended April 4, 2010.	
10.33	Employment Agreement dated July 24, 2009 between Teradyne and Charles J. Gray.	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended April 4, 2010.	
10.34	Form of Executive Officer Stock Option Agreement under 2006 Equity and Cash Compensation Incentive Plan, as amended.*	Filed herewith.	
10.35	Form of Indemnification Agreement.*	Exhibit 10.24 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.	
10.36	Nextest Systems Corporation 1998 Equity Incentive Plan, as amended.	Exhibit 10.33 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.	
10.37	Nextest Systems Corporation 2006 Equity Incentive Plan.	Exhibit 10.34 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.	

Exhibit No.	Description	SEC Document Reference
10.38	Eagle Test Systems, Inc. 2003 Stock Option and Grant Plan.	Exhibit 10.35 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.39	Eagle Test Systems, Inc. 2006 Stock Option and Incentive Plan.	Exhibit 10.36 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.40	Convertible Note Hedge Transaction Confirmation dated as of March 31, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.1 to Current Report on Form 8-K filed April 6, 2009.
10.41	Warrant Transaction Confirmation dated as of March 31, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.2 to Current Report on Form 8-K filed April 6, 2009.
10.42	Amendment to Warrant Transaction Confirmation dated as of April 1, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.3 to Current Report on Form 8-K filed April 6, 2009.
14.1	Standards of Business Conduct, as amended.	Exhibit 14.1 to Teradyne's Annual Report on Form 10-K for the fiscal year ending December 31, 2006.
21.1	Subsidiaries of Teradyne.	Filed herewith.
23.1	Consent of PricewaterhouseCoopers LLP.	Filed herewith.
31.1	Rule 13a-14(a) Certification of Principal Executive Officer.	Filed herewith.
31.2	Rule 13a-14(a) Certification of Principal Financial Officer.	Filed herewith.
32.1	Section 1350 Certification of Principal Executive Officer.	Furnished herewith.
32.2	Section 1350 Certification of Principal Financial Officer.	Furnished herewith.
101.INS**	XBRL Instance Document	
101.SCH**	XBRL Taxonomy Extension Schema Document	
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document	
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document	

† - Confidential treatment granted.

\* - Management contract or compensatory plan.

<sup>\*\*</sup> XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

# SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized this 1st day of March, 2011.

TERADYNE, INC.

By:\_\_\_\_\_ /s/ Gregory R. Beecher

Gregory R. Beecher, Vice President, Chief Financial Officer and Treasurer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ ALBERT CARNESALE Albert Carnesale	Chair of the Board	March 1, 2011
/s/ MICHAEL A. BRADLEY Michael A. Bradley	President and Chief Executive Officer (Principal Executive Officer)	March 1, 2011
/s/ GREGORY R. BEECHER Gregory R. Beecher	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March 1, 2011
/S/ JAMES W. BAGLEY James W. Bagley	Director	March 1, 2011
/s/ DANIEL W. CHRISTMAN Daniel W. Christman	Director	March 1, 2011
/s/ EDWIN J. GILLIS Edwin J. Gillis	Director	March 1, 2011
/s/ TIMOTHY E. GUERTIN Timothy E. Guertin	Director	March 1, 2011
/S/ PAUL J. TUFANO Paul J. Tufano	Director	March 1, 2011
/S/ ROY A. VALLEE Roy A. Vallee	Director	March 1, 2011

#### CERTIFICATIONS

I, Michael A. Bradley, certify that:

1. I have reviewed this annual report on Form 10-K of Teradyne, Inc.;

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

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

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

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

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: March 1, 2011

By: \_\_\_\_/S/ MICHAEL A. BRADLEY

Michael A. Bradley Chief Executive Officer I, Gregory R. Beecher, certify that:

1. I have reviewed this annual report on Form 10-K of Teradyne, Inc.;

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

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

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

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

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: March 1, 2011

By: /s/ Gregory R. Beecher

Gregory R. Beecher Chief Financial Officer

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

In connection with the Annual Report of Teradyne, Inc. (the "Company") on Form 10-K for the period ending December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael A. Bradley, Chief Executive Officer of the Company, certify pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MICHAEL A. BRADLEY

Michael A. Bradley Chief Executive Officer

March 1, 2011

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

In connection with the Annual Report of Teradyne, Inc. (the "Company") on Form 10-K for the period ending December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory R. Beecher, Chief Financial Officer of the Company, certify pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Gregory R. Beecher

Gregory R. Beecher Chief Financial Officer

March 1, 2011

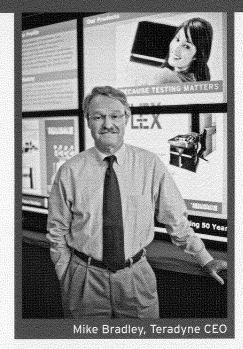
# TEMONE

# Fellow Shareholders,

It all came together in 2010. With excellent revenue growth, record profitability, solid market share gains, exceptional cash flow and steady new-market expansion... 2010 was one of our best years ever.

While world economies slowly crawled out of the recession, technology consumers couldn't wait. They bought smart phones in record numbers, upgraded networks and storage capacity, and stood in line to be the first to own the latest tablet. Whether they were engaged in social networking in China or social revolution in the Middle East, connectivity and instant access to information drove them all. And the electronics industry, which had started its recovery in the second half of 2009, turned it on throughout 2010 to meet their demand.

That's where we came in. While we test a wide range of electronic assemblies, our main focus is in testing the integrated circuits that power consumer electronics; from flash memory in digital cameras to the millions of microcontrollers in automobiles and white goods, to touch screen controllers, and power management chips in the latest tablets and smart phones. We test them all, ensuring their quality and reliability.



Our challenge in 2010 was threefold: (1) Meet the steepest ramp in chip-maker test demand in over ten years; (2) gain market share; and (3) keep fixed costs in check so we could deliver solid results even in a sharp market correction.

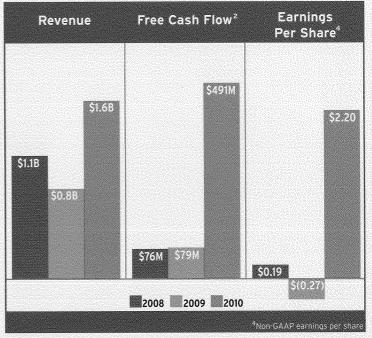
I'm proud to say that we accomplished all three, and here are the numbers that make the case. In 2010, we:

- Increased revenues by 96 percent to just over \$1.6 billion (our 4th highest ever).
- Achieved a 28 percent operating profit<sup>1</sup> (our highest ever).
- Generated \$491 million in free cash flow<sup>2</sup> (again, our highest ever).
- Increased quarterly shipments by 108 percent in the first three periods, then reduced them by 42 percent in the final quarter.
- Maintained our quarterly break even at just above \$200 million throughout the year<sup>3</sup>.
- Delivered the highest growth in revenues, profits and market share of any company in our sector.

All of this helped lift our stock price by 31 percent for the year. This is a strong reflection that our business model now delivers industryleading performance, with about ten points higher operating profit no matter where we are in the capital equipment cycle.

Obviously our results were helped by a rising market. The Systemon-Chip (SOC) test industry that is our core market, doubled to \$2.6 billion in the year. We captured about 60 percent of that growth, propelling our market share from 41 percent to nearly 50 percent for the year. Our focus on the fast-growing mobility, power management and automotive markets fueled that momentum. We're connected to market leaders in the fastest growth segments in SOC test and invest over \$150 million in engineering each year to make sure that alignment stays tight.

While the SOC market was doubling, the memory test market gradually grew back to \$700 million, far short of the over \$1 billion size of prior years. Our memory test revenues topped \$100 million and we now stand at No. 2 in market share, up from No. 4 just two



<sup>1</sup> Non-GAAP profit before interest and tax

<sup>2</sup> A Non-GAAP measure calculated by adjusting GAAP cash flow from operations to include property, plant and equipment additions

<sup>3</sup> A Non-GAAP measure



Employees celebrate Teradyne's 50th anniversary with a bowling party in Singapore

years ago. The Magnum and UltraFLEX-M products are well positioned in both the flash memory and DRAM sectors, so there is good runway ahead as the memory market continues its comeback.

Hard Disk Drive (HDD) Test was a mixed-bag in 2010 after a very good launch in 2009. While our market coverage expanded with new capability for enterprise drive testing, business was choppy as netbook and PC demand fluctuated during the year. But our new test capability, combined with a broader customer base, sets us up for upwards of \$100 million dollars in annual revenues going forward. Not bad for an internal start-up in 3 years.

Our Defense business, which performed so well in the 2009 downturn, shrank as some military contracts were delayed in the ever tightening national budget squeeze. Nevertheless, this Mil/Aero sector continues to contribute steadily to our bottom line.

So what do we do next? First, is to stay focused on our chip testing business. That's where we have our strongest market presence and it's where our future starts every day. Second, is to back our new market offensives in memory, performance analog and Hard Disk Drive test. And third, is to exploit the M&A frontier for investments that could build an even stronger product portfolio around our existing core.

On this last point, investors are justified in asking what kinds of acquisition candidates we're considering, especially as we sit with over a billion dollars of gross cash and marketable securities at year-end. Of course, we'd like to replicate the Nextest and Eagle Test acquisitions of 2008. That was money well-spent as those units have strengthened both our market coverage and our bottom line; each with record results this past year. And while our acquisition appetite isn't limited to electronic test, it is tempered by the requirements of profit contribution, technology leverage and customer access. We'll be motivated by the right opportunity, not compelled by our level of resources.

A few years ago the clouds around the semiconductor test industry were ominous. Too many competitors, relentless R&D requirements and little to offset slowing growth in the personal computer end market. Add to that constant innovation in parallel test and manufacturing productivity, and the outlook was challenging. So we squeezed, cut and optimized; we took some pretty tough medicine. And it was worth it because it helped us fund new products, focus on higher-growth segments and bring on some powerhouse acquisitions. We're proud of the momentum we now have as well as the discipline behind it. And while I said at the outset of this letter that it all came together this year, we believe we can sustain industry-leading performance with our new business model.

As I mentioned in my letter last year, 2010 was the 50th year of Teradyne's existence. Most of our employees weren't alive when Alex and Nick set up shop above Joe and Nemo's hotdog stand in Boston in 1960. But they know how we started, what our values are and where we're headed. They did an exceptional job for all of us this past year...

...and it was a great way to start the next 50.

114 Srall

Michael A. Bradley President & Chief Executive Officer Teradyne, Inc.



Teradyne, Inc. 600 Riverpark Drive North Reading, MA 01864 978.370.2700

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