

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

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

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

DOCUMENTS INCORPORATED BY REFERENCE

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

TERADYNE, INC. FORM 10-K PART I

Item 1: Business

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

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

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

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

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

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

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

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

Investor Information

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

You can access financial and other information, including the charters of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee, our Corporate Governance Guidelines and Standards of Business Conduct, by clicking the Investors link on our web site at www.teradyne.com. We make available, free of charge, copies of our filings with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act through our web site as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

Products

Semiconductor Test

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

- improve and control product quality;
- measure and improve product performance;
- reduce time to market; and
- increase production yields.

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

1) A high efficiency multi-site architecture that eliminates tester overhead such as instrument setup, synchronization and data movement, and signal processing;

2) The IG-XLTM software operating system which provides fast program development, including instant conversion from single to multi-site test; and

3) Broad technology coverage by instruments designed to cover the range of test parameters, coupled with a Universal Slot test head design that allows easy test system reconfiguration to address changing test needs.

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

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

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

We have continued to invest in the J750 platform with a set of J750ExTM instrumentation that was released in 2007, with additional instrument releases in 2008. These instruments bring new capabilities to existing market segments and expand the J750 platform to critical new devices that include high end microcontrollers and the latest generation of cameras. These new J750Ex instruments are designed to be compatible with our customers' existing hardware and software investments and deliver industry leading parallel test economics while providing customers with flexibility to address next generation functional requirements.

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

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

Systems Test Group

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

Mil/Aero

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

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

Hard Disk Drive

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

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

Commercial Board Test

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

In-Circuit Test Systems

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

Imaging Inspection Systems

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

Diagnostic Solutions

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

OEM Service Diagnostics

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

Vehicle Configuration and Test Solutions

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

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

Discontinued Operations

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

Summary of Net Revenue by Reportable Segment

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

	2009	2008	2007
Semiconductor Test	67%	81%	80%
Systems Test Group			
Total	100%	100%	100%

Sales and Distribution

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

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

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

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

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

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

Competition

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

Backlog

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

	2009	2008
		illions)
Semiconductor Test		
Systems Test Group	95.2	106.9
	\$372.0	\$236.3

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

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

Raw Materials

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

Intellectual Property and Licenses

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

- patents;
- copyrights;
- trademarks;
- trade secrets;
- · standards of business conduct and related business practices; and
- technology license agreements, software license agreements, non-disclosure agreements, employment agreements, and other agreements.

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

Employees

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

Engineering and Development Activities

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

Environmental Affairs

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	61	Chief Executive Officer and President	Chief Executive Officer since 2004; President of Teradyne since 2003; President of Semiconductor Test from 2001 to 2003.
Gregory R. Beecher	52	Vice President, Chief Financial Officer and Treasurer	Vice President and Chief Financial Officer of Teradyne since 2001 and Treasurer of Teradyne from 2003 to 2005 and since 2006.
Charles J. Gray	48	Vice President, General Counsel and Secretary	Vice President, General Counsel and Secretary of Teradyne since April 2009; Vice President and General Counsel of Sonus Networks, Inc. from 2002 to 2008.
Jeffrey R. Hotchkiss	62	President of Systems Test Group	President of Systems Test Group since 2007; President of Assembly Test Systems from 2004 to 2007, and President of Diagnostic Solutions from 2005 to 2007.
Mark E. Jagiela	49	President of Semiconductor Test	President of Semiconductor Test since 2003; Vice President of Teradyne since 2001.

Item 1A: Risk Factors

Risks Associated with Our Business

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

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

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

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

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

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

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

We are subject to intense competition.

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

Our operating results are likely to fluctuate significantly.

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

- the worldwide economic slowdown and continued disruption in the global financial markets;
- competitive pressures on selling prices;
- our ability to introduce, and the market acceptance of, new products;
- changes in product revenue mix resulting from changes in customer demand;
- the level of orders received which can be shipped in a quarter because of the tendency of customers to
 wait until late in a quarter to commit to purchase due to capital expenditure approvals and constraints
 occurring at the end of a quarter, or the hope of obtaining more favorable pricing from a competitor
 seeking the business;
- engineering and development investments relating to new product introductions, and the expansion of manufacturing, outsourcing and engineering operations in Asia;

- provisions for excess and obsolete inventory relating to the lack of demand for and the discontinuance of products;
- impairment charges for certain long-lived and intangible assets and goodwill;
- parallel or multi-site testing could lead to a decrease in the ultimate size of the market for our products; and
- the ability of our suppliers and subcontractors to meet product quality or delivery requirements needed to satisfy customer orders for our products, especially if product demand continues to increase.

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

We are subject to risks of operating internationally.

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

- unexpected changes in legal and regulatory requirements affecting international markets;
- changes in tariffs and exchange rates;
- social, political and economic instability, acts of terrorism and international conflicts;
- difficulties in protecting intellectual property;
- difficulties in accounts receivable collection;
- cultural differences in the conduct of business;
- · difficulties in staffing and managing international operations; and
- compliance with customs regulations.

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

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

We believe that our technological position depends primarily on the technical competence and creative ability of our engineers. In a rapidly evolving market, such as ours, the development of new technologies, commercialization of those technologies into products and market 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. Many of our suppliers implemented cost reduction strategies to address the slowdowns in the market. In the second half of 2009, several of our suppliers had material shortages which increased the lead times for certain of our products. We implemented programs to minimize the impact of these shortages. However, it may be difficult for certain suppliers to meet delivery requirements in a period of rapid growth, therefore impacting our ability to meet our customers' demands.

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

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

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

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

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

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

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

We have increased our indebtedness.

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

- make it difficult to make payments on our other obligations;
- make it difficult to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;
- require the dedication of a substantial portion of any cash flow from operations to service for indebtedness, thereby reducing the amount of cash flow available for other purposes, including capital expenditures; and
- limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we compete.

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

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

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

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

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

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

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

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

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

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

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

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

- restrict our ability to expand facilities;
- restrict our ability to ship certain products into the European Union or elsewhere;
- require us to modify our operations logistics;
- require us to acquire costly equipment; or
- require us to incur other significant costs and expenses.

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

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

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

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

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

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

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

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

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

We have significant guarantees and indemnification obligations.

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

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

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

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

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

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

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

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

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

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

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

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

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

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

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

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

(b) This space consists of two buildings.

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

Item 3: Legal Proceedings

On July 11, 2008, Xyratex Technology, Ltd ("Xyratex") filed a complaint against us in the United States District Court in Los Angeles, California alleging that certain of our disk drive test products infringe one of Xyratex's patents. The suit sought temporary, preliminary and permanent injunctive relief as well as unspecified monetary damages, including treble damages, for patent infringement. We filed separate complaints in the United States District Court in Los Angeles alleging that Xyratex's disk drive test products infringe two of our patents and that Xyratex had engaged in anti-competitive conduct in violation of the federal antitrust laws. Prior to trial, on December 14, 2009, the parties entered into a Settlement Agreement agreeing to settle all of the pending litigation between them. The settlement had no impact on our financial condition or results of operations. Although there can be no assurance, we do not expect the settlement to negatively impact our business.

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

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

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

Item 4: Reserved

PART II

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

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

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

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

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

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

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

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

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

Item 6: Selected Financial Data

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

 As a result of the divestiture of Broadband Test Division and Connection Systems, we are reporting Broadband Test Division and Connection Systems as discontinued operations for all periods presented. See "Note D: Discontinued Operations" in the Notes to Consolidated Financial Statements for further discussion.

(2) The Consolidated Statement of Operations Data for the year ended December 31, 2008 includes the results of operations of Nextest from January 24, 2008 and the results of operations of Eagle Test from November 15, 2008.

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

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

Overview

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

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

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

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

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

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

Critical Accounting Policies and Estimates

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

Preparation of Financial Statements and Use of Estimates

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

investments, goodwill, intangible and other long-lived assets, bad debts, income taxes, pensions, warranties, contingencies, and litigation. Management bases its estimates on historical experience and on appropriate and customary assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

Revenue Recognition

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

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

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

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

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

For transactions involving the sale of software which is not incidental to the product, revenue is recognized in accordance with ASC 985-605, "Software Revenue Recognition." We recognize revenue when there is persuasive evidence of an arrangement, delivery has occurred, the sales price is fixed or determinable and collectability is probable. In instances where an arrangement contains multiple elements, revenue related to the undelivered elements is deferred to the extent that vendor-specific objective evidence of fair value ("VSOE") exists for such elements. In instances where VSOE does not exist for one or more of the undelivered elements of an arrangement, all revenue related to the arrangement is deferred until all elements have been delivered. VSOE is the price charged when the element is sold separately. Revenue for the separate elements is only recognized where the functionality of the undelivered element is not essential to the delivered element. For certain contracts eligible for contract accounting under ASC 605-35, *"Revenue Recognition Construction-Type and Production-Type Contracts,"* revenue is recognized using the percentage-of-completion accounting method based upon the percentage of incurred costs to estimated total costs. These arrangements require significant production, modification, or customization. In all cases, changes to total estimated costs and anticipated losses, if any, are recognized in the period in which they are determined. With respect to contract change orders, claims or similar items, judgment must be used in estimating related amounts and assessing the potential for realization. Such amounts are only included in the contract value when they can be reliably estimated and realization is reasonably assured, generally upon receipt of a customer approved change order.

Inventories

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

Equity Incentive and Stock Purchase Plans

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

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

Income Taxes

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

Investments

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

- The length of time and the extent to which the market value has been less than cost;
- The financial condition and near-term prospects of the issuer; and
- The intent and ability to retain the investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value.

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

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

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

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

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

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

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

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

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

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

- Term we estimated a four to five-year expected life of the instruments, based on our expectations of the most likely time in which it would take for the instruments to be called by the issuer or liquidity to be restored to the market place.
- Probability of Default we determined the probability of default using market credit spreads.
- Discount Rate we determined the discount rate based on estimated yields of similar publicly traded instruments (e.g., similar collateral, terms, credit quality, etc.).
- Liquidity Risk Premium given the recent instability in the financial markets and the low demand for auction rate securities, it is unclear as to when these securities will become liquid again. Without the auction process functioning again, it would be extremely difficult to estimate the expected holding period for these instruments. As a result, we included a 400 to 600 basis point premium to the discount rate to reflect the illiquidity of these bonds.

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

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

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

Goodwill, Intangible and Long-Lived Assets

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

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

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

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

SELECTED RELATIONSHIPS WITHIN THE CONSOLIDATED
STATEMENTS OF OPERATIONS

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

Results of Operations

Discontinued Operations

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

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

Book to Bill Ratio

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

	Three mon	Three months ended December 31,			
	2009	2008	2007		
Semiconductor Test	1.3	0.7	1.1		
Systems Test Group	0.6	1.5	1.2		
Total Company	1.1	0.9	1.1		

Revenues

Net revenues for our two reportable segments were as follows:

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

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

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

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

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

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

	2009	2008	2007
Semiconductor Test	67%	81%	80%
Systems Test Group	33	19	20
	100%	100%	100%
Net revenue by region as a percentage of total revenue was as follows:			
	2009	2008	2007
United States	26%	22%	23%
Taiwan	14	18	13
Malaysia	11	6	7
South East Asia	10	10	8
Europe	10	10	12
Thailand	9	3	1
Singapore	8	10	15
Japan	6	11	12
Korea	5	7	6
Rest of the World	1	3	3
	100%	100%	100%

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

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

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

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

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

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

Gross Profit

	2009	2008	2007	2008-2009 Dollar / Point Change	2007-2008 Dollar / Point Change			
	(dollars in millions)							
Gross Profit								
Percent of Total Revenue	38.0%	6 45.0%	46.6%	(7.0)	(1.6)			

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

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

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

	2009	2008	2007	2008-2009 Dollar / Point Change	2007-2008 Dollar / Point Change
			ollars in mi		
Product Gross Profit	\$208.5	\$384.8	\$431.1	\$(176.3)	\$(46.3)
Percent of Product Revenue					(4.0)
Service Gross Profit					\$ 31.1
Percent of Service Revenue	46.0%	6 41.8%	6 34.2%	4.2	7.6

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

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

- Downward revisions to previously forecasted demand levels as a result of worsening economic conditions experienced in the semiconductor and automotive industries primarily in the first half of 2009 resulted in an inventory provision of \$16.7 million for inventory not expected to be consumed;
- A decline in demand versus forecast for our Liquid Crystal Display ("LCD") test product due to the global economic downturn, lower product pricing by competitors, the introduction of a new product by a competitor and consolidation among a number of the expected buyers of the product, resulted in an inventory provision of \$8.6 million; and
- During late 2008, we introduced the next versions of our Nextest Magnum memory test product. At that time, it was anticipated that demand would continue for the existing version of the product within its installed base of customers. An overall decline in the memory market combined with a portion of our customers accelerating their purchasing of the newer version of the product resulted in an inventory provision of \$2.7 million.

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

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

- In the third quarter of 2008, we recorded an inventory provision of \$20.2 million related to wireless instrumentation associated with our Semiconductor Test segment's FLEX Test Platform. In the first half of 2008, there had been a significant increase in demand for our wireless instrumentation. In the third quarter of 2008, this wireless instrumentation demand decreased abruptly causing a reduction in forecasted demand. This significant decrease in demand combined with an upcoming wireless instrumentation product transition resulted in an inventory write-down of \$20.2 million; and
- The remainder of the charge of \$9.2 million primarily reflects downward revisions to previously forecasted demand levels as a result of worsening economic conditions experienced in the semiconductor test industry at the end of 2008.

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

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

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

Engineering and Development

Engineering and development expenses were as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
		llions)			
Engineering and Development	\$164.8	\$216.5	\$204.3	\$(51.7)	\$12.2
Percent of Total Revenue	20.1%	6 19.6%	6 18.6%	, r	

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

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

Selling and Administrative

Selling and administrative expenses were as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
Selling and Administrative Percent of Total Revenue	\$200.4 24.5%	\$247.8	ollars in mil \$248.1 5 22.5%	\$(47.4)	\$(0.3)

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

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

Acquired Intangible Assets Amortization

Acquired intangible assets amortization expense was as follows:

	2009	2008	2007	2008-2009 Change	2007-2008 Change
Acquired Intangible Assets Amortization	\$32.3 3.9%	\$20.6	\$3.7	millions) \$11.7	\$16.9

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

Goodwill Impairment

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

In-process Research and Development

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

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

Restructuring and Other

Restructuring

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

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

O1 2009 Activity:

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

Q2 2009 Activity:

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

Q3 2009 Activity:

- \$4.1 million of charges in Corporate related to the early exit of a leased facility in North Reading; and
- \$0.3 million of charges in Systems Test Group related to the early exit of a leased facility in Novi, Michigan.

Q2 2008 Activity:

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

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

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

Q1 2008 Activity:

- \$7.4 million of severance charges across all functions and segments related to headcount reductions of approximately 148 people, of which \$6.3 million and 126 people were in Semiconductor Test, and \$1.1 million and 22 people were in Systems Test Group; and
- \$0.7 million of facility charges in Semiconductor Test related to the early exit of a leased facility in Bracknell, United Kingdom.

Q2 2008 Activity:

- \$8.1 million of severance charges across all functions and segments related to headcount reductions of approximately 132 people, of which \$7.3 million and 112 people were in Semiconductor Test, and \$0.8 million and 20 people were in Corporate; and
- \$0.7 million of facility charges in the Semiconductor Test related to the early exit of a leased facility in Ontario, Canada.

Q4 2008 Activity:

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

Pre-2007 Activity:

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

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

Q1 2007 Activity:

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

Q2 2007 Activity:

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

Q3 2007 Activity:

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

Pre-2007 Activity:

- \$1.7 million charge in Systems Test Group for a revision in estimated sublease income at a facility in Westford, Massachusetts; and
- \$(0.5) million related to change in the estimated amount of benefits payments related to pre-2007 headcount reduction activities across both segments.

Other

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

- \$1.1 million of long-lived asset impairment charges across both segments primarily related to the disposal of fixed assets as a result of the consolidation of our facilities in North Reading, Massachusetts;
- \$(2.0) million of credits related to finalization of certain Eagle Test purchase accounting items; and
- \$(0.1) million related to other miscellaneous.

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

- \$20.9 million loss on sale of land and buildings, including \$22.6 million loss on the sale of real estate across both segments for a manufacturing facility in North Reading, Massachusetts as a result of the transfer of manufacturing to an outsourced partner and \$1.7 million gain on the sale of real estate in the Semiconductor Test segment for a facility in Agoura Hills, California;
- \$12.0 million of facility charges across both segments related to the accelerated depreciation of a manufacturing facility in North Reading, Massachusetts as a result of the transfer of manufacturing to an outsourced partner;
- \$0.8 related to acquisition financing costs; and
- \$0.6 million charge in the Semiconductor Test segment for a long-lived asset impairment related to acquired intangible assets.

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

- \$(3.6) million related to the gain on sale of land and building in Deerfield, Illinois;
- \$(4.3) million related to cash proceeds recovered from insurance related to a facility fire in Taiwan; and
- \$(0.9) million related to gain on sale of product lines.

Interest and Other

		009	2008	2007 (in millio	Change	2007-2008 Change
Interest income	\$	3.4	\$ 12.6	\$39.1	\$(9.2)	\$(26.5)
Interest expense and other	\$(2	23.6)	\$(14.2)	\$(1.1)	\$(9.4)	\$(13.1)

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

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

(Loss) Income from Continuing Operations before Income Taxes

	2009	2008	2007	2008-2009 Change	2007-2008 Change
			in millior	1s)	
Semiconductor Test	\$(129.1)	\$(291.8)	\$25.1	\$162.7	\$(316.9)
Systems Test Group	11.6	(83.6)	12.0	95.2	(95.6)
Corporate	_(25.1)	(7.0)	42.1	(18.1)	(49.1)
Total	\$(142.6)	\$(382.4)	\$79.2	\$239.8	\$(461.6)

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

Income Taxes

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

Contractual Obligations

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

Payments Due by Period	Purchase Obligations	Non-cancelable Lease Commitments (1)	Debt	Interest on Debt	Pension Contributions	Total
<u>2010</u>	\$131,650	\$19,155	\$ 2,156	\$ 8,677	\$9,834	\$171,472
2010	φ191,050 —	16,317	2,156	8,647		27,120
2011		12,629	2,156	8,618	_	23,403
2012		7,395	2,156	8,587		18,138
2013		5,171	191,078	4,306		200,555
Beyond 2014		5,672				5,672
Total	\$131,650	\$66,339	\$199,702	\$38,835	<u>\$9,834</u>	<u>\$446,360</u>

 Non-cancelable lease payments have not been reduced by sublease income of \$5.8 million due in the future under non-cancelable sublease agreements.

(2) As of December 31, 2009, the total amount of unrecognized tax benefit for uncertain tax positions and the accrual for the related interest, net of the federal benefit, was \$12.8 million and \$13.9 million, respectively, and was included in current and long-term other accrued liabilities. We are unable to make a reasonably reliable estimate of when a cash settlement will occur with tax authorities as the timing of examinations and ultimate resolutions of those examinations is uncertain.

Liquidity and Capital Resources

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

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

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

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

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

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

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

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

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

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

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

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

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

Retirement Plans

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

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

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

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

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

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

Return on Plan Assets		Discount Rate		
Return on Flan Assets	5.35%	5.85%	6.35%	
7.0%	(i	in million:	s)	
	\$5.5	\$4.5	\$3.3	
	4.3	3.3	2.1	
8.0%	3.0	2.0	0.9	

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

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

Equity Compensation Plans

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

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

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

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1))
Equity plans approved by shareholders	9,204(1)	\$12.60	19,391(3)
Equity plans not approved by shareholders(4,5,6)	8,959(2)	\$14.27	
Total	18,163	\$13.88	19,391

(1) Includes 6,570,476 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.

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

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

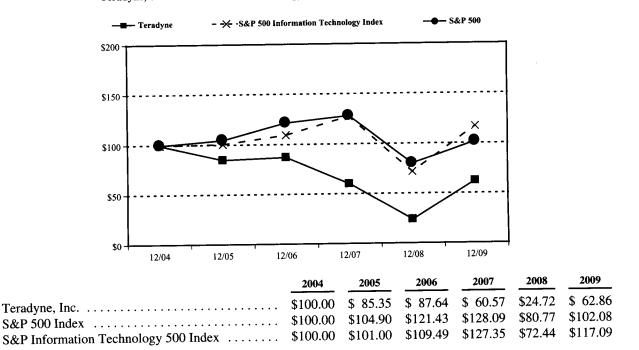
- (5) In connection with the acquisition of Nextest (the "Nextest Acquisition"), we assumed the options and restricted stock units granted under the Nextest Systems Corporation 1998 Equity Incentive Plan, as amended, and the Nextest Systems Corporation 2006 Equity Incentive Plan (collectively, the "Nextest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

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

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

Performance Graph

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



Teradyne, S&P 500 Information Technology Index, and S&P 500

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

Related Party Transaction

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

Recently Issued Accounting Pronouncements

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

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

Item 7A: Quantitative and Qualitative Disclosures About Market Risks

Concentration of Credit Risk

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

Exchange Rate Risk Management

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

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

Interest Rate Risk Management

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

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

Item 8: Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

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

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

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts March 1, 2010

CONSOLIDATED BALANCE SHEETS

December 31, 2009 and 2008

ASSETS Current assets:	2009 (in thousands share info	
Current assets:		
Current assets:		
Current assets:		
	\$ 416,737	\$ 322,705
Cash and cash equivalents	\$ 410,737 46,933	\$ 322,703
Marketable securities	40,933	
Accounts receivable, less allowance for doubtful accounts of \$3,770 and \$4,712 in 2009 and 2008, respectively	125,236	109,625
Inventories: Parts	43,691	89,140
Assemblies in process	37,161	56,780
Finished goods	9,984	22,531
	90,836	168,451
Deferred tax asset	18,944	16,988
Prepayments and other current assets	63,606	67,292
Total current assets	762,292	685,061
Property, plant and equipment:	,	
Land	16,561	16,561
Buildings and improvements	133,689	134,327
Machinery and equipment	631,506	630,446
Construction in progress	651	1,440
Total	782,407	782,774
Less: Accumulated depreciation	536,045	484,325
Net property, plant and equipment	246,362	298,449
Marketable securities	55,130	51,613
Intangible assets net	152,192	186,998
Other assets	19,361	19,534
Total assets	\$1,235,337	\$1,241,655
LIABILITIES		
Current liabilities:	66,765	61,164
Accounts payable	55,356	73,521
Accrued employees' compensation and withholdings Deferred revenue and customer advances	104,439	58,030
Other accrued liabilities	54,640	51,748
Current debt	2,157	122,500
Total current liabilities	283,357	366,963
Retirement plans liabilities	115,101	125,877
Deferred tax liabilities	8,041	8,730
Long-term other accrued liabilities	23,159	30,366
Long-term debt	141,100	
Total liabilities	570,758	531,936
Commitments and contingencies (Note J)		
SHAREHOLDERS' EQUITY		
Common stock, \$0.125 par value, 1,000,000 shares authorized, 174,908 and 169,651 shares issued and		
outstanding at December 31, 2009 and 2008, respectively	21,864	21,206
Additional paid-in capital	1,202,426	1,124,390
	(138,105)	
Accumulated other comprehensive loss	(101 606)	
Accumulated other comprehensive loss	(421,606)	
Accumulated other comprehensive loss	664,579	(287,769) 709,719

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

CONSOLIDATED STATEMENTS OF OPERATIONS

	Yea	rs Ended Decem	ber 31,
	2009	2008	2007
Net revenue:	(in thousan	ds, except per sl	are amounts)
Products	\$ 595,304 224,103	\$ 836,045 270,997	\$ 861,583 240,697
Total net revenue	819,407	1,107,042	1,102,280
Cost of revenues:			
Cost of products	386,807	451,225	430,464
	120,967	157,625	158,383
Total cost of revenue	507,774	608,850	588,847
Gross profit Operating expenses:	311,633	498,192	513,433
Engineering and development	164,835	216,461	204,344
Selling and administrative	200,430	247,789	248,096
Acquired intangible assets amortization	32,296	20,633	3,667
In-process research and developmentRestructuring and other	36,493	1,600 62,775	16,700
Goodwill impairment		329,674	(659)
Total operating expenses	434,054	878,932	472,148
(Loss)/Income from operations	(122,421)	(380,740)	41,285
Interest income	3,417	12,558	39,066
Interest expense and other, net	(23,633)	(14,236)	(1,108)
(Loss)/Income from continuing operations before income taxes	(142,637)	(382,418)	79,243
(Benefit)/Provision for income taxes	(8,800)	12,577	7,360
(Loss)/Income from continuing operations	(133,837)	(394,995)	71,883
Income from discontinued operations before income taxes Provision for income taxes		768	6,346 518
Income from discontinued operations		768	5,828
Net (Loss)/Income	\$(133,837)	\$ (394,227)	\$ 77,711
(Loss)/Income from continuing operations:			
Basic	\$ (0.77)	\$ (2.32)	\$ 0.39
Diluted	\$ (0.77)	\$ (2.32)	\$ 0.39
Net (Loss)/Income per common share:		<u> </u>	
Basic	\$ (0.77)	\$ (2.31)	\$ 0.42
Diluted	\$ (0.77)	\$ (2.31)	\$ 0.42
	172 604	170,593	184,020
Weighted average common shares—basic	173,604	170,595	107,020

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

	Shares Stares	Common Stock Par Value	Additional Paid-in Capital h	Accumulated Other Compre- (Retained Earnings (Accumulated 1 Deficit)	Total Shareholders' Equity	Compre- hensive Income (Loss)
Balance, December 31, 2006	188,952 2,454 (18,318)	\$23,619 307 (2,290)	\$1,179,015 20,211 23,142 (116,927)	(in thousands) \$ (66,309) \$ \$ (ds) \$ 224,862 (154,448)	\$1,361,187 20,518 23,142 (273,665)	
Comprehensive income: Net income				(741) 3,454 13,216	77,711	77,711 (741) 3,454 13,216	<pre>\$ 77,711 (741) 3,454 13,216</pre>
Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$112 Prior service costs, net of tax of \$0 Net transition asset net of tax of (\$19) Total comprehensive income				3,788 613 (49)		3,788 613 (49)	3,788 613 (49) <u>\$ 97,992</u>
Balance, December 31, 2007	173,088 4,036	21,636 504	$1,105,441 \\12,918 \\22,250$	(46,028)	148,125	1,229,174 13,422 22,250	
Stock options and restricted stock units issued in purchase acquisitions	(7,473)	(934)	32,372 (48,591)		(41,667)	32,372 (91,192)	
Comprenensive income. Net foreign currency translation adjustment				(4,878) (1,997) (97,220)	(394,227)	$(394,227) \\ (4,878) \\ (1,997) \\ (97,220)$	\$(394,227) (4,878) (1,997) (97,220)
Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$34 Prior service costs, net of tax of \$8) Net transition asset, net of tax of (\$8)				1,421 613 (19)		1,421 613 (19)	1,421 613 (19) \$(19)
Total comprehensive loss	169,651 5,257	21,206 658	1,124,390 12,612 39,736 24,639 1,040	(148,108)	(287,769)	709,719 13,270 39,736 24,639 1 049	
Comprehensive income: Net loss Net loss Foreign currency translation adjustment				2,779 816 1,836	(133,837)	(133,837) 2,779 1,836	\$(133,837) 2,779 816 1,836
Amortization included in net periodic pension and postretirement costs: Actuarial losses, net of tax of \$221 Proversive costs, net of tax of \$0				4,007 565		4,007 565	4,007 565 \$(123,834)
Balance, December 31, 2009	174,908	\$21,864	\$1,202,426	\$(138,105)	\$(421,606)	\$ 664,579	
			•				

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

TERADYNE, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS) Years Ended December 31, 2009, 2008 and 2007

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years I	Ended Decen	ıber 31,
	2009	2008	2007
Cash flows from operating activities:	(in thousands)
Net (Loss)/Income	\$(133,837)	\$(394,227)	\$ 77,711
Less: Income/(Loss) from discontinued operations Less: Gain on disposal of discontinued operations (Note D)		768	(68) 5,896
(Loss)/Income from continuing operations	(133,837)	(394,995)	71,883
Depreciation Amortization Provision for excess and obsolete inventory Stock-based compensation Non cash charge for the sale of inventories revalued at the date of acquisition	60,094 45,987 27,981 24,639 15,413	71,255 23,505 29,363 22,250 5,046	59,384 8,111 1,835 23,474
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	
Goodwill impairment Loss/(gain) on sale of land and buildings In-process research and development Other Changes in operating assets and liabilities, net of businesses and product lines sold and	(1,058)	329,674 20,883 1,600 (304)	(3,597) 16,700 (2,053)
acquired: Accounts receivable Inventories Other assets Accounts payable, deferred revenue, retirement plans liabilities and other accrued	(15,565) 63,377 (726)	118,196 (3,074) (32,709)	(33,717) 45,179 (24,958)
Retirement plan contributions	46,678 (15,291)	(31,597) (7,158) (5,008)	8,047 (7,910) (30,865)
Net cash provided by continuing operations Net cash provided by (used for) discontinued operations	121,317	163,167 768	131,513 (3,552)
Net cash provided by operating activities	121,317	163,935	127,961
Cash flows from investing activities: Investments in property, plant and equipment Acquisition of businesses, net of cash acquired Proceeds from life insurance . Proceeds from sale of land and buildings Proceeds from sale of equity investments and product lines Acquisition of technology . Proceeds from sales of trading marketable securities Purchases of available-for-sale marketable securities	(41,932) (3,741) 1,076 — 3,000 (90,369)	(87,202) (574,342) 14,832 44,072 2,811 (135,475)	(86,088) 7,888 906 (17,600) (388,385)
Proceeds from sales and maturities of available-for-sale marketable securities	(93,930)	286,206 (449,098)	589,167
Net cash provided by discontinued operations			10,765
Net cash (used for) provided by investing activities Cash flows from financing activities:	(93,930)	(449,098)	
Net proceeds from long-term debt Repayment of revolving credit facility Payments of long-term debt and notes payable Tax benefit related to stock options and restricted stock units Net proceeds from revolving credit facility Repurchase of common stock Issuance of common stock under stock option and stock purchase plans	172,914 (122,500) (1,069) 1,049 15,703	119,674 (91,192) 17,817	(273,665) 23,171
Net cash provided by (used for) financing activities	66,097	46,299	(250,494)
Effect of exchange rate changes on cash and cash equivalents	548	(802)	226
Increase (decrease) in cash and cash equivalents Cash and cash equivalents at beginning of year	94,032 322,705	(239,666) 562,371	(5,654) 568,025
Cash and cash equivalents at end of year	\$ 416,737	\$ 322,705	\$ 562,371
Supplementary disclosure of cash flow information: Cash paid during the year for: Interest Income taxes (refunds) payments	\$ 7,106 \$ (5,838)	\$ 1,063 \$ 17,952	\$ 1,286 \$ 31,584

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A. THE COMPANY

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

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

B. ACCOUNTING POLICIES

Basis of Presentation

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

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

Preparation of Financial Statements and Use of Estimates

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an on-going basis, management evaluates its estimates, including those related to inventories, investments, goodwill, intangible and other long-lived assets, doubtful accounts, income taxes, pensions, warranties, and loss contingencies. Management bases its estimates on historical experience and on appropriate and customary assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

Revenue Recognition

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

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

B. ACCOUNTING POLICIES—(Continued)

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

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

	2009	2008
		sands)
Customer advances	\$ 72,569	\$11,565
Installation and training	22,616	22,153
Undelivered elements	5,551	19,815
Acceptance	530	1,324
Other	3,173	3,173
Total deferred revenue and customer advances	\$104,439	\$58,030

Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with 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 which is not incidental to the product, 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 collectibility is probable. In instances where an arrangement contains multiple elements, revenue is deferred related to the undelivered elements 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

B. ACCOUNTING POLICIES—(Continued)

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, 2009 and 2008, Teradyne had \$1.0 million and \$4.5 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.

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, 2006	\$ 12,897
Accruals for warranties issued during the period	13,234
Accruals related to pre-existing warranties	(1,865)
Settlements made during the period	(14,926)
Balance at December 31, 2007	9,340
Acquisitions	1,872
Accruals for warranties issued during the period	12,589
Accruals related to pre-existing warranties	386
Settlements made during the period	(15,815)
Balance at December 31, 2008	8,372
Accruals for warranties issued during the period	8,907
Accruals related to pre-existing warranties	(674)
Settlements made during the period	(9,519)
Balance at December 31, 2009	\$ 7,086

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

B. ACCOUNTING POLICIES—(Continued)

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 long-term other accrued liabilities.

	Amount
	(in thousands)
Balance at December 31, 2006	\$ 8,350
Deferral of new extended warranty revenue	3,997
Recognition of extended warranty deferred revenue	(5,737)
Balance at December 31, 2007	6,610
Deferral of new extended warranty revenue	4,549
Recognition of extended warranty deferred revenue	(4,790)
Balance at December 31, 2008	6,369
Deferral of new extended warranty revenue	2,438
Recognition of extended warranty deferred revenue	(4,752)
Balance at December 31, 2009	\$ 4,055

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

B. ACCOUNTING POLICIES—(Continued)

• 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, 2009 and 2008. 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 are classified within Level 3. Teradyne's investments in auction rate securities are classified within Level 3 because there are no active markets for the auction rate securities and therefore Teradyne is unable to obtain independent valuations from market sources. The valuation technique used under Level 3 consists of a discounted cash flow analysis which includes 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

B. ACCOUNTING POLICIES—(Continued)

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 vears
Machinery and equipment	3 to 5 years
Software	3 to 5 years

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, 2009, 2008 and 2007 was \$14.5 million, \$29.4 million and \$19.9 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

Effective January 1, 2006, Teradyne adopted the fair value recognition provision of ASC 718-10, "Compensation—Stock Compensation" using the modified prospective transition method and therefore has not restated results for prior periods. Under this transition method, stock based compensation expense for the years ended December 31, 2009, 2008 and 2007 includes compensation expense for all stock-based compensation awards granted prior to, but not yet vested as of January 1, 2006, and is calculated based on the grant date fair

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

B. ACCOUNTING POLICIES—(Continued)

value estimated in accordance with the original provisions of ASC 718-10. Stock-based compensation expense for all stock-based compensation awards granted after January 1, 2006 is based on the grant-date fair value estimated in accordance with the provisions of ASC 718-10. As required by ASC 718-10, we have made an estimate of expected forfeitures and are recognizing compensation costs only for those stock-based compensation awards expected to vest. The cumulative effect of the initial adoption of ASC 718-10 was not material. Prior to the adoption of ASC 718-10, Teradyne recognized stock-based compensation expense in accordance with Accounting Principles Board ("APB") Opinion No. 25 ("APB 25").

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 (excluding executive officers) 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. Restricted stock unit awards granted to executive officers in 2009, 2008 and 2007 vest over four years. A portion of these restricted stock unit awards granted to executive officers is subject to time-based vesting and a portion of the 2008 and 2007 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 2008 performance-based award and the performance-based restricted stock units were forfeited. 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 (including executive officers) 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. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

B. ACCOUNTING POLICIES—(Continued)

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

	2009	2008	2007
Cost of revenue	\$ 4,186	\$ 3,480	\$ 4,460
Engineering and development	7,738	6,912	7,278
Selling and administrative	12,715	11,858	11,736
Stock-based compensation	24,639	22,250	23,474
Income tax benefit			(75)
Total stock-based compensation expense after income taxes	\$24,639	\$22,250	\$23,399

Valuation Assumptions

The total number of stock options granted in 2009 was 1.1 million at the weighted average grant date fair value of \$1.97. There were no stock options granted in 2008 and 2007. The fair value of the stock options at grant date was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2009
Expected life (years)	4.75
Interest rate	1.6%
Volatility-historical	44.9%
Dividend yield	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 risk-free 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 2009 was \$1.66 and \$2.49, respectively, the first and last six months of 2008 was \$2.38 and \$1.27, respectively, and the first and last six months of 2007 was \$3.56 and \$2.67, respectively. The fair value of the employees' purchase rights was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2009	2008	2007
Expected life (years)	0.5	0.5	0.5
Interest rate	0.3%	2.8%	5.1%
Volatility-historical	73.6%	24.4%	24.4%
Dividend yield	0.0%	0.0%	0.0%

As of December 31, 2009, there were 6.7 million shares available for grant under the ESPP.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

B. ACCOUNTING POLICIES—(Continued)

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 \$0.8 million, \$1.5 million and \$2.4 million in 2009, 2008 and 2007, 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 immaterial for the years ended December 31, 2009, 2008 and 2007. For Diagnostic Solutions, assets and liabilities are translated into 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 (Loss) Income per Common Share

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

Comprehensive (Loss) Income

Comprehensive (loss) income includes net (loss) income, 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 October 2009, the FASB issued ASC 605-25, *"Revenue Recognition Multiple-Element Arrangements."* This ASC establishes the accounting and reporting guidance for arrangements including multiple revenue-generating activities. This ASC provides amendments to the criteria for separating deliverables, measuring and allocating arrangement consideration to one or more units of accounting. The amendments in this ASC also

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS—(Continued)

establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor's multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. The amendments also require providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. The amendments in this ASC are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010. Early application is permitted. Teradyne has chosen to early adopt this ASC as of January 1, 2010. Adoption will not have a material impact on Teradyne's financial position or results of operations.

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

D. DISCONTINUED OPERATIONS

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

E. 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	ears
Expected volatility	.6%
Risk-free interest rate	.8%
Dividend yield	.0%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

E. ACQUISITIONS—(Continued)

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:	
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 has recorded an impairment charge in the amount of \$329.7 million, which included the goodwill related to Nextest. See Note I "Goodwill and Intangible Assets".

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

E. ACQUISITIONS—(Continued)

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	
Risk-free interest rate	2.0%
Dividend yield	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[™] 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:	
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)
Other long-term liabilities	(2,064)
In-process research and development	
Total purchase price	\$374,396

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

E. ACQUISITIONS—(Continued)

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 has recorded an impairment charge in the amount of \$329.7 million, which included the goodwill related to Eagle Test. See Note I "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 and 2007. 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	December 31, 2007	
Revenue Net (loss) income Net (loss) income per common share:	\$1,225,441 (418,618)	\$1,285,560 312	
Basic	\$ (2.45)	\$ 0.00	
Diluted	<u>\$ (2.45)</u>	\$ 0.00	

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, in both periods presented.

Technology

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. 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, 2009 or 2008. At December 31, 2009 and 2008, Teradyne's investments in auction rate securities were classified as trading securities. At December 31, 2009 and 2008, Teradyne's investments in equity and debt mutual funds, asset backed and 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 year ended December 31, 2009, Teradyne recorded realized gains of \$0.4 million on the sale of its marketable securities. For the years ended December 31, 2008 and 2007, Teradyne recorded no realized gains on the sale of its marketable securities. For the years ended December 31, 2008 and 2007, Teradyne recorded no realized gains on the sale of its marketable securities. For the years ended December 31, 2008 and 2007, Teradyne recorded no realized gains on the sale of its marketable securities. For the years ended December 31, 2009, 2008 and 2007, Teradyne recorded realized 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.

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

Because the UBS Put is expected to allow Teradyne to sell its ARS securities at par within a relatively short time horizon and provides UBS with the ability to require Teradyne to sell the securities to them at any time between acceptance of the UBS Put through July 2012, Teradyne does not anticipate holding these investments to the earlier of maturity or redemption by the issuer. Teradyne intends to exercise the UBS Put and require UBS to repurchase its ARS at par at the earliest possible time, June 2010. As a result, as of the Eagle Test acquisition date (November 14, 2008), Teradyne classified the ARS as trading securities under ASC 320-10, *"Investments –Debt and Equity Securities"*. During 2009, Teradyne recorded a net gain of \$0.7 million in interest income and during 2008 Teradyne recorded a loss of \$0.5 million in interest expense and other, in its consolidated statement of operations for the changes in the ARS fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

In determining the fair value of Teradyne's ARS and other investments Teradyne utilizes the provisions of ASC 820-10, "*Fair Value Measurement and Disclosures*". In determining the value of its ARS as of December 31, 2009 and 2008 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:

- 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 recent instability in the financial markets and the low demand for auction rate securities, it is unclear as to when these securities will become liquid again. Without the auction process functioning again, it would be extremely difficult to estimate the expected holding period for these instruments. As a result, 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 and \$26.0 million as of December 31, 2009 and 2008, respectively.

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

Teradyne has elected fair value treatment for the UBS Put under ASC 825-10, "Financial Instruments."

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

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, 2009 and 2008.

	Year ended December 31, 2009			
	Level 1	Level 2	Level 3	Total
		(in the	ousands)	
Assets:				
Short-term marketable securities	\$12,137	\$34,796	\$ —	\$ 46,933
Long-term marketable securities	11,794	19,687	23,649	55,130
UBS Put	<u> </u>		2,830	2,830
Total	\$23,931	\$54,483	\$26,479	\$104,893
Liabilities:				
Derivatives	<u>\$ </u>	<u>\$ 143</u>	\$	\$ 143
Total	<u>\$ </u>	\$ 143	<u>\$ </u>	\$ 143

	Year ended December 31, 2008			
	Level 1	Level 2	Level 3	Total
		(in the	ousands)	
Assets:				
Long-term marketable securities	\$ 6,192	\$19,453	\$25,968	\$ 51,613
UBS Put	<u> </u>		3,330	3,330
Total	\$ 6,192	\$19,453	\$29,298	\$ 54,943
Liabilities:				
Derivatives	<u>\$ </u>	<u>\$ 767</u>	<u>\$ </u>	<u> </u>
Total	<u>\$ </u>	<u>\$ 767</u>	<u>\$ </u>	<u>\$ 767</u>

Changes in the fair value of Level 3 financial assets for the year ended December 31, 2009 and 2008 were as follows:

	Level 3 Financial Assets		
	Long-Term Auction Rate Securities	Long-Term UBS Put	
	(in thous	ands)	
Balance at December 31, 2007	\$	\$ —	
Assumed from acquisition	26,467	2,710	
Change in unrealized gain included in earnings	_	620	
Change in unrealized loss included in earnings	(499)		
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	

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

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, 2009 and 2008 were as follows:

	December 31, 2009		December 31, 2008	
	Carrying Value	Fair Value	Carrying Value	Fair Value
		(in tho	usands)	
Marketable securities	\$102,063	\$102,063	\$ 51,613	\$ 51,613
UBS Put	2,830	2,830	3,330	3,330
Revolving credit facility	_		122,500	122,500
Convertible debt (1)	133,554	392,113	_	
Japan loan		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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

securities

Short-term marketable securities mature in less than one year. Long-term marketable securities have maturities of one to three years. At December 31, 2009 and 2008, these investments are reported as follows:

	Available-for-Sale				Fair Market
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Value of Investments with Unrealized Losses
			(in the	ousands)	
2009					
Short-term marketable securities:					
U.S. Treasury and government agency					
securities	\$20,440	\$2	\$ (1)	\$20,441	\$12,002
Bank time deposits	14,202	1		14,203	—
Corporate debt securities	12,286	4	(1)	12,289	4,423
	\$46,928	<u>\$ 7</u>	<u>\$ (2)</u>	\$46,933	\$16,425
Long-term marketable securities:					
Auction rate securities	\$23,649	\$	\$	\$23,649	\$
Corporate debt securities	15,202	8	(30)	15,180	9,066
U.S. Treasury and government agency					
securities	8,524	2	(11)	8,515	5,188
Equity and debt mutual funds	7,699	640	(553)	7,786	4,139
	\$55,074	\$650	<u>\$(594</u>)	\$55,130	\$18,393
		Availab	le-for-Sale		Fair Market
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Value of Investments with Unrealized Losses
			(in the	usands)	
2008					
Long-term marketable securities:					
Auction rate securities	\$25,968	\$—	\$ —	\$25,968	\$ —
Equity and debt mutual funds	8,910	589	(3,307)	6,192	5,421

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. The investments that had unrealized losses for greater than one year are mutual funds related to employee retirement benefits. Of the \$30.7 million of investments that had unrealized losses for less than one year, \$16.4 million relates to short-term investment in U.S. Treasury and government agency securities and corporate debt securities and \$14.3 million relates to long-term corporate debt securities, municipal bonds and U.S. Treasury and government agency securities. Teradyne reviews its investments to identify and evaluate investments that have an indication of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near term prospects of the issuer, and Teradyne's intent and ability to hold the investments for a period of time to allow for anticipated recovery in market value. Based on this review, Teradyne determined that the unrealized losses related to these investments, at December 31, 2009, are temporary.

\$589

\$(3,307)

19,453

\$51,613

\$5,421

19.453

\$54,331

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

F. FINANCIAL INSTRUMENTS—(Continued)

As of December 31, 2008, the fair market value of investments with unrealized losses totaled \$5.4 million. Of this value, \$0.9 million had an unrealized loss for greater than one year and \$4.5 million had an unrealized loss for less than one year. These investments are mutual funds related to employee retirement benefits. Teradyne determined that the unrealized losses related to these investments, at December 31, 2008, 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, 2009 and 2008, 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, 2009		December 31, 2008)08	
	Buy Position	Sell Position	Net Total	Buy Position	Sell Position	Net Total
			(in mil	llions)		
Japanese Yen	\$ —	\$ 5.6	\$ 5.6	\$ —	\$22.2	\$22.2
Tajwan Dollar		6.8	6.6		7.9	7.9
British Pound Sterling	(0.1)	7.7	(1.4)	(14.8)	18.5	3.7
Euro	(1 1 1)	12.9	(1.7)	(18.9)	17.7	(1.2)
Total	+ · · · · · · · ·	\$33.0	\$ 9.1	\$(33.7)	\$66.3	\$32.6

The fair value of the outstanding contracts was \$0.1 million and \$0.8 million at December 31, 2009 and 2008, respectively, which represented unrealized losses on the outstanding contracts. In 2009, Teradyne recorded net realized gains of \$1.6 million related to foreign currency forward contracts hedging net monetary positions. In 2008, Teradyne recorded net realized losses of \$8.1 million related to foreign currency forward currency contracts hedging net monetary positions. In 2007, Teradyne recorded net realized gains of \$0.2 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

F. FINANCIAL INSTRUMENTS---(Continued)

The following table summarizes the fair value of derivative instruments as of December 31 2009 and December 31, 2008:

	Asset Derivatives			
	Balance Sheet Location	December 31, 2009	December 31, 2008	
Derivatives not designated as hedging instruments:		(in thousands)		
Foreign exchange contracts	Other accrued liabilities	\$143	\$767	
Total derivatives		\$143	\$767	

The following table summarizes the effect of derivative instruments in the statement of operations recognized for the years ended December 31, 2009, 2008 and 2007 (the table does not reflect the corresponding gain (loss) from the hedged balance sheet):

	Location of Gains (Losses) Recognized in Statement of Operations	December 31, 2009	December 31, 2008	December 31, 2007
Derivatives not designated as hedging instruments:			(in thousands)	
Foreign exchange contracts Total derivatives	Interest expense and other	\$1,590 \$1,590	$\frac{\$(8,124)}{\$(8,124)}$	\$171 \$171

See Debt footnote G 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. All of Teradyne's auction rate marketable securities are AAA, AA or A rated by one or more of the major credit rating agencies and are substantially guaranteed by a U.S. Department of Education agency or a third party insurer. Teradyne's fixed income available-for-sale marketable securities purchased during 2009 and held as of December 31, 2009 have a minimum rating of AA by one or more of the major credit rating agencies. 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.

G. DEBT

Long-term debt at December 31, 2009 and 2008 consisted of the following:

	2009	2008
	(in thous	ands)
Convertible senior notes	\$133,554	\$
Japan loan	9,703	_
Total debt	143,257	
Current portion of long-term debt	2,157	
Long-term debt	\$141,100	\$

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

G. DEBT—(Continued)

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

Payments Due by Period	Amount
2010	\$ 2,156
2010	2,156
2012	2,150
2013	2,156
2013	191,078
Beyond 2014	
Total	\$199,702

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 \$12.1 million as of December 31, 2009) 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, 2009, approximately \$2.2 million of the outstanding loan principal is included in current debt and approximately \$7.5 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

G. DEBT—(Continued)

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 2009, 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, 2010, no holders have exercised their 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 shares and a fixed strike price. Because the only variable that can affect the settlement amount is 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

G. DEBT-(Continued)

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 at December 31, 2009 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.

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

	December 31, 2009
Debt principal	(in thousands) \$190,000 56,446
Net carrying amount of the convertible debt	<u>\$133,554</u>
	For the year ended December 31, 2009
	(in thousands)
Contractual interest expense on the coupon	\$ 6,294 7,601
Total interest expense on the convertible debt	\$13,895

As of December 31, 2009, the unamortized discount was \$56.4 million, which will be amortized over approximately 4.25 years, and the carrying amount of the equity component was \$63.4 million. As of December 31, 2009, 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 \$372.4 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

G. DEBT-(Continued)

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.

The Credit Agreement contained customary representations and warranties as well as affirmative and negative covenants. Affirmative covenants include, among others, with respect to Teradyne and its subsidiaries, maintenance of existence, financial and other reporting, payment of obligations, maintenance of properties and insurance, and an agreement to cause future material domestic subsidiaries to become parties to the Security and Pledge Agreement referred to below. Negative covenants include, among others, with respect to Teradyne and its subsidiaries, limitations on incurrence or guarantees of indebtedness, limitations on liens, sale and lease-back transactions, investments, dividends, share redemptions and other restricted payments, affiliate transactions and capital expenditures. The Credit Agreement also required Teradyne to maintain certain financial ratios as of the end of any fiscal quarter, including a leverage ratio, fixed charge coverage ratio and an available domestic cash to total revolving borrowings ratio. The most restrictive covenant was the leverage ratio, which is a ratio of consolidated earnings before interest, taxes, depreciation and amortization ("EBITDA") to consolidated indebtedness, which for any period of four consecutive fiscal quarters may not exceed 2.5 to 1.0, subject to certain exceptions. As of December 31, 2008, Teradyne was in compliance with all financial covenants set forth in the Credit Agreement.

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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

H. ACCUMULATED OTHER COMPREHENSIVE LOSS

At December 31, 2009 and 2008, the accumulated other comprehensive loss balances were as follows:

	2009	2008
	(in thou	isands)
Retirement plans net actuarial loss, net of tax of \$(2,747) and \$(3,925)	\$(135,775)	\$(141,323)
Retirement plans prior service cost, net of tax of \$0 and \$0	(474)	(1,334)
Unrealized gain (loss) on investments, net of tax of \$0 and \$0	61	(2,718)
Foreign currency translation adjustments	(1,917)	(2,733)
Total accumulated other comprehensive loss		<u>\$(148,108)</u>

I. 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 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

I. GOODWILL AND INTANGIBLE ASSETS-(Continued)

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.

In 2007, Teradyne performed its annual impairment test for goodwill at the reporting unit level and determined that no adjustment to goodwill was necessary.

The changes in the carrying amount of goodwill by reporting units for the years ended December 31, 2009 and 2008 is as follows:

	Semiconductor Test	Systems Test	Total
Balance at December 31, 2007:		(in thousands)	
Goodwill Accumulated impairment losses	\$	\$ 148,183 (79,049)	\$ 148,183 (79,049)
Goodwill acquired during the year:		69,134	69,134
Nextest	170,492		170,492
Impairment losses	90,048 (260,540)	(69,134)	90,048 (329,674)
Balance at December 31, 2008:			
Goodwill Accumulated impairment losses	260,540 (260,540)	148,183 (148,183)	408,723 (408,723)
		´	
Activity during the year			
Goodwill	260,540	148,183	408,723
Accumulated impairment losses	<u>(260,540)</u> \$	$\frac{(148,183)}{\$ -}$	<u>(408,723)</u> \$

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

I. GOODWILL AND INTANGIBLE ASSETS—(Continued)

Intangible Assets

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

		December	31, 2009	
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
		(in thou	sands)	
Developed technology	\$121,055	\$47,746	\$ 73,309	6.1 years
Customer relationships and service and software maintenance contracts	91,271	22,187	69,084	8.6 years
Tradenames and trademarks	14,840	5.041	9,799	11.5 years
Customer backlog	300	300		0.5 years
Total intangible assets	\$227,466	\$75,274	\$152,192	7.6 years

	December 31, 2008			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
		(in thou	sands)	
Developed technology	\$122,393	\$27,889	\$ 94,504	6.1 years
Customer relationships and service and software maintenance contracts	92,279	11,001	81,278	8.6 years
Tradenames and trademarks	15,000	3,784	11,216	11.5 years
	300	300		0.5 years
Customer backlog		÷ 12 07 1	¢196.009	76 10000
Total intangible assets	\$229,972	<u>\$42,974</u>	\$186,998	7.6 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, 2009, 2008 and 2007 was \$32.3 million, \$20.6 million, and \$3.7 million, respectively. Estimated intangible assets amortization expense for each of the five succeeding fiscal years is as follows:

	Amount
Year	(in thousands)
2010	\$29,251
2010	27.821
2011	25,732
2012	a i i c o a
2013	a
2014	21,398

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 long-

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

I. GOODWILL AND INTANGIBLE ASSETS—(Continued)

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. 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.

J. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

As of December 31, 2009, 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 \$131.7 million.

Lease Commitments

Rental expense for the years ended December 31, 2009, 2008 and 2007 was \$22.0 million, \$21.5 million and \$19.8 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)
2010	(in thousands)
	\$19,155
2011	16,317
2012	12,629
2013	7,395
2014	5,171
Beyond 2014	5,672
Total	\$66,339

(1) Minimum payments have not been reduced by minimum sublease income of \$5.8 million due in the future under non-cancelable subleases.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

J. COMMITMENTS AND CONTINGENCIES—(Continued)

Legal Claims

On July 11, 2008, Xyratex Technology, Ltd ("Xyratex") filed a complaint against Teradyne in the United States District Court in Los Angeles, California alleging that certain of Teradyne's disk drive test products infringe one of Xyratex's patents. The suit sought temporary, preliminary and permanent injunctive relief as well as unspecified monetary damages, including treble damages, for patent infringement. Teradyne filed separate complaints in the United States District Court in Los Angeles alleging that Xyratex's disk drive test products infringe two of Teradyne's patents and that Xyratex had engaged in anti-competitive conduct in violation of the federal antitrust laws. Prior to trial, on December 14, 2009, the parties entered into a Settlement Agreement agreeing to settle all of the pending litigation between them. The settlement had no impact on Teradyne's financial condition or results of operations. Although there can be no assurance, Teradyne does not expect the settlement to negatively impact its business.

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

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

In addition, 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

J. COMMITMENTS AND CONTINGENCIES—(Continued)

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, 2009 and 2008, Teradyne had a product warranty accrual of \$7.1 million and \$8.4 million, respectively, included in other accrued liabilities, and revenue deferrals related to extended warranties of \$4.1 million and \$6.4 million, respectively, included in deferred revenue.

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, 2009, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations as of December 31, 2009 because the amount would be immaterial.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

K. NET (LOSS) INCOME PER COMMON SHARE

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

	2009	2008	2007
	(in thousands	, except per sha	re amounts)
(Loss) Income from continuing operations	\$(133,837)	\$(394,995)	\$ 71,883
Income from discontinued operations, net		768	5,828
Net (loss) income for basic net (loss) income per share	(133,837)	(394,227)	77,711
Net (loss) income for diluted net (loss) income per share	\$(133,837)	\$(394,227)	<u>\$ 77,711</u>
Shares used in (loss) income from continuing operations per common			
share—basic	173,604	170,593	184,020
Stock options		—	755
Restricted stock units			520
Employee stock purchase rights			79
Dilutive potential common shares			1,354
Shares used in (loss) income from continuing operations per common share—diluted	173,604	170,593	185,374
Net (loss) income per common share—basic:			
Continuing operations	\$ (0.77)	\$ (2.32)	\$ 0.39
Discontinued operations	0.00	0.00	0.03
	\$ (0.77)	\$ (2.31)	\$ 0.42
Net (loss) income per common share—diluted:			
Continuing operations	\$ (0.77)	\$ (2.32)	\$ 0.39
Discontinued operations	0.00	0.00	0.03
	\$ (0.77)	\$ (2.31)	\$ 0.42

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. 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. The computation of diluted net income per common share for the year ended December 31, 2007 excludes the effect of the potential exercise of options to purchase approximately 13.8 million shares because the effect would have been anti-dilutive.

L. RESTRUCTURING AND OTHER

Restructuring

In response to a downturn in the industry, 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 is reflected in the accrued employees' compensation and withholdings account on the balance sheet and is expected to be paid by the end of the first quarter of 2010. The remaining accrual for lease payments on vacated facilities is reflected in the other accrued liabilities account and the long-term other accrued liabilities account and is expected to be paid over the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

L. RESTRUCTURING AND OTHER—(Continued)

lease terms, the latest of which expires in 2013. Teradyne expects to pay approximately \$3.5 million against the lease accruals over the next twelve months. Teradyne's future lease commitments are net of expected sublease income of \$5.8 million as of December 31, 2009. Teradyne has subleased approximately 54% of its unoccupied space as of December 31, 2009.

	Severance and Benefits	Facility Exit Costs	Total
Pre-2007 Activities:			
Balance as of December 31, 2006	\$ 2,816	\$10,229	\$13,045
Change in estimate	(444)	1,651	1,207
Cash payments	(2,122)	(4,078)	(6,200)
Balance at December 31, 2007	250	7,802	8,052
Change in estimate	(132)	2,676	2,544
Cash payments	(118)	(2,006)	(2,124)
Balance at December 31, 2008	_	8,472	8,472
Cash payments		(2,341)	(2,341)
Balance at December 31, 2009	\$	\$ 6,131	\$ 6,131
Q1 2007Activity:			
Provision	\$ 2,475	\$ —	\$ 2,475
Cash payments	(2,475)	φ	(2,475)
Balance at December 31, 2007	(<u>-,</u>)	¢	
	<u>→</u>	<u>\$ </u>	<u>\$ </u>
Q2 2007Activity:		.	
Provision	\$ 1,697	\$ —	\$ 1,697
Cash payments	(1,697)		(1,697)
Balance at December 31, 2007	<u>\$ </u>	<u>\$ </u>	<u>\$ </u>
Q3 2007Activity:			
Provision	\$ 2,791	\$ —	\$ 2,791
Cash payments	(1,683)		(1,683)
Balance at December 31, 2007	1,108		1,108
Cash payments	(1,026)	_	(1,026)
Balance at December 31, 2008	82		82
Cash payments	(82)	—	(82)
Balance at December 31, 2009	\$	\$	\$
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	\$	\$	\$

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Sovoronco Facility

L. RESTRUCTURING AND OTHER—(Continued)

	Severance and Benefits	Facility Exit Costs	Total
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	<u>\$ </u>	<u>\$ 110</u>	\$ 110
<i>Q4 2008 Activity:</i>			
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>
<i>Q1 2009 Activity:</i>			
Provision	\$ 17,630	\$ —	\$ 17,630
Cash payments	(17,630)		(17,630)
Balance at December 31, 2009	<u>\$ </u>	<u>\$ </u>	<u>\$ </u>
Q2 2009 Activity:			+ . = o . o
Provision	\$ 15,940	\$ —	\$ 15,940
Cash payments	(13,035)		(13,035)
Balance at December 31, 2009	\$ 2,905	<u>\$ </u>	<u>\$ 2,905</u>
Q3 2009 Activity:			
Provision	\$ —	\$ 4,420	\$ 4,420
Cash payments		(285)	
Other		100	100
Balance at December 31, 2009	<u>\$ </u>	\$ 4,235	\$ 4,235
Balance at December 31, 2009	\$ 2,905	\$10,476	<u>\$ 13,381</u>

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 Q208 activity. The restructuring charges (credit) recorded in 2009 consisted of the following activities:

Q1 2009 Activity:

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

L. RESTRUCTURING AND OTHER—(Continued)

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 segment 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 the Semiconductor Test segment 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

L. RESTRUCTURING AND OTHER-(Continued)

Pre-2007 Activity:

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

During the year ended December 31, 2007, Teradyne recorded restructuring charges of \$7.0 million related to 2007 activities, primarily due to the transition of its manufacturing processes, including board assembly, electro-mechanical integration and final configuration and test for the FLEX product to the outsourced provider in China, in an effort to achieve lower material costs, more efficient manufacturing and lower shipping costs. Teradyne also recorded an additional net charge of \$1.2 million for a change in estimates related to Pre-2007 activities. The restructuring charges recorded in 2007 consisted of the following activities:

Q1 2007 Activity:

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

Q2 2007 Activity:

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

Q3 2007 Activity:

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

Pre-2007 Activity:

- \$1.7 million charge in Systems Test Group for a revision in estimated sublease income at a facility in Westford, Massachusetts; and
- \$(0.5) million related to change in the estimated amount of benefits payments related to pre-2007 headcount reduction activities across both segments.

Other

During the year ended December 31, 2009, 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

L. RESTRUCTURING AND OTHER—(Continued)

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.

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

- \$(3.6) million related to the gain on sale of land and a building in Deerfield, Illinois;
- \$(4.3) million related to cash proceeds recovered from insurance related to a facility fire in Taiwan; and
- \$(0.9) million related to gain on sale of product lines.

M. 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 equity and fixed income 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. RETIREMENT PLANS—(Continued)

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:

	2009	2008
	(in tho	usands)
Assets and Obligations		
Change in benefit obligation:		
Projected benefit obligation:		
Beginning of year	\$310,927	\$ 291,387
Service cost	3,993	4,800
Interest cost	18,442	17,320
Actuarial loss	16,533	14,514
Benefits paid	(11,878)	(13,544)
Curtailment gain	(1,897)	(433)
Settlement loss	(4,170)	<u> </u>
Transfers	323	
Non-U.S. currency movement	1,390	(3,117)
End of year	333,663	310,927
Change in plan assets:		
Fair value of plan assets:		
Beginning of year	205,745	284,201
Company contributions	12,417	4,300
Plan participants' contributions	24	23
Actual return on plan assets	36,525	(66,165)
Benefits paid	(11,878)	(13,544)
Settlement cost	(4,170)	_
Non-U.S. currency movement	1,134	(3,070)
End of year	239,797	205,745
Funded status	\$(93,866)	\$(105,182)

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

	2009	2008
	(in tho	usands)
Long-term retirement plans assets	\$ 118	\$
Accrued employees' compensation and withholdings	(2,350)	(2,347)
Long-term retirement plans liabilities	(91,634)	(102,835)
	<u>\$(93,866)</u>	\$(105,182)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. RETIREMENT PLANS—(Continued)

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

	2009	2008
	(in thousands)	
Net actuarial loss	\$134,433	\$141,290
Prior service cost	2,235	3,330
Total recognized in other comprehensive loss before tax	136,668	144,620
Deferred tax asset	(2,747)	(3,925)
Total recognized in other comprehensive loss, net of tax	\$133,921	\$140,695

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 2010 is \$4.5 million, and \$0.8 million, respectively.

The accumulated benefit obligation for all defined benefit pension plans was \$317.5 million and \$293.5 million at December 31, 2009 and 2008, respectively.

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

	2009	2008
	(in mi	llions)
Projected benefit obligation	\$317.9	\$298.1
Accumulated benefit obligation		
Fair value of plan assets	223.9	193.2

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. RETIREMENT PLANS—(Continued)

Expense

For the years ended December 31, 2009, 2008 and 2007, Teradyne's net periodic pension costs were comprised of the following:

	2009	2008 n thousands)	2007
Components of Net Periodic Pension Cost:	(i	n mousanus)	
Service cost	\$ 3,993	\$ 4,800	\$ 5,664
Interest cost	18,442	17,320	16,647
Expected return on plan assets	(19,300)	(20,400)	(19,545)
Amortization of:		(27)	(68)
Net transition asset	799	847	847
Prior service cost	4,000	1,315	3,614
Net actuarial loss	1,616		
Settlement cost	(550)	(433)	
Curtailment gain			\$ 7.159
Total net periodic pension cost	<u>\$ 9,000</u>	\$ 3,422	\$ 7,139
Changes in Plan Assets and Benefit Obligations Recognized in Other			
Comprehensive Income:	(2, 150)	00.912	(12,895)
Net actuarial (gain) loss arising during period	(3,156)	99,812	(12,093)
Reversal of amortization items:		27	68
Net transition asset	(799)	(847)	(847)
Prior service cost	· · ·		• • • •
Net actuarial loss	(4,000)	(1,315)	
Total recognized in other comprehensive income	(7,955)	97,677	(17,288)
Total recognized in net periodic pension cost and other comprehensive income	\$ 1,045	\$101,099	\$(10,129)

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

	United States Plan			Foreign Plans		
	2009	2008	2007	2009	2008	2007
Discount rate	6.2%	6.5%	6.0%	4.9%	4.8%	4.1%
Expected return on plan assets	7.75	7.75	7.75	3.7	4.0	4.0
Salary progression rate	4.0	4.0	4.0	3.4	3.6	3.5

Weighted Average Assumptions to Determine Pension Obligations at December 31

	United States Plan		Foreign Plans	
	2009	2008	2009	2008
Discount rate	5.85% 4.0	6.2% 4.0	4.5% 3.4	4.9% 3.4

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. RETIREMENT PLANS—(Continued)

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 7.75% was an appropriate rate to use for fiscal 2009 for the U.S. Qualified Pension 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, 2009, under the U.S. Qualified Pension Plan, Teradyne had cumulative losses of approximately \$34.7 million, which remain to be recognized in the calculation of the market-related value of assets. The discount rate utilized for determining future pension obligations for the U.S. Qualified Pension Plan is based on Citigroup Pension Index adjusted for the plan's expected cash flows and was 5.85% at December 31, 2009, down from 6.2% at December 31, 2008.

Plan Assets

As of December 31, 2009, the fair value of Teradyne's pension plans' assets totaled \$239.8 million of which \$217.1 million was related to the U.S. Qualified Pension Plan ("Plan"), \$15.9 million was related to the U.K. Defined Benefit Pension Plan, \$5.6 million was related to the Japan Defined Benefit Pension Plan and \$1.2 million was related to other foreign defined benefit pension plans. Teradyne's pension plans' assets consisted primarily of investments in equity and fixed-income 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, 2009 and 2008, by asset category is as follows:

	United States Plan		Foreign	Plans
	2009	2008	2009	2008
Equity Securities Fixed Income Securities Other	42.6	52.0	20.2	38.9
Total	11.4	<u>11.4</u> 100.0%	7.0 100.0%	6.0 100.0%

The assets of the U.S. Qualified Pension Plan ("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 Plan assets. In accordance with its responsibilities, the Fiduciary Committee meets on a regular basis to review the performance of the Plan assets and compliance with the investment policy. The policy sets forth an investment structure for managing 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

M. RETIREMENT PLANS—(Continued)

return over the long term, and preservation of capital, while maintaining sufficient liquidity to pay the benefits of the 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 achieve a rate of return, which exceeds the rate of inflation, as measured by the Consumer Price Index, by 3% per year, and to avoid excessive volatility and produce a rate of return that at least matches the Policy Index identified above. 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 and index for each asset category for the U.S. Qualified Pension Plan, per the investment policy, for the portfolio is as follows:

Asset Category:	Policy Index:	Target
Equity (Large cap)	S&P 500 Stock Index	22%
Equity (Small cap)		10
International Equity	MSCI EAFE Index (Net Dividends) and MSCI Emerging	
	Markets Free Index	15
Passive Fixed Income	Barclays Capital Long Government Credit Index	33
High-Yield Fixed Income	Barclays Capital High Yield Index	10
Real Assets	Real Asset Custom Index	10

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 equity, 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 \$22.7 million as of December 31, 2009. There were no investments with significant unobservable inputs (Level 3) in the non-U.S. pension plans.

Teradyne's U.S. Qualified Pension 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(Continued)

M. RETIREMENT PLANS—(Continued)

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

	As of December 31, 2009			
	Level 1	Level 2	Level 3	Total
		(in the	ousands)	
Fixed income securities:				
Corporate bonds	\$—	\$ 19,568	\$40,195	\$ 59,763
High-yield fixed income		21,354		21,354
U.S. and U.K. government bonds		19,086		19,086
U.S. equity (large cap)		47,034		47,034
International equity		25,097	19,415	44,512
Real assets		21,808		21,808
U.S. equity (small cap)		4,965	15,905	20,870
Other debt securities		4,513		4,513
Cash and cash equivalents		857		857
Total	<u>\$</u>	\$164,282	\$75,515	\$239,797

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

	Level 3 Pension Plans' Assets			
		(in thousands)		
	Fixed income – corporate bonds	U.S. equity (small cap)	International equity	Total
Balance at December 31, 2008	\$ 58,170	\$18,922	\$21,087	\$ 98,179
Realized gains (losses)	1,974	(371)	658	2,261
Change in unrealized (losses) gains	(1,978)	3,725	3,808	5,555
Sales and purchases, net	(17,971)	(6,371)	(6,138)	(30,480)
Balance at December 31, 2009	\$ 40,195	\$15,905	\$19,415	\$ 75,515

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 2009, 2008 and 2007, Teradyne contributed \$12.4 million, which included a \$7.5 million discretionary contribution to the U.S. Qualified Pension Plan, \$4.3 million and \$4.8 million, respectively, to the plans. On February 18, 2010, Teradyne made a voluntary contribution of \$5.0 million to the U.S. Qualified Pension Plan. Contributions in 2010 to certain Qualified Plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$3.3 million. Contributions in 2010 to the U.S. Supplemental Executive Defined Benefit Pension Plan will be approximately \$1.5 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

M. RETIREMENT PLANS—(Continued)

Expected Future Pension Benefits Payments

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

	United States	
	(in thous	ands)
2010	\$12,923	\$ 1,677
2011	13,419	1,724
2012	14,486	2,515
2013	15,423	1,861
2014	16,746	2,280
2015-2019	95,101	15,134

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 (including executive officers) 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:

	2009	2008
	(in thousands)	
Assets and Obligations		
Change in benefit obligation:		
Projected benefit obligation:		
Beginning of year	\$ 19,640	\$ 21,288
Service cost	109	167
Interest cost	1,093	1,227
Actuarial loss (gain)	731	(184)
Benefits paid	(2,874)	(2,858)
End of year	18,699	19,640
Change in plan assets:		
Fair value of plan assets:		
Beginning of year	—	
Company contributions	2,874	2,858
Benefits paid	(2,874)	(2,858)
End of year		
Funded status	<u>\$(18,699)</u>	\$(19,640)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

M. RETIREMENT PLANS—(Continued)

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

	2009	2008
	(in thou	isands)
Accrued employees' compensation and withholdings	\$ (2,730)	\$ (2,790)
Long-term retirement plans liability	(15,969)	(16,850)
	<u>\$(18,699</u>)	\$(19,640)

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

	2009	2008
	(in thou	sands)
Net actuarial loss	\$ 4,460	\$ 3,957
Prior service credit	(1,761)	(1,995)
Total recognized in other comprehensive loss	\$ 2,699	\$ 1,962

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 2010 is \$0.2 million and \$(0.2) million, respectively.

Expense

For the years ended December 31, 2009, 2008 and 2007, Teradyne's net periodic postretirement benefit costs were comprised of the following:

	2009	2008	2007
	(in thousands)		
Components of Net Periodic Postretirement Benefit Cost:			
Service cost	\$ 109	\$ 167	\$ 254
Interest cost	1,092	1,227	1,315
Amortization of:			
Prior service credit	(234)	(234)	(234)
Net actuarial loss	228	140	285
Total net periodic postretirement benefit cost	1,195	1,300	\$ 1,620
Changes in Plan Assets and Benefit Obligations Recognized in Other			
Comprehensive Income:			
Net actuarial loss (gain) arising during period	731	(184)	(1,385)
Reversal of amortization items:			
Prior service credit	234	234	234
Net actuarial loss	(228)	(140)	(285)
Total recognized in other comprehensive income	737	(90)	(1,436)
Total recognized in net periodic postretirement benefit cost and other			
comprehensive income	\$1,932	\$1,210	<u>\$ 184</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

M. RETIREMENT PLANS—(Continued)

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

	2009	2008	2007
Discount rate	6.1%	6.5%	6.0%
Initial Health Care Cost Trend Rate	8.9	9.0	10.0
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	2014

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

	2009	2008	2007
Discount rate	5.1%	6.1%	6.5%
Initial Medical Trend	8.5	8.9	9.0
Ultimate Health Care Trend	5.0	5.0	5.0
Medical cost trend rate decrease to ultimate rate in year	2018	2018	2014

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, 2009, would have the following effects:

	1 Percentage Point Increase	1 Percentage Point Decrease
	(in tho	usands)
Effect on total service and interest cost components	\$ 26	\$ (24)
Effect on postretirement benefit obligations	\$651	\$(626)

Expected Future Benefits Payments

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

	Benefits
	(in thousands)
2010	2,730
2011	2,510
2012	2,200
2013	2,050
2014	1,840
2015-2019	6,950

N. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. STOCK BASED COMPENSATION—(Continued)

Restricted stock unit awards granted to employees (excluding executive officers) 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. Restricted stock unit awards granted to executive officers in 2009, 2008 and 2007 vest over four years. A portion of these restricted stock unit 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 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.

	2009	2008	2007
	(in)	
Restricted Stock Units:			
Non-vested at January 1	5,147	2,199	1,128
Awarded	4,074	3,453	2,101
Assumed from acquisitions	—	1,092	
Vested	(1,381)	(1,213)	(809)
Forfeited	(944)	(384)	(221)
Non-vested at December 31	6,896	5,147	2,199
Stock Options:			
Outstanding at January 1	16,791	17,142	19,011
Granted	1,071		
Assumed from acquisitions		6,920	
Exercised	(1,848)	(1,725)	(691)
Forfeited	(17)	(25)	(54)
Cancelled	(4,759)	(5,521)	(1,124)
Outstanding at December 31	11,238	16,791	17,142
Vested and expected to vest at December 31	11,234	16,776	17,139
Exercisable at December 31	9,865	16,067	17,069

Stock compensation plan activity for the years 2009, 2008 and 2007 follows:

Total shares available for the years 2009, 2008 and 2007:

	2009	2008	2007
	(in thousands)		
Shares available:			
Available for grant at January 1	6,875	9,980	11,901
Option granted	(1,071)		
Restricted stock units granted	(4,074)	(3,453)	(2,101)
Restricted stock units forfeited	923	348	180
Additional shares reserved	10,000		
Available for grant at December 31	12,653	6,875	9,980

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. STOCK BASED COMPENSATION—(Continued)

Weighted-average restricted stock unit award date fair value information for the years 2009, 2008 and 2007 follows:

	2009	2008	2007
	(i	n thousand	s)
Non-vested at January 1	\$10.55	\$15.47	\$16.00
Awarded	4.93	9.39	15.18
Assumed from acquisition	_	10.18	
Vested	10.87	10.72	15.49
Forfeited	8.02	11.93	15.36
Non-vested at December 31	\$ 7.31	\$10.55	\$15.47

Restricted stock unit awards aggregate intrinsic value information at December 31 for the years 2009, 2008 and 2007 follows:

	2009	2008	2007
	(in thousands)
Outstanding	\$73,990	\$21,719	\$23,541
Expected to vest	\$67,476	\$19,558	\$20,844

Restricted stock units weighted average contractual terms (in years) information at December 31, for the years 2009, 2008 and 2007 follows:

	2009	2008	2007
Outstanding	1.31	2.79	3.01
Expected to vest	1.30	2.78	3.00

Weighted average stock options exercise price information for the years 2009, 2008 and 2007 follows:

	2009	2008	2007
Outstanding at January 1	\$14.66	\$20.78	\$20.66
Options granted	4.92	_	_
Assumed from acquisition	_	3.21	_
Options exercised	3.52	2.74	12.79
Options forfeited	5.35	9.91	12.73
Options canceled	18.73	22.91	24.08
Outstanding at December 31	13.87	14.66	20.78
Exercisable at December 31	15.10	15.09	20.81

Stock option aggregate intrinsic value information for the years ended December 31, 2009, 2008 and 2007 follows:

	2009	2008	200	7
	· ·	n thousands)		
Exercised	\$ 5,126	\$10,829	\$2,10	04
Outstanding	\$30,533	\$ 5,506	\$	6
Vested and expected to vest				
Exercisable	\$22,726	\$ 5,122	\$	6

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

N. STOCK BASED COMPENSATION—(Continued)

Stock options weighted average contractual terms (in years) information at December 31, for the years 2009, 2008 and 2007 follows:

	2009	2008	<u>2007</u>	
Outstanding	2.9	3.1	1.9	
Vested and Expected to vest				
Exercisable	2.4	2.9	1.9	

Significant option groups outstanding at December 31, 2009 and related weighted average price and remaining contractual life information follow:

	Options	Outstandi	ng	Optio	ns Exercisable
Range Of Exercise Prices	Weighted- Average Remaining Contractual Life (Years)	Shares	Weighted- Average Exercise Price	Shares	Weighted- Average Exercise Price
		(optio	ons in thousands)		
\$ 0.01 - \$4.61	5.40	2,179	\$ 2.50	2,124	\$ 2.46
\$ 4.64 - \$11.35	6.30	2,337	5.34	1,020	5.67
\$11.66 - \$25.24	0.61	3,282	13.34	3,281	13.34
\$26.66 - \$56.26	1.07	3,440	27.38	3,440	27.38
Total		11,238	\$13.87	9,865	\$15.10

As of December 31, 2009, total unrecognized expense related to non-vested restricted stock unit awards and stock options totaled \$38.8 million, and is expected to be recognized over a weighted average period of 1.8 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 2009, 1.2 million shares of common stock were issued to employees who participated in the plan during the first half of 2009, at the price of \$3.97 per share. In January 2010, Teradyne issued 0.8 million shares of common stock to employees who participated in the plan during the second half of 2009, at the price of \$5.98 per share.

O. 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 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. There was no match for employees still actively accruing benefits in the U.S. Qualified Pension Plan. In 2008 and 2007, 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

O. SAVINGS PLAN—(Continued)

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 \$1.7 million in 2009, \$7.5 million in 2008 and \$6.2 million in 2007.

P. RELATED PARTY TRANSACTION

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

Q. INCOME TAXES

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

(Loss) income from continuing operations before income taxes: U.S. \$ (18,910) \$ (417,403) \$ 208,509 Non-U.S. $(123,727)$ $34,985$ $(129,266)$ \$ (142,637) \$ (382,418) \$ 79,243 (Benefit) provision for income taxes from continuing operations: $(123,727)$ $34,985$ $(129,266)$ $(122,637)$ \$ (382,418) \$ 79,243 (Benefit) provision for income taxes from continuing operations: $Current:$ $U.S.$ Federal \$ (6,612) \$ (1,574) \$ (2,513) Non-U.S. 1,852 9,246 11,180 State 716 (109) (557) $(4,044)$ 7,563 8,110 Deferred: $ -$ Non-U.S. $(4,756)$ $5,014$ (750) State $ (4,756)$ $5,014$ (750)		2009	2008	2007
U.S. \$ (18,910) \$ (417,403) \$ 208,509 Non-U.S. $(123,727)$ $34,985$ $(129,266)$ \$ (142,637) \$ (382,418) \$ 79,243 (Benefit) provision for income taxes from continuing operations: $(123,727)$ $34,985$ $(129,266)$ (Benefit) provision for income taxes from continuing operations: $(142,637)$ \$ (382,418) \$ 79,243 (Benefit) Non-U.S. State (1574) \$ (2,513) Non-U.S. $1,852$ $9,246$ $11,180$ State 716 (109) (557) $(4,044)$ $7,563$ $8,110$ Deferred: $(4,756)$ $5,014$ (750) State $ -$ Non-U.S. $(4,756)$ $5,014$ (750)			(in thousands)	
Non-U.S. $(123,727)$ $34,985$ $(129,266)$ $\$(142,637)$ $\$(382,418)$ $\$$ $79,243$ (Benefit) provision for income taxes from continuing operations: $(123,727)$ $\$(382,418)$ $\$$ $79,243$ (Benefit) provision for income taxes from continuing operations: $(142,637)$ $\$(382,418)$ $\$$ $79,243$ (Benefit) provision for income taxes from continuing operations: $(123,727)$ $\$(382,418)$ $\$$ $79,243$ (Benefit) provision for income taxes from continuing operations: $(129,266)$ $\$(142,637)$ $\$(382,418)$ $\$$ $79,243$ (Benefit) provision for income taxes from continuing operations: $\$(142,637)$ $\$(1574)$ $\$(2,513)$ Non-U.S. $1,852$ $9,246$ $11,180$ 1852 $9,246$ $11,180$ State 716 (109) (557) $(4,044)$ $7,563$ $\$,110$ Deferred: $ -$ Non-U.S. $(4,756)$ $5,014$ (750) $ -$ State $ -$	(Loss) income from continuing operations before income taxes:			
(Benefit) provision for income taxes from continuing operations: $$$(142,637)$ $$(382,418)$ $$79,243 (Benefit) provision for income taxes from continuing operations: $$(142,637)$ $$(382,418)$ $$79,243 (Benefit) provision for income taxes from continuing operations: $$(6,612) $$(1,574) $$(2,513) Non-U.S. 1,852 9,246 11,180 State 716 (109) (557) (4,044) 7,563 8,110 Deferred: Non-U.S. (4,756) 5,014 (750) State $	U.S	\$ (18,910)	\$(417,403)	\$ 208,509
(Benefit) provision for income taxes from continuing operations: Current: U.S. Federal Non-U.S. State U.S. Federal Mon-U.S. Provision for income taxes from continuing operations: 0.5. Federal 1,852 9,246 11,180 State 1,852 9,246 11,180 (4,044) 7,563 8,110 Deferred: U.S. Federal Non-U.S. State Output 1,852 9,246 11,180 (4,044) 7,563 8,110 Deferred: U.S. Federal 0,01,01,01,01,01,01,01,01,01,01,01,01,01	Non-U.S	(123,727)	34,985	(129,266)
Current: U.S. Federal \$ (6,612) \$ (1,574) \$ (2,513) Non-U.S. 1,852 9,246 11,180 State 716 (109) (557) $(4,044)$ 7,563 8,110 Deferred: (4,756) 5,014 (750) State - -		\$(142,637)	\$(382,418)	\$ 79,243
U.S. Federal \$ (6,612) \$ (1,574) \$ (2,513) Non-U.S. 1,852 9,246 11,180 State 716 (109) (557) $(4,044)$ 7,563 8,110 Deferred: (4,756) 5,014 (750) State Non-U.S. (4,756) 5,014 (750)	(Benefit) provision for income taxes from continuing operations:			
Non-U.S. $1,852$ $9,246$ $11,180$ State 716 (109) (557) $(4,044)$ $7,563$ $8,110$ Deferred: $ -$ Non-U.S. $(4,756)$ $5,014$ (750) State $ -$	Current:			
State 716 (109) (557) $(4,044)$ $7,563$ $8,110$ Deferred: $ -$ Non-U.S. $(4,756)$ $5,014$ (750) State $ -$	U.S. Federal	\$ (6,612)	\$ (1,574)	\$ (2,513)
Deferred: (4,044) 7,563 8,110 Non-U.S. (4,756) 5,014 (750) State — — —	Non-U.S	1,852	9,246	11,180
Deferred:	State	716	(109)	(557)
U.S. Federal		(4,044)	7,563	8,110
Non-U.S. (4,756) 5,014 (750) State	Deferred:			
Non-U.S. (4,756) 5,014 (750) State	U.S. Federal			_
State		(4,756)	5,014	(750)
(4.756) 5.014 (750)				—
(4,750) 5,014 (750)		(4,756)	5,014	(750)
Total (benefit) provision for income taxes from continuing operations: $\overline{\$ (8,800)}$ $\overline{\$ 12,577}$ $\overline{\$ 7,360}$	Total (benefit) provision for income taxes from continuing operations:	\$ (8,800)	\$ 12,577	\$ 7,360

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

Q. INCOME TAXES—(Continued)

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. For the year ended December 31, 2007, income tax expense from continuing operations totaled \$12.6 million, primarily related to tax provisions for foreign taxes. For the year ended December 31, 2007, income tax expense from continuing operations totaled \$12.6 million, primarily related to tax provisions for foreign taxes. For the year ended December 31, 2007, income tax expense from continuing operations totaled \$12.6 million, primarily related to tax provisions for foreign taxes.

The total income tax (benefit) provision for the years ended December 31, 2009, 2008 and 2007 was as follows:

	2009	2008	2007
	(ii	n thousands))
Continuing operations	\$(8,800)	\$12,577	\$7,360
Discontinued operations			518
Total income tax (benefit) provision	\$(8,800)	\$12,577	\$7,878

Significant components of Teradyne's deferred tax assets (liabilities) as of December 31, 2009 and 2008 were as follows:

	2009	2008
	(in thou	sands)
Deferred tax assets:		
Net operating and capital loss carryforwards	\$ 135,413	\$ 77,629
Tax credits	82,525	79,320
Inventory valuations	45,979	40,864
Pension liability	35,617	40,636
Research and development	33,344	46,105
Accruals	18,920	14,989
Equity compensation	10,601	4,044
Vacation accrual	5,639	6,177
Other	2,638	
Deferred revenue	1,670	3,161
Amortization	1,108	1,220
Securities impairment	254	4,386
Intercompany license payments		57,000
Gross deferred tax assets	373,708	375,531
Less: valuation allowance	(301,051)	(290,137)
Total deferred tax assets	72,657	85,394
Deferred tax liabilities:		
Intangible assets	(57,832)	(71,058)
Excess of tax over book depreciation	(3,922)	(3,010)
Other		(3,068)
Total deferred tax liabilities	(61,754)	(77,136)
Net deferred assets	\$ 10,903	\$ 8,258

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Q. INCOME TAXES—(Continued)

At December 31, 2009 Teradyne had operating loss carryforwards that expire in the following years:

	U.S. Federal Operating Loss Carryforwards	ting Loss Operating Loss Operating L	
		(in thousands)	
2010	\$ 511	\$ 176	\$ —
2011		59	—
2012		144	
2013	_	644	
2014		440	—
2015-2020	50,982	2,717	
2021-2023	112,366	3,587	
Beyond 2023	142,724	4,930	343
Non-expiring			280,428
Total	\$306,583	\$12,697	\$280,771

Of the U.S. Federal operating loss carryforwards, \$51.5 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 \$65.5 million of loss relating to stock compensation.

Teradyne has approximately \$82.5 million of tax credit carry forwards. Business tax credits of approximately \$22.7 million expire in the years 2019 through 2029. Teradyne has foreign tax credits of approximately \$25.7 million expiring in the years 2013 through 2019 and alternative minimum tax credits of approximately \$6.6 million, which do not expire. In addition, there are state tax credits of \$27.4 million which begin to expire in 2010.

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. During 2008, Teradyne's valuation allowance decreased by \$15.0 million due to the increase of the deferred tax liability related to the purchased intangible assets of \$71.0 million net of the increase of deferred tax assets of \$56 million. The increase of deferred tax assets was due to the \$86 million growth in tax credits, net operating losses and pension, partially offset by a \$30 million reduction in inventory and research and development.

Due to the continued uncertainty of realization, Teradyne maintained its valuation allowance at December 31, 2009 and 2008, for deferred tax assets in the U.S. and Singapore. Teradyne does not expect to significantly reduce its valuation allowance until sufficient positive evidence exists, including sustained profitability, that realization is more likely than not. The valuation allowance includes \$49.8 million for net deferred tax assets resulting from the funded status recognition provision of ASC 715, "Compensation – Retirement Benefits."

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS-(Continued)

Q. INCOME TAXES—(Continued)

A reconciliation of the effective tax rate for the years 2009, 2008 and 2007 follows:

	2009	2008	2007
U.S. statutory federal tax rate	35.0%	35.0%	35.0%
State income taxes, net of federal tax benefit	(0.4)		(0.7)
Foreign taxes	(25.9)	0.2	60.6
Federal income tax audit			0.4
Valuation allowance	(5.9)	(7.0)	(75.4)
Goodwill impairment		(30.2)	_
Current year tax credits	0.8		(9.9)
Prior year refund claims	1.6	_	_
Other U.S. permanent items	0.3	(1.1)	2.8
Other, net	0.7	(0.2)	(3.5)
	6.2%) 9.3%

Teradyne adopted ASC 740, "*Income Taxes*", with respect to uncertain tax positions, effective January 1, 2007. ASC 740 applies to all income tax positions and addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. ASC 740 also addressed other aspects of reporting and disclosing uncertain tax positions. Upon adoption of ASC 740, there was no cumulative effect to retained earnings. It is anticipated that within the next twelve months unrecognized tax benefits may decrease by \$2.8 million due to state audit settlements. As of December 31, 2009, Teradyne has open tax years beginning in 2003 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, 2009 was not material.

Teradyne's unrecognized tax benefits for the years ended December 31, 2009, 2008 and 2007 were as follows (in thousands):

	2009	2008	2007
Beginning balance, as of January 1	\$13,918	\$ 9,780	\$10,584
Additions:			
Tax positions for current year	_	601	3,489
Tax positions for prior years		6,057	6,400
Reductions:			
Tax positions for prior years	(1,547)	(2,520)	(6,351)
Settlements with tax authorities			(4,342)
Ending Balance as of December 31	\$12,767	\$13,918	\$ 9,780

Current year and prior year additions include assessment of potential transfer pricing issues worldwide and state income taxes. Reductions for tax positions for prior years relate to changes in estimates regarding limitation of foreign tax credits, acquired net operating losses, and statute expirations. Of the \$12.8 million of unrecognized tax benefits as of December 31, 2009, \$10.3 million would impact the consolidated income tax rate if ultimately recognized.

As of December 31, 2009, a deferred tax liability has not been established for approximately \$196.4 million of cumulative undistributed earnings of non-U.S. subsidiaries, as Teradyne plans to keep these amounts

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Q. INCOME TAXES—(Continued)

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 2019.

R. 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, circuitboard 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". Due to the sale on August 1, 2007 of Broadband Test Division, its results have been excluded from segment reporting and included in discontinued operations for all periods presented. Previously, Broadband Test Division and Diagnostic Solutions had been combined to form the Other Test Systems segment. Diagnostic Solutions and Assembly Test are now components of the Systems Test Group segment. Segment information for the years ending December 31, 2009, 2008 and 2007 is as follows (in thousands):

	Semiconductor Test	Systems Test Group	Corporate And Eliminations	Consolidated
2009	* * * * * * *	#0(7.00F	¢	\$ 819,407
Net revenue	\$ 552,402	\$267,005	\$ —	\$ 819,407
(Loss) income from continuing operations before taxes (1)(2)	(129,132)	11,638	(25,143)	(142,637)
Total assets (3)	602,841	99,125	533,371	1,235,337 41,932
Property additions (4)	38,502	3,086	344	41,952
Depreciation and intangible amortization expense (4)	82,434	5,926	17,721	106,081
2008	+ 000 0 00	#006 7 50	¢	¢1 107 042
Net revenue	\$ 900,292	\$206,750	\$	\$1,107,042
(Loss) income from continuing operations before taxes (1)(2)	(291,824)	(83,641)	(6,953)	(382,418)
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
2007	A 084 514	¢225.7((¢	\$1,102,280
Net revenue	\$ 876,514	\$225,766	\$ —	\$1,102,200
Income from continuing operations before taxes (1)(2)	25,093	12,042	42,108	79,243
Total assets (3)	540,939	219,724	794,625	1,555,288
Property additions (4)	75,236	7,850	3,002	86,088
Depreciation and intangible amortization expense (4)		7,655	5,760	67,495

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

R. OPERATING SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION—(Continued)

- (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 31			
	2009	2008	2007	
		(in thousands)		
Cost of revenues—inventory charge (1)	\$20,317	\$24,923	\$ 492	
Cost of revenues—inventory step-up (2)	15,413	5,046		
Restructuring and other, net	29,512	50,356	(382)	
Total	\$65,242	\$80,325	<u>\$ 110</u>	

(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 cost for purchase accounting inventory step-up.

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

	For the Y	ear Ended De	ember 31,
	2009	2008	2007
		(in thousands)
Cost of revenues—inventory charge	\$ 7,664	\$ 4,440	\$1,343
Restructuring and other, net			2,723
Total	\$11,404	\$14,196	\$4,066

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

	For the Y	ear Ended De	cember 31,
	2009	2008	2007
		(in thousands)
Restructuring and other, net charge	\$ 3,242	\$ 2,663	\$(3,000)
Other income and expense, net	11,810	17,092	(1,832)
Total	\$15,052	\$19,755	\$(4,832)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

R. OPERATING SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION— (Continued)

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

	2009	2008	2007
Devenue to unoffiliated austomore (1)		(in thousands)
Revenue to unaffiliated customers (1):			
United States	\$210,019	\$ 236,636	\$ 254,379
Taiwan	111,895	198,508	145,757
Malaysia	91,526	62,114	76,065
South East Asia	89,613	114,223	85,933
Europe	80,116	112,253	129,533
Thailand	73,455	34,083	10,478
Singapore	67,211	114,301	163,110
Japan	45,974	119,876	131,204
Korea	40,361	81,441	70,612
Rest of the World	9,237	33,607	35,209
	\$819,407	\$1,107,042	\$1,102,280

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

For the year ended December 31, 2009 one Systems Test Group customer accounted for approximately 12% of total consolidated revenue. In 2008 and 2007, no customer accounted for more than 10% of total consolidated revenue.

Long-lived assets by geographic area:

	United States	Foreign Countries	Total
		in thousands	,
December 31, 2009	\$197,741	\$48,621	\$246,362
December 31, 2008	243,807	54,642	298,449

S. 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, 2009 and 2008 totaled 8.5 million shares of common stock for \$102.6 million at an average price of \$12.14 per share. As of November 4, 2008, the Board suspended the stock repurchase program.

T. SUBSEQUENT EVENTS

Teradyne management evaluated the activity of Teradyne through March 1, 2010 (the issue date of the financial statements) and concluded that no subsequent events have occurred that would require recognition in the financial statements or disclosure in the notes to the financial statements.

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.

	2009			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1)	(2)	(3)	(4)
	(in th	ousands, excep	t per share amo	unts)
Net Revenue:	¢ 61725	\$115,148	\$205,304	\$210,117
Products	\$ 64,735 55,873	54,432	\$205,504 56,858	56,940
Services				
Total net revenue	120,608	169,580	262,162	267,057
Cost of revenue:	56.160	92,635	125,116	112,896
Cost of products	31,088	29,816	30,291	29,772
		122,451	155,407	142.668
Total cost of revenue	87,248	<u>_</u>		
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 68
Restructuring and other, net	15,965	15,270	5,189	
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 sharebasic	\$ (0.53)	\$ (0.39)	\$ 0.04	\$ 0.10
Net (loss) income per common sharediluted	\$ (0.53)	\$ (0.39)	\$ 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.

	2008			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	(1) (in th	(2) Iousands, excep	(3) t por chore em/	(4)
Net Revenue:	(III LI	iousanus, excep	t per share and	Junts)
Products	\$232,991	\$248,779	\$228,854	\$ 125,421
Services	64,324	68,926	68,401	69,346
Total net revenue	297,315	317,705	297,255	194,767
Cost of revenue:				
Cost of products	118,307	124,925	130,105	77,889
Cost of services	40,505	38,932	39,220	38,967
Total cost of revenue	158,812	163,857	169,325	116,856
Gross profit	138,503	153,848	127,930	77,911
Operating expenses:				
Engineering and development	55,149	56,154	52,969	52,189
Selling and administrative	65,221	65,463	58,614	58,491
Acquired intangible assets amortization	3,863 1,100	4,774	5,034	6,962 500
Goodwill impairment	1,100			329,674
Restructuring and other, net	11,785	12,726	28,589	9,675
Total operating expenses	137,118	139,117	145,206	457,491
Income (loss) from operations	1,385	14,731	(17,276)	(379,580)
Interest income	4,612	2,932	2,740	2,274
Interest expense and other	470	(484)	(5,851)	(8,370)
Income (loss) from continuing operations before taxes	6,467	17,179	(20,387)	(385,676)
Provision (benefit) for income taxes	4,100	6,100	3,070	(693)
Income (loss) from continuing operations	2,367	11,079	(23,457)	(384,983)
Income from discontinued operations			768	
Net income (loss)	\$ 2,367	\$ 11,079	\$(22,689)	\$(384,983)
Income (loss) from continuing operations per common				
share—basic	<u>\$ 0.01</u>	\$ 0.06	\$ (0.14)	\$ (2.28)
Income (loss) from continuing operations per common	¢ 0.01	¢ 0.07	¢ (0.14)	¢ (0.00)
share—diluted	\$ 0.01	\$ 0.06	<u>\$ (0.14)</u>	<u>\$ (2.28)</u>
Net income (loss) per common share—basic	\$ 0.01	<u>\$ 0.06</u>	<u>\$ (0.13)</u>	<u>\$ (2.28)</u>
Net income (loss) per common sharediluted	\$ 0.01	\$ 0.06	<u>\$ (0.13)</u>	\$ (2.28)

 Restructuring and other, net includes \$7.4 million of severance charges related to headcount reductions across all segments, \$4.5 million of facility charges related to accelerated depreciation of a manufacturing facility in North Reading, Massachusetts, and \$0.2 million of facility charges related to an early exit of a leased facility in Bracknell, United Kingdom.

- (2) Restructuring and other, net includes: \$5.5 million of severance charges related to headcount reductions across all segments, \$4.5 million of facility charges related to accelerated depreciation of a manufacturing facility in North Reading, Massachusetts, \$2.7 million facility related charge in our Systems Test Group segment for changes in estimated amount and timing of sublease income on a facility in Westford, Massachusetts, \$1.7 million gain on the sale of real estate in our Semiconductor Test segment for a facility in Agoura Hills, California, \$0.7 million of facility charges in our Semiconductor Test segment for a long-lived asset impairment related to acquired intangible assets, and \$0.2 million of facility charges related to the early exit of a leased facility in Bracknell, UK.
- (3) Restructuring and other, net includes \$22.6 million loss on the sale of real estate across both segments for a manufacturing facility in North Reading, Massachusetts, \$2.6 million of severance charges related to headcount reductions across all segments, \$3.0 million of facility charges related to accelerated depreciation of a manufacturing facility in North Reading, Massachusetts, and \$0.3 million of facility charges related to an early exit of a leased facility in Bracknell, UK.

(4) Restructuring and other, net includes \$8.9 million of severance charges related to headcount reductions across all segments, and \$0.8 million charge for acquisition financing costs.

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, 2009 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, 2009.

The effectiveness of our internal control over financial reporting as of December 31, 2009 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 28, 2010. 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 28, 2010. 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 28, 2010. 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 28, 2010. 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 28, 2010. 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:

Report of Independent Registered Public Accounting Firm	46
Balance Sheets as of December 31, 2009 and 2008	47
Statements of Shareholders' Equity and Comprehensive Income for the years ended December 31, 2009, 2008 and 2007	48
2008 and 2007	49
Statements of Cash Flows for the years ended December 31, 2009, 2008 and 2007	50

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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

001111					
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 thou	Other Isands)	Deductions	Balance at End of Period
 Valuation reserve deducted in the balance sheet from the asset to which it applies: Accounts receivable: 2009 Allowance for doubtful accounts 2008 Allowance for doubtful accounts 2007 Allowance for doubtful accounts 	\$ 4,712 \$ 4,493 \$ 4,964	\$ \$_52 \$	\$	\$ 942 \$ 364 \$ 471	\$ 3,770 \$ 4,712 \$ 4,493
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: 2009 Inventory reserve	\$127,795 \$105,620	\$27,981 \$29,363	<u>\$ </u>	\$26,108 \$15,050	\$129,668 \$127,795
2007 Inventory reserve	\$138,427	\$ 1,835	<u>\$ </u>	\$34,642	\$105,620

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.

Exhibit No.	Description	SEC Document Reference
3.1	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.
3.2	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.
4.1	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.
4.2	Form of Note.	Included in Exhibit 4.1 to Teradyne's Current Report on Form 8-K filed April 6, 2009.
10.1†	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.
10.2†	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.
10.3†	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.
10.4	Fifth Amendment to Standard Manufacturing Agreement, dated as of July 17, 2009, by and between Teradyne and Flextronics Corporation.	Filed herewith.
10.5††	Sixth Amendment to Standard Manufacturing Agreement, dated as of July 27, 2009, by and between Teradyne and Flextronics Corporation.	Filed herewith.
10.6	2006 Equity and Cash Compensation Incentive Plan, as amended.*	Filed herewith.
10.7	Form of Amended Performance-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.1 to Teradyne's Current Report on Form 8-K filed May 27, 2008.
10.8	Form of Performance-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.5 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

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Exhibit No.	Description	SEC Document Reference
10.9	Form of Time-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.15 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.
10.10	Form of Restricted Stock Unit Agreement for Directors under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.1 to Teradyne's Current Report on Form 8-K filed October 4, 2006.
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 10.24 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 and 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.*	Filed herewith.
10.18	1991 Employee Stock Option Plan, as amended.*	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q 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.

Exhibit No.	Description	SEC Document Reference
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.
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	Form of Executive Officer Stock Option Agreement under 2006 Equity and Cash Compensation Incentive Plan, as amended.*	Exhibit 99.4 to Teradyne's Current Report on Form 8-K filed January 29, 2009.
10.33	Form of Indemnification Agreement.*	Exhibit 10.24 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.
10.34	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.
10.35	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.
10.36	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.

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Description	SEC Document Reference
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.
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 file April 6, 2009.
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 file April 6, 2009.
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 file April 6, 2009.
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.
Subsidiaries of Teradyne.	Filed herewith.
Consent of PricewaterhouseCoopers LLP.	Filed herewith.
Rule 13a-14(a) Certification of Principal Executive Officer.	Filed herewith.
Rule 13a-14(a) Certification of Principal Financial Officer.	Filed herewith.
Section 1350 Certification of Principal Executive Officer.	Furnished herewith.
Section 1350 Certification of Principal Financial Officer.	Furnished herewith.

++ - Confidential treatment requested.
* - Management contract or compensatory plan.

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, 2010.

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/ PATRICIA S. WOLPERT Patricia S. Wolpert	Chair of the Board	March 1, 2010
/s/ MICHAEL A. BRADLEY Michael A. Bradley	President and Chief Executive Officer (Principal Executive Officer)	March 1, 2010
/s/ GREGORY R. BEECHER Gregory R. Beecher	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March 1, 2010
/S/ JAMES W. BAGLEY James W. Bagley	Director	March 1, 2010
/s/ ALBERT CARNESALE Albert Carnesale	Director	March 1, 2010
/s/ EDWIN J. GILLIS Edwin J. Gillis	Director	March 1, 2010
/s/ VINCENT M. O'REILLY Vincent M. O'Reilly	Director	March 1, 2010
/s/ PAUL J. TUFANO Paul J. Tufano	Director	March 1, 2010
/s/ ROY A. VALLEE Roy A. Vallee	Director	March 1, 2010

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EXHIBIT 32.1

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, 2009 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, 2010

EXHIBIT 32.2

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, 2009 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, 2010

EXHIBIT 31.1

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 we 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, 2010

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 we 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, 2010

By: /s/ Gregory R. Beecher

Gregory R. Beecher Chief Financial Officer