

TERADYNE, INC  
Form 10-K  
March 01, 2013  
Table of Contents

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**  
**FORM 10-K**  
**ANNUAL REPORT**  
**PURSUANT TO SECTIONS 13 OR 15(d)**  
**OF THE SECURITIES EXCHANGE ACT OF 1934**

(MARK ONE)

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

For the fiscal year ended December 31, 2012

OR

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

Commission file number 001-06462

**TERADYNE, INC.**

(Exact Name of Registrant as Specified in Its Charter)

**MASSACHUSETTS**  
(State or Other Jurisdiction of

Incorporation or Organization)

**600 RIVERPARK DRIVE**

**04-2272148**  
(I.R.S. Employer

Identification Number)

**01864**

Edgar Filing: TERADYNE, INC - Form 10-K

**NORTH READING, MASSACHUSETTS**

(Address of Principal Executive Offices)

(Zip Code)

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

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

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (229.405) is not contained herein, and will not be contained to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or in any amendment to this Form 10-K.

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of June 29, 2012 was approximately \$2.3 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, 2013 was 190,315,020 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's proxy statement in connection with its 2013 annual meeting of shareholders are incorporated by reference into Part III.

---

**Table of Contents**

**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 semiconductors, wireless products, hard disk drives and circuit boards in the consumer electronics, wireless, automotive, industrial, computing, communications and aerospace and defense industries. Our automatic test equipment products and services include:

semiconductor test ( Semiconductor Test ) systems;

wireless test ( Wireless Test ) systems; and

military/aerospace ( Mil/Aero ) test instrumentation and systems, storage test ( Storage Test ) systems, and circuit-board test and inspection ( Commercial Board Test ) systems (collectively these products represent Systems Test Group).

We have a broad customer base which includes integrated device manufacturers ( IDMs ), outsourced semiconductor assembly and test providers ( OSATs ), wafer foundries, fabless companies that design, but contract with others for the manufacture of integrated circuits ( ICs ), developers of wireless devices and consumer electronics, manufacturers of circuit boards, automotive suppliers, wireless product manufacturers, storage device manufacturers, aerospace and military contractors.

In 2011, we acquired LitePoint Corporation ( LitePoint ) to expand our product portfolio of test equipment in the wireless test sector. LitePoint designs, develops, and supports advanced wireless test solutions for the development and manufacturing of wireless devices, including smart phones, tablets, notebooks, laptops, personal computer peripherals, and other Wi-Fi and cellular enabled devices. LitePoint is our Wireless Test segment.

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 data storage and 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, notebooks and consumer electronic storage devices. In 2013, we intend to enter the test market for 3.5 inch hard disk drives which are used in cloud computing and other applications.

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

**Investor Information**

We are a Massachusetts corporation incorporated on September 23, 1960. We are subject to the informational requirements of the Securities Exchange Act of 1934 ( Exchange Act ). We file periodic reports, proxy statements and other information with the Securities and Exchange Commission ( SEC ). Such reports,



---

## **Table of Contents**

proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, N.E., Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file documents electronically.

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

## **Products**

### ***Semiconductor Test***

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

improve and control product quality;

measure and improve product performance;

reduce time to market; and

increase production yields.

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

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

FLEX Test Platform purchases are being made by IDMs, OSATs, Foundries 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



## **Table of Contents**

broad consumer, automotive and broadband markets have historically driven most of the device volume growth in the semiconductor industry. These markets include smart phones, cell phones, tablets, set top boxes, HDTVs, game controllers, computer graphics, and automotive controllers to name a few. These end use markets continue 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 3,500 systems to date and it continues to grow. The introduction of the UltraFLEX-M tester in 2009 extended 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. 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. We continue to invest in the J750 platform with new instrument releases that bring new capabilities to existing market segments and expand the J750 platform to new devices that include high end microcontrollers and the latest generation of cameras. The J750 platform has an installed base of over 3,900 systems and it continues to grow.

Our acquisition of Nextest in January of 2008 expanded our product offerings to include the Magnum test platform. The Magnum products address the requirements of mass production test of memory devices such as flash memory and DRAM. Flash and DRAM memory are widely used core building blocks in modern electronic products finding wide application in consumer, industrial, and computing equipment. Magnum II is the newest member of the family. With test rates up to 800 megabits per second and a versatile architecture designed for maximal throughput, Magnum II tests flash and DRAM devices, an important advantage for large memory producers that manufacture both types of memory. The Magnum platform has an installed base of over 1,300 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, cell phones, video/multimedia products, automotive electronics, computer peripherals, and notebook and desktop computers. The ETS platform has an installed base of over 2,900 systems and it continues to grow.

### ***Wireless Test***

Our acquisition of LitePoint in October of 2011 expanded our product offerings in the wireless test industry. LitePoint designs, develops, and supports advanced wireless test solutions for the development and manufacturing of wireless devices, including smart phones, tablets, notebooks/laptops, personal computer peripherals, and other Wi-Fi and cellular enabled devices. LitePoint collaborates with developers, component manufacturers, and industry leaders to create agile systems capable of analyzing the entire wireless landscape. Using easy-to-deploy, innovative test methodologies running on software-controlled module design, LitePoint's IQ product line is designed for high-volume, low-cost product test. LitePoint's products fall into two categories: cellular and connectivity.

### ***Cellular***

The LitePoint IQxstream is an optimized solution for high-speed testing of GSM, EDGE, W-CDMA, HSPA+, cdma2000, and LTE technologies used for calibration and verification of smartphones, tablets, and embedded cellular modules. As the industry's first multi-DUT test solution, it greatly increases production

## **Table of Contents**

output through the implementation of parallel test methods of multiple devices. IQxstream is complemented by LitePoint's IQvectorsolution, a turnkey production-optimized testing package that supports the leading cellular chipset solutions, and allows manufacturers to ramp volume production in a matter of weeks, rather than months.

### ***Connectivity***

LitePoint offers a comprehensive range of hardware and software solutions for connectivity testing. The IQxel, IQxel80, and new IQxel160 enable testing of the latest Wi-Fi standard 802.11ac taking wireless data rates beyond the gigabit per second barrier. The IQxel supports multiple bandwidths and channel configurations, MIMO antenna arrangements, Bluetooth 1.0-4.0, as well as legacy 802.11 a/b/g/n/p modes. It is targeted at manufacturers of networking equipment, Internet access devices, and embedded modules used in smartphones, tablets, and PCs. The LitePoint IQ2015 is a one-box solution for multi-connectivity needs, including Wi-Fi (a/b/g/n), Bluetooth (1.0-4.0), GPS/GLONASS, FM, WiMAX and ZigBee. It is a preferred choice by manufacturers of smartphones and tablets. LitePoint continues to deliver and support its legacy products, including IQflex, IQnxn, IQ2010, IQnav, and IQview.

LitePoint IQfactPlus is a turnkey, chipset specific solution, enabling rapid volume manufacturing with a minimum of engineering effort. IQfact solution can be customized for a specific end product and then deployed on LitePoint test equipment.

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

Our Systems Test Group segment is comprised of three business units: Mil/Aero, Storage Test and Commercial Board Test.

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

We are a leading provider of high-performance test systems, subsystems, instruments, software solutions and service for the defense and aerospace markets. Our solutions are used to ensure the readiness of military and commercial aerospace electronics systems. New programs, such as tactical aircraft and missile systems, as well as upgrade programs, continue to fuel the demand for high performance test systems in this market. Our solutions are well-suited to the demands of defense/aerospace electronics manufacturers and repair depots worldwide. Our leadership in this market is underscored by our success with major Department of Defense programs across all U.S. military service branches and many allied defense services worldwide.

#### ***Storage Test***

The Storage Test business unit addresses the high throughput, automated manufacturing test requirement of hard disk drive (HDD) manufacturers. Our products address the 2.5 inch HDD market that is driven by the needs of laptop, ultrabook, and enterprise storage products. We are a leading supplier of test equipment to this market as illustrated by our success at each of the HDD manufacturers. Our Neptune tester is a leader in addressing customer requirements related to factory density, thermal performance and vibration isolation. In 2013, we intend to enter the test market for 3.5 inch hard disk drives which are used in cloud computing and other applications.

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

Our test and inspection systems are used by electronics manufacturers worldwide. Our products verify that printed circuit boards are assembled correctly and operational. Fast, accurate and cost-effective test capabilities are hallmark features of our In-Circuit-Test (ICT) systems, including the TestStation and Spectrum product families. We offer a full range of ICT equipment, including handler-ready, in-line test systems for high volume automated board manufacturing, standalone offline systems and combined ICT/functional test solutions.



**Table of Contents****Discontinued Operations**

On March 21, 2011, our Diagnostic Solutions business unit was sold to SPX Corporation for \$40.2 million in cash. This business provided electronic test and diagnostic systems to the automotive OEMs and their major subcontractors. This business unit was in our Systems Test Group segment. Diagnostic Solutions has been reflected as discontinued operations in the accompanying financial statements.

**Summary of Net Revenues by Reportable Segment**

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

	2012	2011	2010
Semiconductor Test	68%	77%	90%
Wireless Test	17	2	
Systems Test Group	15	21	10
	100%	100%	100%

**Sales and Distribution**

In 2012, revenues from Apple Inc. accounted for 10% of our consolidated net revenues. Apple Inc. is a customer of our Wireless Test segment. In 2011 and 2010, no single customer accounted for 10% or more of our consolidated net revenues. In each of the years 2012, 2011 and 2010, our three largest customers in aggregate accounted for 29%, 19% and 21% of our consolidated net revenues, respectively.

Direct sales to United States government agencies accounted for 2%, 2% and 1% of our consolidated net revenues in 2012, 2011 and 2010, respectively. Approximately 15%, 8% and 8% of Systems Test Group's revenues in 2012, 2011 and 2010, respectively, were to United States government agencies and 20%, 17% and 35% of Systems Test Group's revenues in 2012, 2011 and 2010, respectively, were 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 were 86%, 84% and 85% of our consolidated net revenues in 2012, 2011 and 2010, respectively. Sales are attributed to geographic areas based on the location of the customer site.

Sales to customers outside of the United States that accounted for 10% or more of our consolidated net revenues in any of the previous three years were as follows:

	2012	2011	2010
China	21%	13%	9%
Taiwan	18	12	18
Korea	14	10	8
Japan	6	10	5
Philippines	6	9	12
Malaysia	4	10	13

**Table of Contents**

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

**Competition**

We face significant competition throughout the world in each of our reportable segments. Competitors in the Semiconductor Test segment include, among others, Advantest Corporation and LTX Credence Corporation. Competitors in the Systems Test Group include, among others, Agilent Technologies, Inc. and Xyratex Ltd. Competitors in our Wireless Test segment include, among others, Agilent Technologies, Inc., Aeroflex, Inc., Anritsu Company, National Instruments Corporation and Rohde & Schwarz GmbH & Co. KG.

Some of our competitors have substantially greater financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. In particular, our largest competitor in the Semiconductor Test segment spends considerably more than us on research and development which may provide it with a competitive advantage. We also face competition from emerging Asian equipment companies and from internal suppliers at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. See also Item 1A: Risk Factors.

**Backlog**

At December 31, 2012 and 2011, our backlog of unfilled orders in our three reportable segments was as follows:

	2012	2011
	(in millions)	
Semiconductor Test	\$ 204.2	\$ 274.8
Wireless Test	29.8	4.4
Systems Test Group	120.0	175.3
	\$ 354.0	\$ 454.5

Of the backlog at December 31, 2012, approximately 98% of the Semiconductor Test backlog, 85% of Systems Test Group backlog, and 48% of Wireless Test backlog, is expected to be delivered in 2013.

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 or cancellations of backlog during any particular period could have a material adverse effect on our business, financial condition or results of operations.

**Raw Materials**

Our products contain electronic and mechanical components that are provided by a wide range of suppliers. Some 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 delay or cease to deliver products.

## **Table of Contents**

### **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, 2012, we employed approximately 3,600 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, 2012, 2011 and 2010 were \$251.4 million, \$197.8 million, and \$191.9 million, respectively. These expenditures accounted for approximately 15%, 14%, and 12% of our consolidated net revenues in 2012, 2011, and 2010, 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. 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.

**Table of Contents****OUR EXECUTIVE OFFICERS**

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

<b>Executive Officer</b>	<b>Age</b>	<b>Position</b>	<b>Business Experience For The Past 5 Years</b>
Michael A. Bradley	64	Chief Executive Officer	Chief Executive Officer since 2004; President of Teradyne from 2003 to January 2013; President of Semiconductor Test from 2001 to 2003.
Gregory R. Beecher	55	Vice President, Chief Financial Officer and Treasurer	Vice President and Chief Financial Officer of Teradyne since 2001; Treasurer of Teradyne from 2003 to 2005 and since 2006.
Charles J. Gray	51	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.
Mark E. Jagiela	52	President and President of Semiconductor Test	President of Teradyne since January 2013; President of Semiconductor Test since 2003; Vice President of Teradyne since 2001.
Walter G. Vahey	48	President of Systems Test Group	President of Systems Test Group since July 2012; Vice President of Teradyne since 2008; General Manager of Storage Test since 2008; General Manager of Mil/Aero from 2004 to July 2012.

**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 and frequency of slowdowns in customer capital investments are difficult to predict.

The global economy and financial markets experienced disruption in 2009 and 2008, including, among other things, extreme volatility in security prices, severely diminished liquidity and credit availability, rating downgrades of certain investments and declining valuations of others. We are unable to predict the likely duration, frequency and severity of disruptions in financial markets, credit availability, and adverse economic conditions throughout the world. These economic developments affect businesses such as ours and those of our customers and vendors in a number of ways that could result in unfavorable consequences to us. Disruption or deterioration in economic conditions may reduce customer purchases of our products, thereby reducing our revenues and earnings. In addition, such adverse changes in economic conditions may, among other things, result in increased price competition for our products, increased risk of excess and obsolete inventories, increased risk

## **Table of Contents**

in the collectability of our accounts receivable, increased risk in potential reserves for doubtful accounts and write-offs of accounts receivable, and higher operating costs as a percentage of revenues.

We have taken actions to address the effects of economic variability, including implementing cost control and reduction measures. If our business has another downturn, we may need to take further cost control and reduction measures.

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

Our business and results of operations depend in significant part upon capital expenditures of manufacturers of semiconductors and other electronics, which in turn depend upon the current and anticipated market demand for those products. As evidenced by our 2009 and 2008 business and results of operations, the market demand for electronics is impacted by economic slowdowns. Historically, the electronics and semiconductor industry has been highly cyclical with recurring periods of over-supply, which often have had a severe negative effect on demand for test equipment, including systems we manufacture and market. We believe that the markets for newer generations of electronic products such as those that we manufacture and market will also be subject to similar fluctuations. We are dependent on the timing of orders from our customers, and the deferral or cancellation of previous customer orders could have an adverse effect on our results of operations. We cannot ensure that the level of revenues or new orders for a fiscal quarter will be sustained in subsequent quarters. In addition, any factor adversely affecting the electronics industry or particular segments within the electronics industry may adversely affect our business, financial condition or 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. In particular, our largest competitor in the Semiconductor Test segment spends considerably more than us on research and development which may provide it with a competitive advantage. We also face competition from emerging Asian equipment companies and internal development at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of our products.

***The market for our products is concentrated, and our business depends, in part, on obtaining orders from a few significant customers.***

The market for our products is concentrated with a limited number of significant customers accounting for a substantial portion of the purchases of test equipment. In each of the years 2012, 2011 and 2010, our three largest customers in aggregate accounted for 29%, 19% and 21% of consolidated net revenues, respectively. In any one reporting period, a single customer or several customers may contribute even a larger percentage of our consolidated net revenues. In addition, our ability to increase sales will depend, in part, on our ability to obtain orders from current or new significant customers. The opportunities to obtain orders from these customers may be limited, which may impair our ability to grow revenues. We expect that sales of our products will continue to be concentrated with a limited number of significant customers for the foreseeable future. The loss of a significant customer or any reduction in orders by these customers, including reductions due to market or competitive conditions, would likely have a material adverse effect on our business, financial condition or results of operations.

**Table of Contents**

***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 or profitability. The following factors are expected to impact future operations:

a worldwide economic slowdown or disruption in the global financial markets;

competitive pressures on selling prices;

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

changes in product revenues 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 or stock price.

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

A significant portion of our total revenues 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;

## Edgar Filing: TERADYNE, INC - Form 10-K

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.

**Table of Contents**

*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 or acquisition 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 or acquisition, 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, have significantly decreased revenues and earnings and be subject to contractual penalties, 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.



## Edgar Filing: TERADYNE, INC - Form 10-K

To a certain extent, we are dependent upon the ability of our suppliers and contractors to help meet increased product or delivery requirements. It may be difficult for certain suppliers to meet delivery requirements in a period of rapid growth, therefore impacting our ability to meet our customers' demands.

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

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

We depend on Flextronics International Ltd. ( Flextronics ) to manufacture and test our FLEX and J750 family of products from its facility in China and on other contract manufacturers to manufacture other products. If for any reason these contract manufacturers 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 or

---

**Table of Contents**

our other contract manufacturers, 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 differences. 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 have a material adverse effect on our business, results of operations or financial condition.

***We may not fully realize the benefits of our acquisitions or strategic alliances.***

We may acquire businesses, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing businesses. We may not be able to realize the expected synergies and cost savings from the integration with our existing operations of other businesses or technologies that we may acquire. In addition, the integration process for our acquisitions may be complex, costly and time consuming and include unanticipated issues, expenses and liabilities. We may have difficulty in developing, manufacturing and marketing the products of a newly acquired company in a manner that enhances the performance of our combined businesses or product lines and allows us to realize value from expected synergies. Following an acquisition, we may not achieve the revenues 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 or that the holders may elect to convert into shares of our common stock. 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

---

**Table of Contents**

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 \$7.67 per share, which was 75% higher than the closing price of our common stock on March 31, 2009. The warrants will be net share settled and cover, subject to customary antidilution adjustments, approximately 31,963,470 shares of our common stock. On April 1, 2009, the hedge counterparty exercised its option to purchase warrants covering, subject to customary antidilution adjustments, an additional 2,739,726 shares of our common stock. However, we will not be obligated to deliver to the hedge counterparty more than 34,526,500 shares of common stock upon exercise of the warrants (which amount represented less than 19.99% of our outstanding shares of common stock as of March 31, 2009, without giving effect to any shares of common stock issuable pursuant to the warrant transaction), subject to customary antidilution adjustments.

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

In connection with establishing its initial hedge of these convertible note hedge and warrant transactions, the hedge counterparty has entered into various derivative transactions with respect to our common stock and/or purchased shares of our common stock or other securities, including the Notes, concurrent with, or shortly after, the pricing of the Notes. In addition, the hedge counterparty may modify its hedge positions by entering into or unwinding various derivative transactions with respect to our common stock or 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 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;

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 Massachusetts and New Hampshire which are no longer conducting manufacturing operations. As of December 31, 2012, we have not incurred material costs as result of the monitoring and remediation steps taken at the 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



## **Table of Contents**

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 or 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 products 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 or operating results.

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

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

As a multinational corporation, we are subject to income taxes as well as non-income based taxes, in both the United States and various foreign jurisdictions. In certain foreign jurisdictions, we qualify for tax incentives and tax holidays 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 and tax holidays, 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.

---

**Table of Contents**

***We have significant guarantees, indemnification and customer confidentiality obligations.***

From time to time, we make guarantees to customers regarding the delivery and 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. Additionally, we have confidentiality obligations to certain customers. If we become liable under any of these obligations, it could materially and adversely affect our business, financial condition or operating results. For additional information see Note L: 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 ability 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.

***New regulations related to conflict minerals may adversely affect us.***

The Dodd-Frank Wall Street Reform and Consumer Protection Act imposes new disclosure requirements regarding the use of conflict minerals mined from the Democratic Republic of Congo and adjoining countries in our products, whether or not these products are manufactured by third parties. This new requirement could affect the pricing, sourcing and availability of minerals used in the manufacture of components we use in our products. In addition, there will be additional costs associated with complying with the disclosure requirements, such as costs related to determining the source of any conflict minerals used in our products. Our supply chain is complex and we may be unable to verify the origins for all metals used in our products. As a result, we may be unable to certify that our products are conflict free.

***Our operations and the operations of our customers and suppliers are subject to risks of natural catastrophic events, widespread health epidemics, acts of war, terrorist attacks and the threat of domestic and international terrorist attacks, any one of which could result in cancellation of orders, delays in deliveries or other business activities, or loss of customers and could negatively affect our business and results of operations.***

Our business is international in nature, with our sales, service and administrative personnel and our customers and suppliers located in numerous countries throughout the world. Our operations and those of our customers and suppliers are subject to disruption for a variety of reasons, including work stoppages, acts of war, terrorism, health epidemics, fires, earthquakes, hurricanes, volcanic eruptions, energy shortages, telecommunication failures, tsunamis, flooding or other natural disasters. Such disruption could materially increase our costs and expenses as well as cause delays in, among other things, shipments of products to our customers, our ability to perform services requested by our customers, or the installation and acceptance of our products at customer sites. Any of these conditions could have a material adverse effect on our business, financial conditions or results of operations.

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

There are provisions in our basic corporate documents and under Massachusetts law that could discourage, delay or prevent a change in control, even if a change in control may be regarded as beneficial to some or all of our stockholders.

**Item 1B: *Unresolved Staff Comments***

None.

**Item 2: *Properties***

The following table provides information as to our principal facilities:

Location	Operating Segment	Major Activity+	Approximate Square Feet of Floor Space
<b>Properties Owned:</b>			
North Reading, Massachusetts	Semiconductor Test, Systems Test		
	Group & Corporate	1-2-3-4-5-6	413,000
Agoura Hills, California	Semiconductor Test	3-5	120,000
Kumamoto, Japan	Semiconductor Test	2-3-4-5	79,000
			612,000
<b>Properties Leased:</b>			
Cebu, Philippines	Semiconductor Test & Corporate	1-2-6	135,000
San Jose, California	Semiconductor Test	2-3-4-5	128,000
Buffalo Grove, Illinois	Semiconductor Test	2-3-4-5	95,000
Sunnyvale, California	Wireless Test	2-3-4-5-6	75,000
North Reading, Massachusetts	Corporate	1	60,000
Shanghai, China	Semiconductor Test & Systems Test Group	2-5-6	44,000
Hsinchu, Taiwan	Semiconductor Test & Systems Test Group	5	43,000
Heredia, Costa Rica	Semiconductor Test	2-6	42,000
			622,000

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

**Item 3: *Legal Proceedings***

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

**Item 4:** *Mine Safety Disclosure: Not Applicable*



**Table of Contents****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
2011		
First Quarter	\$ 19.19	\$ 13.38
Second Quarter	18.68	13.51
Third Quarter	15.30	10.76
Fourth Quarter	15.05	10.37
2012		
First Quarter	\$ 17.50	\$ 13.53
Second Quarter	18.01	13.18
Third Quarter	16.49	12.95
Fourth Quarter	16.90	13.40

The number of record holders of our common stock at February 22, 2013 was 2,423

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 2010, the Board cancelled the November 2007 stock repurchase program and authorized a new stock repurchase program for up to \$200 million. The cumulative repurchases as of December 31, 2012 totaled 2.6 million shares of common stock for \$31.2 million at an average price of \$11.84 per share.

The following table includes information with respect to repurchases we made of our common stock during the quarter ended December 31, 2012 (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 1, 2012 – October 28, 2012		\$		\$ 168,825
October 29, 2012 – November 25, 2012		\$		\$ 168,825
November 26, 2012 – December 31, 2012		\$		\$ 168,825

We satisfy the U.S. minimum withholding tax obligation due upon the vesting and the conversion of restricted stock units into shares of our common stock, by automatically withholding from the shares being issued, a number of shares with an aggregate fair market value on the date of such vesting and conversion that would satisfy the withholding amount due.



**Table of Contents****Item 6: Data**

Information in items 6, 7 and 8 for the years ended December 31, 2011, 2010, 2009 and 2008 has been revised, as applicable, for the retrospective application of our change in accounting policy for recognizing pension and postretirement benefit plans expense. See Note C: Change in Accounting Principle of the Notes to the Financial Statements for a discussion of the change.

	2012	Years Ended December 31,			2008
		2011	2010	2009	
(dollars in thousands, except per share amounts)					
<b>Consolidated Statement of Operations Data (1)(2)(3)(4)(5)(6)(7):</b>					
Net revenues	\$ 1,656,750	\$ 1,429,061	\$ 1,566,162	\$ 777,425	\$ 1,047,917
Income (loss) from continuing operations	217,049	343,957	379,692	(129,520)	(496,784)
Net income (loss)	\$ 217,049	\$ 369,873	\$ 384,820	\$ (127,994)	\$ (490,026)
Income (loss) from continuing operations per common share basic	\$ 1.16	\$ 1.86	\$ 2.11	\$ (0.75)	\$ (2.91)
Income (loss) from continuing operations per common share diluted	\$ 0.94	\$ 1.52	\$ 1.73	\$ (0.75)	\$ (2.91)
Net income (loss) per common share basic	\$ 1.16	\$ 2.00	\$ 2.14	\$ (0.74)	\$ (2.87)
Net income (loss) per common share diluted	\$ 0.94	\$ 1.63	\$ 1.75	\$ (0.74)	\$ (2.87)
<b>Consolidated Balance Sheet Data:</b>					
Total assets	\$ 2,429,345	\$ 2,188,639	\$ 1,810,355	\$ 1,235,337	\$ 1,241,655
Long-term debt obligations	171,059	159,956	150,182	141,100	

- (1) As a result of the divestiture of Diagnostic Test Solutions in 2011, we are reporting this business unit as discontinued operations for all periods presented.
- (2) The Consolidated Statement of Operations Data for the year ended December 31, 2011 includes the results of operations of LitePoint from October 5, 2011, and 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.
- (3) The Consolidated Statement of Operations Data for the year ended December 31, 2011 includes a tax benefit of \$129.5 million due primarily to the release of the deferred tax valuation allowance.
- (4) The Consolidated Statement of Operations Data for the year ended December 31, 2009 includes \$32.6 million of severance charges and \$3.7 million of facilities charges related to the early exit of leased facilities.
- (5) The Consolidated Statement of Operations Data for the year ended December 31, 2008 includes a \$329.7 million goodwill impairment charge.
- (6) The Consolidated Statement of Operations Data for the year ended December 31, 2008 includes \$27.3 million of restructuring charges, primarily related to severance, \$20.9 million of charges related to loss on sale of land and buildings and \$12.0 million of facility charges related to accelerated depreciation.

**Table of Contents**

- (7) The impact of the adjustments resulting from the retrospective application of the change in accounting policy for recognizing pension and postretirement benefits plans expense is summarized below:

	Originally Reported	Effect of Accounting Change (in thousands, except per share amounts)	As Adjusted
<b>Year ended December 31, 2011:</b>			
Income from continuing operations	\$ 347,893	\$ (3,936)	\$ 343,957
Net income	\$ 373,809	\$ (3,936)	\$ 369,873
Net income per common share from continuing operations:			
Basic	\$ 1.88	\$ (0.02)	\$ 1.86
Diluted	\$ 1.53	\$ (0.01)	\$ 1.52
Net income per common share:			
Basic	\$ 2.02	\$ (0.02)	\$ 2.00
Diluted	\$ 1.65	\$ (0.02)	\$ 1.63
<b>Year ended December 31, 2010:</b>			
Income from continuing operations	\$ 374,602	\$ 5,090	\$ 379,692
Net income	\$ 379,730	\$ 5,090	\$ 384,820
Net income per common share from continuing operations:			
Basic	\$ 2.08	\$ 0.03	\$ 2.11
Diluted	\$ 1.71	\$ 0.02	\$ 1.73
Net income per common share:			
Basic	\$ 2.11	\$ 0.03	\$ 2.14
Diluted	\$ 1.73	\$ 0.02	\$ 1.75
<b>Year ended December 31, 2009:</b>			
Loss from continuing operations	\$ (135,363)	\$ 5,843	\$ (129,520)
Net loss	\$ (133,837)	\$ 5,843	\$ (127,994)
Net loss per common share from continuing operations:			
Basic	\$ (0.78)	\$ 0.03	\$ (0.75)
Diluted	\$ (0.78)	\$ 0.03	\$ (0.75)
Net loss per common share:			
Basic	\$ (0.77)	\$ 0.03	\$ (0.74)
Diluted	\$ (0.77)	\$ 0.03	\$ (0.74)
<b>Year ended December 31, 2008:</b>			
Loss from continuing operations	\$ (400,985)	\$ (95,799)	\$ (496,784)
Net loss	\$ (394,227)	\$ (95,799)	\$ (490,026)
Net loss per common share from continuing operations:			
Basic	\$ (2.35)	\$ (0.56)	\$ (2.91)
Diluted	\$ (2.35)	\$ (0.56)	\$ (2.91)
Net loss per common share:			
Basic	\$ (2.31)	\$ (0.56)	\$ (2.87)
Diluted	\$ (2.31)	\$ (0.56)	\$ (2.87)

**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.



---

## **Table of Contents**

### **Overview**

We are a leading global supplier of automatic test equipment. We design, develop, manufacture and sell automatic test systems and solutions used to test semiconductors, wireless products, hard disk drives and circuit boards in the consumer electronics, wireless, automotive, industrial, computing, communications and aerospace and defense industries. Our automatic test equipment products and services include:

semiconductor test ( Semiconductor Test ) systems;

wireless test ( Wireless Test ) systems; and

military/aerospace ( Mil/Aero ) test instrumentation and systems, storage test ( Storage Test ) systems, circuit-board test and inspection ( Commercial Board Test ) systems, collectively these products represent Systems Test Group .

We have a broad customer base which includes integrated device manufacturers ( IDMs ), outsourced semiconductor assembly and test providers ( OSATs ), wafer foundries, fabless companies that design, but contract with others for the manufacture of integrated circuits ( ICs ), developers of wireless devices and consumer electronics, manufacturers of circuit boards, automotive suppliers, wireless product manufacturers, storage device manufacturers, aerospace and military contractors.

In 2011, we acquired LitePoint Corporation ( LitePoint ) to expand our product portfolio of test equipment in the wireless test sector. LitePoint designs, develops, and supports advanced wireless test solutions for the development and manufacturing of wireless devices, including smart phones, tablets, notebooks/laptops, personal computer peripherals, and other Wi-Fi and cellular enabled devices. LitePoint is our Wireless Test segment.

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 revenues in our Semiconductor Test business which was impacted by the deteriorating global economy, which negatively impacted the entire semiconductor industry. The sharp swings in the semiconductor industry in recent years have generally affected the semiconductor test equipment and services industry more significantly than the overall capital equipment sector.

We believe our acquisitions of LitePoint, Eagle Test and Nextest, and our entry into the high speed memory and storage test markets have enhanced our opportunities for growth. We will continue to invest in our business to expand further our addressable markets while tightly managing our costs.

On March 21, 2011, we completed the sale of our Diagnostic Solutions business unit, which was included in the Systems Test Group segment, to SPX Corporation for \$40.2 million in cash. We sold this business as its growth potential as a stand-alone business was significantly less than if it was part of a larger automotive supplier. The financial information for Diagnostic Solutions has been reclassified to discontinued operations.

### **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.

---

## **Table of Contents**

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

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

### ***Revenue Recognition***

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

Our equipment has non-software and software components that function together to deliver the equipment's essential functionality. Revenue is recognized upon shipment or at delivery destination point, provided that customer acceptance criteria can be demonstrated prior to shipment. Certain contracts require us to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, revenue is deferred until customer acceptance has been received. We also defer the portion of the sales price that is not due until acceptance, which represents deferred profit.

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

Our post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customers' ability to use the product. We defer revenue for the selling price of installation and training. Extended warranties constitute warranty obligations beyond one year and we defer revenue in accordance with Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) 605-20, *Separately Priced Extended Warranty and Product Maintenance Contracts* and ASC 605-25, Revenue Recognition Multiple-Element Arrangements. Service revenue is recognized over the contractual period or as services are performed.

Our products are generally subject to warranty and the related costs of the warranty are provided for in cost of revenues when product revenue is recognized. We classify shipping and handling costs in cost of revenue.

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

### ***Retirement and Postretirement Plans***

Effective January 1, 2012, we changed the method of recognizing actuarial gains and losses for our defined benefit pension plans and postretirement benefit plan and calculating the expected return on plan assets for our

---

## **Table of Contents**

defined benefit pension plans. Historically, we recognized net actuarial gains and losses in accumulated other comprehensive income within shareholders' equity on our consolidated balance sheets on an annual basis and amortized them into operating results over the average remaining years of service of the plan participants, to the extent such gains and losses were outside of a range ( "corridor" ). We elected to immediately recognize net actuarial gains and losses and the change in the fair value of the plan assets in our operating results in the year in which they occur or upon any interim remeasurement of the plans. In addition, we used to calculate the expected return on plan assets using a calculated market-related value of plan assets. Effective January 1, 2012, we elected to calculate the expected return on plan assets using the fair value of the plan assets.

We believe that this new method is preferable as it eliminates the delay in recognizing gains and losses in our operating results and it will improve the transparency by faster recognition of the effects of economic and interest rate trends on plan obligations and investments. These actuarial gains and losses are generally measured annually as of December 31 and, accordingly, will be recorded during the fourth quarter of each year or upon any interim remeasurement of the plans. In accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 250, Accounting Changes and Error Corrections, all prior periods presented in this Annual Report on Form 10-K have been adjusted to apply the new accounting method retrospectively.

### ***Inventories***

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

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

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

### ***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. We consider the probability of future taxable income and our historical profitability, among other factors, in assessing the amount of the 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. At December 31, 2011, we reassessed this judgment and concluded that it is more likely than not that a substantial majority of our deferred tax assets will be realized through consideration of both the positive and negative evidence. The evidence consisted primarily of our three year U.S. historical cumulative profitability, projected future taxable income, forecasted utilization of the deferred tax assets and the fourth quarter of 2011 acquisition of LitePoint offset by the volatility of the industries we operate in, primarily the semiconductor industry. As such, we reduced the valuation allowance by \$190.2 million, which was recorded as a tax benefit in the year ended December 31, 2011. At December 31, 2012 and 2011, we maintained a valuation allowance for certain deferred tax assets of \$55.4 million and \$51.1 million, respectively, primarily related to excess stock compensation deductions associated with pre-2006 activity, state net operating losses and state tax credit carryforwards, due to uncertainty regarding their realization. Adjustments could be required in the future if we estimate that the amount of deferred tax assets to be realized is more or less than the net amount we have recorded.



## **Table of Contents**

On January 2, 2013, the American Taxpayer Relief Act of 2012 was enacted which retrospectively reinstated the research and development tax credit for 2012 and extended it through December 31, 2013. As a result, in the first quarter of 2013, we expect to record a discrete benefit related to 2012 of approximately \$7.0 million.

### ***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.

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

We assess the impairment of intangible and long-lived assets 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. No goodwill impairment was identified in 2012 or 2011.

**Table of Contents**

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

	Year Ended December 31,		
	2012	2011	2010
Percentage of net revenues:			
Net revenues:			
Products	83.5%	81.2%	85.0%
Services	16.5	18.8	15.0
Total net revenues	100.0	100.0	100.0
Cost of revenues:			
Cost of products	38.8	40.5	37.7
Cost of services	7.7	9.7	7.6
Total cost of revenues	46.5	50.2	45.2
Gross profit	53.5	49.8	54.8
Operating expenses:			
Engineering and development	15.2	13.8	12.3
Selling and administrative	17.0	16.5	14.4
Acquired intangible assets amortization	4.4	2.8	1.9
Restructuring and other	(0.5)	0.5	(0.2)
Total operating expenses	36.1	33.6	28.3
Income from operations	17.3	16.2	26.5
Interest income	0.2	0.5	0.4
Interest expense and other	(1.5)	(1.7)	(1.6)
Income from continuing operations before income taxes	16.1	15.0	25.3
Provision (benefit) for income taxes	3.0	(9.1)	1.1
Income from continuing operations	13.1	24.1	24.2
Income from discontinued operations before income taxes		0.1	0.3
(Benefit) provision for income taxes		0.0	0.0
Income from discontinued operations		0.1	0.3
Gain on disposal of discontinued operations (net of tax)		1.7	
Net income	13.1%	25.9%	24.6%

**Results of Operations****Book to Bill Ratio**

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

	Three months ended December 31,		
	2012	2011	2010
Semiconductor Test	1.0	1.2	1.1
Wireless Test	1.1	0.7	

Systems Test Group	1.6	1.9	1.0
Total Company	1.1	1.3	1.1

**Table of Contents****Revenues**

Net revenues for our three reportable segments were as follows:

	2012	2011	2010 (in millions)	2011-2012 Dollar Change	2010-2011 Dollar Change
Semiconductor Test	\$ 1,127.7	\$ 1,106.2	\$ 1,413.3	\$ 21.5	\$ (307.1)
Wireless Test	286.4	28.4		258.0	28.4
Systems Test Group	242.7	294.5	152.9	(51.8)	141.6
	\$ 1,656.8	\$ 1,429.1	\$ 1,566.2	\$ 227.7	\$ (137.1)

The increase in Semiconductor Test revenues of \$21.5 million or approximately 2% from 2011 to 2012 was primarily due to an increase in system-on-a-chip ( SOC ) test products for mobility applications, partially offset by a decrease in memory system sales.

Semiconductor Test revenues decreased \$307.1 million or approximately 22% from 2010 to 2011, due to a decrease in SOC product sales. Semiconductor Test product demand can fluctuate significantly from year to year based upon semiconductor device unit growth and installed base utilization. The 2011 decrease was due to lower volume from reduced demand.

The decrease in Systems Test Group revenues of \$51.8 million or approximately 18% from 2011 to 2012 was primarily due to a decrease in sales due to lower volume in both Storage Test systems and Commercial Board Test systems, partially offset by an increase in Mil/Aero systems and instruments.

The increase in Systems Test Group revenues of \$141.6 million or approximately 93% from 2010 to 2011 was primarily due to an increase in sales of Storage Test systems, which was driven by new customers and new product applications.

The acquisition of LitePoint, which was completed in October of 2011, added \$286.4 million and \$28.4 million of revenues in 2012 and 2011, respectively. LitePoint is our Wireless Test segment.

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

	2012	2011	2010
Semiconductor Test	68%	77%	90%
Wireless Test	17	2	
Systems Test Group	15	21	10
	100%	100%	100%

Net revenues by region as a percentage of total revenues were as follows:

	2012	2011	2010
China	21%	13%	9%
Taiwan	18	12	18
United States	14	16	15
Korea	14	10	8
Japan	6	10	5
Philippines	6	9	12

Edgar Filing: TERADYNE, INC - Form 10-K

Europe	5	7	6
Singapore	5	6	9
Thailand	5	6	4
Malaysia	4	10	13
Rest of the World	2	1	1
	100%	100%	100%

**Table of Contents**

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

	2012	2011	2010 (in millions)	2011-2012 Dollar Change	2010-2011 Dollar Change
Product Revenues	\$ 1,383.6	\$ 1,160.2	\$ 1,331.0	\$ 223.4	\$ (170.8)
Service Revenues	273.2	268.9	235.2	4.3	33.7
	\$ 1,656.8	\$ 1,429.1	\$ 1,566.2	\$ 227.7	\$ (137.1)

Our product revenues increased \$223.4 million or 19% in 2012 from 2011 primarily due to \$282.4 million of product revenues from the addition of LitePoint, an increase in SOC Semiconductor Test products for mobility applications and an increase in Mil/Aero systems and instruments. The increase was partially offset by a decrease in sales in our memory test and Storage Test systems. Service revenues, which are derived from the servicing of our installed base of products and includes maintenance contracts, repairs, extended warranties, parts sales, and applications support, increased \$4.3 million or 2% due to higher volume.

Our product revenues decreased \$170.8 million or 13% in 2011 from 2010 primarily due to lower sales of SOC Semiconductor Test products. Semiconductor Test product sales demand can fluctuate significantly from year to year based upon semiconductor device unit growth and installed base utilization. The 2011 decrease was due to lower volume from reduced demand. The decrease was partially offset by an increase in sales of Storage Test systems, which was driven by new customers and new product applications. The LitePoint acquisition which was completed in October of 2011 added \$27.8 million of product revenue in 2011. Service revenues, which are derived from the servicing of our installed base of products and includes maintenance contracts, repairs, extended warranties, parts sales, and applications support, increased \$33.7 million or 14% due to higher volume.

In 2012, revenues from one customer accounted for 10% of our consolidated net revenues. In 2011 and 2010, no single customer accounted for 10% or more of our consolidated net revenues. In each of the years 2012, 2011 and 2010, our three largest customers in aggregate accounted for 29%, 19% and 21% of our consolidated net revenues, respectively.

**Gross Profit**

	2012	2011	2010 (dollars in millions)	2011-2012 Dollar / Point Change	2010-2011 Dollar / Point Change
Gross Profit	\$ 886.0	\$ 711.8	\$ 857.6	\$ 174.2	\$ (145.8)
Percent of Total Revenues	53.5%	49.8%	54.8%	3.7	(5.0)

Gross profit as a percentage of revenues increased from 2011 to 2012 by 3.7 percentage points. This increase was a result of an increase of 4.6 points primarily due to the addition of LitePoint, partially offset by a decrease of 1.2 points due to higher inventory provisions.

Gross profit as a percentage of revenues decreased from 2010 to 2011 by 5.0 percentage points. This decrease was the result of a decrease of 2.9 points related to product mix primarily from higher Storage Test system sales, a decrease of 0.9 points for a charge to adjust LitePoint acquired inventory to fair value, a decrease of 0.5 points due to lower volume, and a decrease of 0.3 points due to higher inventory provisions.

**Table of Contents**

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

	2012	2011	2010	2011-2012	2010-2011
	(dollars in millions)			Dollar /	Dollar /
				Point	Point
				Change	Change
Product Gross Profit	\$ 740.7	\$ 581.2	\$ 741.1	\$ 159.5	\$ (159.9)
Percent of Product Revenues	53.5%	50.1%	55.7%	3.4	(5.6)
Service Gross Profit	\$ 145.3	\$ 130.6	\$ 116.5	\$ 14.7	\$ 14.1
Percent of Service Revenues	53.2%	48.6%	49.5%	4.6	(0.9)

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, 2012, we recorded an inventory provision of \$26.8 million included in cost of revenues, due to the following factors:

A decline in demand compared to previously forecasted demand levels for prior generation Nextest Magnum testers resulted in an inventory provision of \$12.0 million in Semiconductor Test.

A \$5.3 million inventory write-down as a result of product transition related to the Flex Test Platform in Semiconductor Test.

A \$3.9 million inventory write-down as a result of product transition in Wireless Test.

The remainder of the charge of \$5.6 million primarily reflects downward revisions to previously forecasted demand levels, of which \$4.3 million was in Systems Test Group, \$0.2 million in Wireless Test and \$1.1 million in Semiconductor Test.

During the year ended December 31, 2011, we recorded an inventory provision of \$11.6 million included in cost of revenues, due to the downward revisions to previously forecasted demand levels. Of the \$11.6 million of total excess and obsolete provisions recorded in 2011, \$10.4 million was related to Semiconductor Test primarily due to product transition, \$1.1 million was in Systems Test Group, and \$0.1 million was in Wireless Test.

During the year ended December 31, 2010, we recorded an inventory provision of \$6.0 million included in cost of revenues, due to the downward revisions to previously forecasted demand levels. Of the \$6.0 million of total excess and obsolete provisions recorded in 2010, \$4.5 million was related to Semiconductor Test and \$1.5 million was in Systems Test Group.

During the years ended December 31, 2012, 2011 and 2010, we scrapped \$9.6 million, \$9.2 million and \$4.7 million of inventory, respectively, and sold \$4.3 million, \$8.1 million and \$8.3 million of previously written-down or written-off inventory, respectively. As of December 31, 2012, we had inventory related reserves for amounts which had been written-down or written-off totaling \$141.8 million. We have no pre-determined timeline to scrap the remaining inventory.

**Engineering and Development**

Engineering and development expenses were as follows:

Edgar Filing: TERADYNE, INC - Form 10-K

	2012	2011	2010 (dollars in millions)	2011-2012 Change	2010-2011 Change
Engineering and Development	\$ 251.4	\$ 197.8	\$ 191.9	\$ 53.6	\$ 5.9
Percent of Total Revenues	15.2%	13.8%	12.3%		

27



**Table of Contents**

The increase of \$53.6 million in engineering and development expenses from 2011 to 2012 was due primarily to additional costs of \$37.1 million related to LitePoint and increased spending in Semiconductor Test.

The increase of \$5.9 million in engineering and development expenses from 2010 to 2011 was due primarily to additional costs of \$6.0 million related to LitePoint.

**Selling and Administrative**

Selling and administrative expenses were as follows:

	2012	2011	2010	2011-2012 Change	2010-2011 Change
	(dollars in millions)				
Selling and Administrative	\$ 281.5	\$ 235.3	\$ 225.3	\$ 46.2	\$ 10.0
Percent of Total Revenues	17.0%	16.5%	14.4%		

The increase of \$46.2 million in selling and administrative expenses from 2011 to 2012 was due primarily to additional costs of \$49.7 million related to LitePoint.

The increase of \$10.0 million in selling and administrative expenses from 2010 to 2011 was due primarily to additional costs of \$9.7 million related to LitePoint.

**Acquired Intangible Assets Amortization**

Acquired intangible assets amortization expense was as follows:

	2012	2011	2010	2011-2012 Change	2010-2011 Change
	(dollars in millions)				
Acquired Intangible Assets Amortization	\$ 73.5	\$ 40.5	\$ 29.3	\$ 33.0	\$ 11.2
Percent of Total Revenues	4.4%	2.8%	1.9%		

Acquired intangible assets amortization expense increased from 2011 to 2012 and from 2010 to 2011, due to the LitePoint acquisition.

**Restructuring and Other****Other**

During the year ended December 31, 2012, due to a decrease in specified new product revenue through the December 31, 2012 earn-out period end date, we recorded an \$8.8 million fair value adjustment to decrease the LitePoint acquisition contingent consideration. The \$68.5 million decrease in the contingent consideration liability from December 31, 2011 is due to \$59.7 million in payments and the \$8.8 million fair value decrease.

During the year ended December 31, 2011, we recorded \$5.8 million of other charges of which \$4.6 million related to LitePoint acquisition costs and \$1.2 million related to non-U.S. pension settlements.

During the year ended December 31, 2010, we had \$3.0 million of gains related to non-U.S. pension settlements.

**Restructuring**

In response to a downturn in the industry in 2008 and 2009, we initiated restructuring activities across our Semiconductor Test and Systems Test Group segments to reduce costs, principally through headcount reductions and facility consolidations. The remaining accrual for severance and benefits of \$0.2 million is reflected in the



**Table of Contents**

accrued employees' compensation and withholdings on the balance sheet and is expected to be paid by June 2013. The remaining accrual for lease payments on vacated facilities of \$1.1 million is reflected in the other accrued liabilities and is expected to be paid over the next twelve months. As of December 31, 2012, we have subleased approximately 37% of our unoccupied space.

During the year ended December 31, 2012, we recorded the following restructuring activities:

Severance and Benefits:

- \$0.5 million of charges related to headcount reductions of 7 people in Systems Test Group.
- \$0.3 million of charges related to headcount reductions of 10 people in Semiconductor Test.
- \$0.2 million of charges related to headcount reductions of 2 people in Wireless Test.

During the year ended December 31, 2011, we recorded the following restructuring activities:

Severance and Benefits:

- \$1.2 million of charges related to headcount reductions of 7 people in Semiconductor Test.

Facilities and Exit Charges:

- \$(0.5) million credit related to changes in the estimated exit costs related to the Westford, MA and Poway, CA facilities in Systems Test Group, and the North Reading, Massachusetts facility in Semiconductor Test and Systems Test Group.

During the year ended December 31, 2010, we recorded the following restructuring activities:

Severance and Benefits:

- \$1.2 million of severance charges related to headcount reductions of approximately 17 people in Systems Test Group.
- \$0.9 million of severance charges related to headcount reductions of approximately 4 people in Semiconductor Test.

Facilities and Exit Charges:

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

**Interest and Other**

	2012	2011	2010 (in millions)	2011-2012 Change	2010-2011 Change
Interest Income	\$ 4.1	\$ 6.6	\$ 5.9	\$ (2.5)	\$ 0.7
Interest Expense and Other	\$ (25.5)	\$ (23.7)	\$ (24.5)	\$ (1.8)	\$ 0.8

Interest income decreased by \$2.5 million, from \$6.6 million in 2011 to \$4.1 million in 2012, due to a decrease in marketable securities used to fund the LitePoint acquisition in 2011.

Interest income increased by \$0.7 million, from \$5.9 million in 2010 to \$6.6 million in 2011, due primarily to higher cash and marketable securities balances in 2011.

Interest expense and other increased by \$1.8 million, from \$23.7 million in 2011 to \$25.5 million in 2012, due primarily to higher interest expense from increased convertible debt discount amortization.

**Table of Contents**

Interest expense and other decreased by \$0.8 million, from \$24.5 million in 2010 to \$23.7 million in 2011, due primarily to a loss on the exercise of the auction rate securities related UBS Put recorded in 2010, partially offset by higher convertible debt discount amortization in 2011.

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

	2012	2011	2010	2011-2012 Change	2010-2011 Change
	(in millions)				
Semiconductor Test	\$ 186.0	\$ 212.2	\$ 415.0	\$ (26.2)	\$ (202.8)
Wireless Test	83.1	(20.6)		103.7	(20.6)
Systems Test Group	34.2	51.8	(8.9)	(17.6)	60.7
Corporate	(37.3)	(29.0)	(9.8)	(8.3)	(19.2)
	\$ 266.0	\$ 214.4	\$ 396.3	\$ 51.6	\$ (181.9)

The increase in income from continuing operations before income taxes from 2011 to 2012 was primarily due to higher revenue in 2012 compared to 2011, a \$14.5 million decrease in restructuring and other costs, partially offset by a \$33.0 million increase in intangible assets amortization.

The decrease in income from continuing operations before income taxes from 2010 to 2011 was primarily due to lower revenue in 2011 compared to 2010, an \$11.2 million increase in intangible assets amortization, a \$12.2 million charge to adjust LitePoint acquired inventory to fair value and a \$10.5 million increase in restructuring and other costs.

**Income Taxes**

The income tax expense from continuing operations for 2012 totaled \$48.9 million, primarily attributable to a U.S. federal tax provision and foreign taxes. The income tax benefit from continuing operations for 2011 totaled \$129.5 million, primarily attributable to the reduction of our deferred income tax valuation allowance. We considered the weight of both the positive and negative evidence as of December 31, 2011 and concluded that a substantial majority of the deferred tax assets will be realized. The income tax expense from continuing operations of \$16.7 million for 2010 was related primarily to tax provisions for foreign taxes.

**Contractual Obligations**

The following table reflects our contractual obligations as of December 31, 2012:

	Total	Less than 1 year	Payments Due by Period		More than 5 years	Other
			1-3 years	3-5 years		
	(in thousands)					
Long-Term Debt Obligations (1)	\$ 193,491	\$ 2,328	\$ 191,163	\$	\$	\$
Interest on Debt	12,897	8,590	4,307			
Contingent Consideration	388	388				
Operating Lease Obligations	54,915	14,174	21,794	11,510	7,437	
Purchase Obligations	209,962	206,952	3,010			
Retirement Plan Contributions	54,627	5,169	10,499	10,678	28,281	
Other Long-Term Liabilities Reflected on the Balance Sheet under GAAP (2)	87,730		16,227			71,503
Total	\$ 614,010	\$ 237,601	\$ 247,000	\$ 22,188	\$ 35,718	\$ 71,503



**Table of Contents**

- (1) Long-Term Debt Obligations include current maturities.
- (2) Included in Other Long-Term Liabilities are liabilities for customer advances, extended warranty, uncertain tax positions and other obligations. For certain long-term obligations, we are unable to provide a reasonably reliable estimate of the timing of future payments relating to these obligations and therefore we included these amounts in the column marked Other .

**Liquidity and Capital Resources**

Our cash, cash equivalents and marketable securities balance increased \$251.7 million from 2011 to 2012, to \$1.0 billion. Cash activity for 2012, 2011 and 2010 was as follows:

	2012	2011	2010 (in millions)	2011-2012 Change	2010-2011 Change
<b>Cash provided by operating activities:</b>					
Income from continuing operations, adjusted for non cash items	\$ 444.9	\$ 372.6	\$ 508.6	\$ 72.3	\$ (136.0)
Change in operating assets and liabilities, net of businesses sold and acquired	(40.4)	(94.0)	52.7	53.6	(146.7)
Cash (used for) provided by discontinued operations		(4.8)	5.0	4.8	(9.8)
<b>Total cash provided by operating activities</b>	<b>\$ 404.5</b>	<b>\$ 273.8</b>	<b>\$ 566.3</b>	<b>\$ 130.7</b>	<b>\$ (292.5)</b>
<b>Cash used for investing activities:</b>					
Cash used for investing activities from continuing operations	(603.9)	(120.5)	(627.7)	(483.4)	507.2
Cash provided by investing activities from discontinued operations		39.0		(39.0)	39.0
<b>Total cash used for investing activities</b>	<b>\$ (603.9)</b>	<b>\$ (81.5)</b>	<b>\$ (627.7)</b>	<b>\$ (522.4)</b>	<b>\$ 546.2</b>
<b>Total cash (used for) provided by financing activities</b>	<b>\$ (35.4)</b>	<b>\$ (16.3)</b>	<b>\$ 42.4</b>	<b>\$ (19.1)</b>	<b>\$ (58.7)</b>
<b>Total (decrease) increase of cash and cash equivalents</b>	<b>\$ (234.8)</b>	<b>\$ 176.0</b>	<b>\$ (19.0)</b>	<b>\$ (410.8)</b>	<b>\$ 195.0</b>

In 2012, changes in operating assets and liabilities, net of businesses sold and acquired, used cash of \$40.4 million. This was due to an \$8.0 million increase in operating assets and a \$32.4 million decrease in operating liabilities.

The increase in operating assets was due to a \$24.1 million increase in accounts receivable and a \$1.5 million increase in prepayments due primarily to supplier prepayments, partially offset by a \$17.6 million decrease in inventories.

The decrease in operating liabilities was due to a \$15.7 million decrease in accrued employee compensation due primarily to employee stock awards payroll taxes and variable compensation payments, a \$14.6 million decrease in customer advance payments and deferred revenue, a \$11.5 million decrease in accounts payable due to lower fourth quarter sales volume, a \$5.6 million decrease in other accrued liabilities, and \$4.8 million of retirement plans contributions, partially offset by a \$19.8 million increase in accrued income taxes.

Investing activities during 2012 used cash of \$603.9 million, due to \$751.1 million used for purchases of marketable securities and \$119.1 million used for purchases of property, plant and equipment, partially offset by proceeds from sales and maturities of marketable securities that provided cash of \$95.2 million and \$171.1 million, respectively.

Financing activities during 2012 used cash of \$35.4 million, \$18.5 million was from the issuance of common stock under stock option and stock purchase plans, and \$8.4 million from the tax benefit related to stock

---

**Table of Contents**

options and restricted stock units, partially offset by \$59.7 million of cash used for payments related to LitePoint acquisition contingent consideration and \$2.5 million of cash used for payments on long-term debt related to the Japan loan.

In 2011, changes in operating assets and liabilities, net of businesses sold and acquired, used cash of \$94.0 million. This was due to a \$43.2 million decrease in operating assets and a \$137.2 million decrease in operating liabilities.

The decrease in operating assets was due to a \$66.4 million decrease in accounts receivable resulting from increased collections, partially offset by a \$22.6 million increase in prepayments due primarily to supplier prepayments and a \$0.6 million increase in inventories. The decrease in operating liabilities was due to a \$62.6 million decrease in customer advance payments due to shipments of systems prepaid by customers, a \$28.3 million decrease in accrued employee compensation due primarily to employee stock awards payroll taxes and variable compensation payments, a \$19.9 million decrease in accounts payable due to decreased sales volume, \$11.9 million of retirement plans contributions, an \$8.7 million decrease in accrued income taxes, and a \$5.8 million decrease in deferred revenue.

Investing activities during 2011 used cash of \$120.5 million. In October 2011, we completed the acquisition of LitePoint for an initial cash purchase price, net of cash acquired, of \$537.5 million. Capital expenditures were \$86.1 million. Proceeds from sales and maturities of marketable securities that provided cash of \$676.4 million and \$518.5 million, respectively, partially offset by \$691.8 million used for purchase of marketable securities. The net proceeds were used to acquire LitePoint.

Financing activities during 2011 used cash of \$16.3 million, due to the repurchase of 2.6 million shares of common stock for \$31.2 million at an average price of \$11.84 per share and \$2.5 million for payments on long-term debt related to the Japan loan, partially offset by \$17.4 million from the issuance of common stock under stock option and stock purchase plans.

In 2010, changes in operating assets and liabilities, net of businesses sold and acquired, provided cash of \$52.7 million. This was due to a \$38.2 million increase in operating assets and a \$90.9 million increase in operating liabilities.

The increase in operating assets was due to an increase in accounts receivable of \$50.4 million due to higher sales volume, partially offset by a \$3.7 million decrease in inventories, and a decrease in other current assets of \$8.5 million. The increase in operating liabilities was due to a \$57.7 million increase in customer advance payments due primarily to an advanced payment received from one of our Semiconductor Test customers, a \$44.5 million increase in accrued employee compensation due to higher variable compensation and employee stock awards payroll taxes, a \$15.0 million increase in accounts payable, a \$15.0 million increase in deferred revenue, an \$8.5 million increase in accrued income taxes, and a \$2.7 million increase in other accrued liabilities, partially offset by \$52.5 million of retirement plans contributions.

Investing activities during 2010 used cash of \$627.7 million, due to \$870.8 million used for purchases of marketable securities and \$76.0 million used for purchases of property, plant and equipment, partially offset by proceeds from sales and maturities of marketable securities that provided cash of \$181.2 million and \$136.8 million, respectively, and proceeds from life insurance that provided cash of \$1.1 million.

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

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

---

**Table of Contents**

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.

We believe our cash, cash equivalents and marketable securities balance will be sufficient to meet working capital and expenditure needs for at least the next twelve months. The amount of cash, cash equivalents and marketable securities in the U.S. and our operations in the U.S. provide sufficient liquidity to fund our business activities in the U.S. We have approximately \$300 million of cash outside the U.S. that if repatriated would incur additional taxes. Inflation has not had a significant long-term impact on earnings.

**Retirement Plans**

ASC 715-20, *Compensation Retirement Benefits Defined Benefit Plans* 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 ( U.S. Plan ), certain qualified plans for non-U.S. subsidiaries, and a U.S. Supplemental Executive Defined Benefit Plan, was approximately \$26.0 million for the year ended December 31, 2012. The largest portion of our 2012 pension expense was \$9.0 million for our U.S. Plan. Pension expense is calculated based upon a number of actuarial assumptions, a significant input to the actuarial models that measure pension benefit obligations. Discount rate and expected return on assets are two assumptions which are important elements of pension plan expense and asset/liability measurement. We evaluate these critical assumptions at least annually on a plan and country specific basis. We evaluate other assumptions related to demographic factors, such as retirement age, mortality and turnover periodically, and update them to reflect our experience and expectations for the future.

In developing the expected return on U.S. Plan assets assumption, we evaluated input from our investment managers and pension consultants, including their review of asset class return expectations. Based on this review, we believe that 5.0% was an appropriate rate to use for 2012. We will continue to evaluate the expected return on plan assets at least annually, and will adjust the rate as necessary. The December 31, 2012 asset allocation for our U.S. Plan is 86% invested in fixed income securities, 13% invested in equity securities, and 1% invested in other securities. Our investment managers regularly review the actual asset allocation and periodically rebalance the portfolio to ensure alignment with our targeted allocations.

Effective January 1, 2012, we have elected to immediately recognize net actuarial gains and losses and the change in the fair value of plans assets in our operating results in the year in which they occur or upon any interim remeasurement of the plans. In addition, we used to calculate the expected return on plan assets using a calculated market-related value of plan assets. Effective January 1, 2012, we elected to calculate the expected return on plan assets using the fair value of the plan assets.

The discount rate that we utilized for determining future pension obligations for the U.S. Plan is based on the Citigroup Pension Index adjusted for the U.S. Plan's expected cash flows and was 3.6% at December 31,



**Table of Contents**

2012, down from 4.2% at December 31, 2011. We estimate that in 2013 we will recognize approximately \$2.1 million of pension income for the U.S. Plan. The U.S. Plan related pension income estimate for 2013 is based on a 3.6% discount rate and 5.0% return on assets. Future pension expense or income 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, 2012, we had an unrecognized pension prior service cost of \$0.7 million.

We performed a sensitivity analysis, which expresses the potential U.S. Plan (income) expense for the year ending December 31, 2013, which would result from changes to either the discount rate or the expected return on plan assets. The below estimates exclude the impact of any potential actuarial gains or losses. It is difficult to reliably forecast or predict whether there will be any actuarial gains or losses in 2013 as they are primarily driven by events and circumstances beyond our control, such as changes in interest rates and the performance of the financial markets.

Return on Plan Assets	Discount Rate		
	3.1%	3.6%	4.1%
	(in millions)		
4.5%	\$ (1.5)	\$ (0.7)	\$ (0.1)
5.0%	(2.9)	(2.1)	(1.4)
5.5%	(4.2)	(3.5)	(2.8)

The assets of the U.S. Plan consist primarily of fixed income and equity securities. U.S. Plan assets have decreased from \$319.1 million at December 31, 2011 to \$278.9 million at December 31, 2012. The decrease was due primarily to \$52.0 million of payments made to certain former U.S. employees which were offered an option to receive their vested pension benefit as a one-time, lump sum payment. Approximately 2,000 former employees elected to receive a one-time, lump sum payment.

Our funding policy is to make contributions to our pension plans in accordance with local laws and to the extent that such contributions are tax deductible. During 2012, we made contributions of \$1.7 million to the U.S. supplemental executive defined benefit pension plan and \$1.6 million to certain qualified plans for non-U.S. subsidiaries. We expect to contribute approximately \$1.8 million to the U.S. supplemental executive defined benefit pension plan in 2013. Contributions that will be made in 2013 to certain qualified plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$2.0 million. We do not expect to make any contributions to the U.S. Plan in 2013.

**Equity Compensation Plans**

In addition to our 1996 Employee Stock Purchase Plan discussed in Note P: Stock Based Compensation in Notes to Consolidated Financial Statements, we have a 2006 Equity and Cash Compensation Incentive Plan (the 2006 Equity Plan) under which equity securities are authorized for issuance. The 2006 Equity Plan was initially approved by stockholders on May 25, 2006.

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.

**Table of Contents**

The following table presents information about these plans as of December 31, 2012 (share numbers in thousands):

<b>Plan category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights</b>	<b>Weighted-average exercise price of outstanding options, warrants and rights</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column one)</b>
Equity plans approved by shareholders	5,878(1)	\$ 9.77	9,246(2)
Equity plans not approved by shareholders (3,4,5)	2,933	\$ 3.06	
<b>Total</b>	<b>8,811</b>	<b>\$ 4.64</b>	<b>9,246</b>

- (1) Includes 4,970,308 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.
- (2) Consists of 6,413,195 securities available for issuance under the 2006 Equity Plan and 2,832,538 of securities available for issuance under the Employee Stock Purchase Plan.
- (3) 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, 2012, there were outstanding options exercisable for an aggregate of 768,382 shares of our common stock pursuant to the Nextest Plans, with a weighted average exercise price of \$3.57 per share.
- (4) 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, 2012, there were outstanding options exercisable for an aggregate of 236,839 shares of our common stock pursuant to the Eagle Plans, with a weighted average exercise price of \$3.85 per share.
- (5) In connection with the acquisition of LitePoint Corporation (the LitePoint Acquisition), we assumed the options granted under the LitePoint Corporation 2002 Stock Plan (the LitePoint Plan). Upon the consummation of the LitePoint Acquisition, these options were converted automatically into options to purchase an aggregate of 2,828,344 shares of our common stock. No additional awards will be granted under the LitePoint Plan. As of December 31, 2012, there were outstanding options exercisable for an aggregate of 1,927,222 shares of our common stock pursuant to the LitePoint Plan, with a weighted average exercise price of \$2.75 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, 2012 was 6,413,195 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.

**Table of Contents**

As of December 31, 2012, total unrecognized compensation expense related to non-vested awards and options was \$52.1 million, and is expected to be recognized over a weighted average period of 2.0 years.

**Performance Graph**

The following graph compares the change in our cumulative total shareholder return in our common stock with (i) the Standard & Poor's 500 Index and (ii) the Morningstar Semiconductor Equipment & Materials Index. The comparison assumes \$100.00 was invested on December 31, 2007 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any.

	Annual Rate of Return				
	2008	2009	2010	2011	2012
Teradyne, Inc.	-59%	154%	31%	-3%	24%
Morningstar Semiconductor Equipment & Materials Index	-56%	68%	12%	-11%	24%
S&P 500 Index	-37%	26%	15%	2%	16%

- (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 Zacks Investment Research, Inc., a source believed to be reliable, but we are not responsible for any errors or omissions in such information.

**Recently Issued Accounting Pronouncements**

In December 2011, the FASB issued ASU No. 2011-11, *Disclosures about Offsetting Assets and Liabilities*. This ASU is intended to enhance the understanding of the effects of netting arrangements on an entity's financial statements, including financial instruments and derivative instruments that are either offset or subject to a master netting arrangement. The scope of this ASU includes derivatives, sale and repurchase agreements, reverse sale and repurchase agreements, and securities borrowing and lending arrangements. In

## **Table of Contents**

January 2013, the FASB issued ASU No. 2013-01 *Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities*. This standard provided additional guidance on the scope of ASU 2011-11. The provisions of this ASU are effective for interim and annual periods beginning on or after January 1, 2013.

In February 2013, the FASB issued ASU No. 2013-02, *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*. Under this ASU, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ( AOCI ) by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. The provisions of this ASU are effective for interim and annual periods beginning on or after January 1, 2013.

### **Item 7A: *Quantitative and Qualitative Disclosures about Market Risks*** **Concentration of Credit Risk**

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

### **Exchange Rate Risk Management**

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

We performed a sensitivity analysis assuming a hypothetical 10% fluctuation in foreign exchange rates to the hedging contracts and the underlying exposures described above. As of December 31, 2012, 2011 and 2010, 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 losses 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 fluctuation in interest rates of 25 basis points was assumed. Market risk for the short and long-term marketable securities was estimated as the potential change in the fair value resulting from a hypothetical change in interest rates for securities contained in the investment portfolio. The potential change in fair value from changes in interest rates is immaterial as of December 31, 2012 and 2011.

---

**Table of Contents**

**Item 8: *Financial Statements and Supplementary Data*  
Report of Independent Registered Public Accounting Firm**

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

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, 2012 and December 31, 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 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) present 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, 2012, 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 Control 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.

As discussed in Note C to the consolidated financial statements, the Company changed the manner in which it accounts for defined benefit pension and other postretirement benefit plans in 2012.

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, 2013

**Table of Contents****TERADYNE, INC.****CONSOLIDATED BALANCE SHEETS****December 31, 2012 and 2011**

	<b>2012</b>	<b>2011</b>
	<b>(in thousands, except per share information)</b>	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 338,920	\$ 573,736
Marketable securities	431,516	96,502
Accounts receivable, less allowance for doubtful accounts of \$4,118 and \$4,102 in 2012 and 2011, respectively	153,423	129,330
Inventories:		
Parts	89,598	102,307
Assemblies in process	32,303	24,283
Finished goods	17,509	33,473
	139,410	160,063
Deferred tax assets	77,305	53,948
Prepayments and other current assets	95,487	86,308
<b>Total current assets</b>	<b>1,236,061</b>	<b>1,099,887</b>
Net property, plant and equipment	265,782	232,207
Marketable securities	235,872	84,407
Other assets	20,209	17,545
Retirement plans assets	3,282	8,840
Intangible assets, net	318,867	392,975
Goodwill	349,272	352,778
<b>Total assets</b>	<b>\$ 2,429,345</b>	<b>\$ 2,188,639</b>
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable	58,324	69,842
Accrued employees' compensation and withholdings	86,264	90,427
Deferred revenue and customer advances	81,357	78,670
Contingent consideration	388	68,892
Other accrued liabilities	56,861	62,420
Accrued income taxes	12,306	860
Current debt	2,328	2,573
<b>Total current liabilities</b>	<b>297,828</b>	<b>373,684</b>
Long-term deferred revenue and customer advances	16,227	33,541
Retirement plans liabilities	94,373	76,638
Deferred tax liabilities	50,201	16,049
Long-term other accrued liabilities	21,302	23,711
Long-term debt	171,059	159,956
<b>Total liabilities</b>	<b>650,990</b>	<b>683,579</b>

Commitments and contingencies (Note L)

**SHAREHOLDERS EQUITY**

Common stock, \$0.125 par value, 1,000,000 shares authorized, 187,908 and 183,587 shares issued and outstanding at December 31, 2012 and 2011, respectively	23,488	22,948
Additional paid-in capital	1,347,762	1,293,130
Accumulated other comprehensive income	5,820	4,746
Retained earnings	401,285	184,236
<b>Total shareholders equity</b>	<b>1,778,355</b>	<b>1,505,060</b>
<b>Total liabilities and shareholders equity</b>	<b>\$ 2,429,345</b>	<b>\$ 2,188,639</b>

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

**Table of Contents****TERADYNE, INC.****CONSOLIDATED STATEMENTS OF OPERATIONS**

	Years Ended December 31,		
	2012	2011	2010
	(in thousands, except per share amounts)		
Net revenues:			
Products	\$ 1,383,569	\$ 1,160,191	\$ 1,330,942
Services	273,181	268,870	235,220
Total net revenues	1,656,750	1,429,061	1,566,162
Cost of revenues:			
Cost of products	642,881	578,936	589,891
Cost of services	127,832	138,302	118,688
Total cost of revenues	770,713	717,238	708,579
Gross profit	886,037	711,823	857,583
Operating expenses:			
Engineering and development	251,382	197,798	191,863
Selling and administrative	281,500	235,319	225,333
Acquired intangible assets amortization	73,508	40,465	29,250
Restructuring and other	(7,721)	6,743	(3,800)
Total operating expenses	598,669	480,325	442,646
Income from operations	287,368	231,498	414,937
Interest income	4,090	6,617	5,861
Interest expense and other	(25,482)	(23,694)	(24,451)
Income from continuing operations before income taxes	265,976	214,421	396,347
Provision (benefit) for income taxes	48,927	(129,536)	16,655
Income from continuing operations	217,049	343,957	379,692
Income from discontinued operations before income taxes		1,278	5,406
(Benefit) provision for income taxes		(267)	278
Income from discontinued operations		1,545	5,128
Gain on disposal of discontinued operations (net of tax \$4,578)		24,371	
Net income	\$ 217,049	\$ 369,873	\$ 384,820
Income from continuing operations per common share:			
Basic	\$ 1.16	\$ 1.86	\$ 2.11
Diluted	\$ 0.94	\$ 1.52	\$ 1.73
Net income per common share:			
Basic	\$ 1.16	\$ 2.00	\$ 2.14



Edgar Filing: TERADYNE, INC - Form 10-K

Diluted		\$ 0.94	\$ 1.63	\$ 1.75
Weighted average common shares basic		186,878	184,683	179,924
Weighted average common shares diluted		230,246	226,820	226,807

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

**Table of Contents****TERADYNE, INC.****CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

	For the Years Ended December 31,		
	2012	2011	2010
	(in thousands)		
Net income	\$ 217,049	\$ 369,873	\$ 384,820
Other comprehensive income (loss), net of tax:			
Foreign currency translation reclassification adjustment included in net income		2,266	(349)
Unrealized gains on marketable securities:			
Unrealized gains on marketable securities arising during period	2,106	1,293	1,466
Less: Reclassification adjustment for gains included in net income	(799)	(1,296)	93
	1,307	(3)	1,559
Defined benefit pension and post-retirement plans:			
Prior service cost arising during period			3,279
Less: Amortization of prior service (benefit) cost included in net periodic pension and post-retirement costs	(233)	14	310
	(233)	14	3,589
Other comprehensive income (loss)	1,074	2,277	4,799
Comprehensive income	\$ 218,123	\$ 372,150	\$ 389,619

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

**Table of Contents****TERADYNE, INC.****CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY****Years Ended December 31, 2012, 2011 and 2010**

	<b>Common Stock Shares Issued</b>	<b>Common Stock Par Value</b>	<b>Additional Paid-in Capital</b>	<b>Accumulated Other Comprehensive (Loss) Income (in thousands)</b>	<b>Retained Earnings (Accumulated Deficit)</b>	<b>Total Shareholders Equity</b>
Balance, December 31, 2009	174,908	\$ 21,864	\$ 1,202,426	\$ (2,330)	\$ (557,381)	\$ 664,579
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$7,269	7,127	891	36,519			37,410
Stock-based compensation expense			30,580			30,580
Net income					384,820	384,820
Unrealized gain on marketable securities:						
Unrealized gain on marketable securities arising during period, net of tax of \$0				1,466		1,466
Less: reclassification adjustment for losses included in net income				93		93
Foreign currency translation adjustment				(349)		(349)
Prior service cost arising during period				3,279		3,279
Amortization of prior service costs, net of tax of \$0				310		310
Balance, December 31, 2010	182,035	22,755	1,269,525	2,469	(172,561)	1,122,188
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$12,297	4,185	522	4,566			5,088
Stock-based compensation expense			32,337			32,337
Repurchase of common stock	(2,633)	(329)	(17,770)		(13,076)	(31,175)
Stock options issued in purchase acquisition			4,472			4,472
Net income					369,873	369,873
Unrealized gain on marketable securities:						
Unrealized gain on marketable securities, net of tax of \$666				1,293		1,293
Less: reclassification adjustment for gains included in net income				(1,296)		(1,296)
Foreign currency translation adjustment				2,266		2,266
Amortization of prior service costs, net of tax of \$9				14		14
Balance, December 31, 2011	183,587	22,948	1,293,130	4,746	184,236	1,505,060
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of \$11,582	4,321	540	6,354			6,894
Stock-based compensation expense			39,920			39,920
Tax benefit related to stock options and restricted stock units			8,358			8,358
Net income					217,049	217,049
Unrealized gain on marketable securities:						
Unrealized gain on marketable securities, net of tax of \$169				2,106		2,106
Less: reclassification adjustment for gains included in net income				(799)		(799)
Amortization of prior service costs, net of tax of \$(134)				(233)		(233)
Balance, December 31, 2012	187,908	\$ 23,488	\$ 1,347,762	\$ 5,820	\$ 401,285	\$ 1,778,355

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

**Table of Contents****TERADYNE, INC.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Years Ended December 31,		
	2012	2011	2010
	(in thousands)		
<b>Cash flows from operating activities:</b>			
Net income	\$ 217,049	\$ 369,873	\$ 384,820
Less: Income from discontinued operations		1,545	5,128
Less: Gain on disposal of discontinued operations		24,371	
<b>Income from continuing operations</b>	<b>217,049</b>	<b>343,957</b>	<b>379,692</b>
<b>Adjustments to reconcile income from continuing operations to net cash provided by operating activities:</b>			
Depreciation	55,049	51,040	52,810
Amortization	87,750	53,338	40,706
Provision for excess and obsolete inventory	26,849	11,601	5,971
Stock-based compensation	39,920	32,337	29,777
Non cash charge for the sale of inventories revalued at the date of acquisition	6,089	12,178	
Retirement plans actuarial losses (gains)	23,320	13,564	(1,351)
Contingent consideration adjustment	(8,794)		
Tax benefit related to stock options and restricted stock units	(8,358)		
Deferred taxes	5,556	(146,949)	(1,519)
Other	498	1,509	2,528
<b>Changes in operating assets and liabilities, net of businesses sold and acquired:</b>			
Accounts receivable	(24,093)	66,367	(50,418)
Inventories	17,652	(615)	3,715
Other assets	(1,544)	(22,600)	8,460
Deferred revenue and customer advances	(14,627)	(68,359)	72,744
Accounts payable and other accrued expenses	(32,810)	(48,222)	62,201
Retirement plan contributions	(4,778)	(11,851)	(52,452)
Accrued income taxes	19,804	(8,727)	8,465
<b>Net cash provided by continuing operations</b>	<b>404,532</b>	<b>278,568</b>	<b>561,329</b>
Net cash (used for) provided by discontinued operations		(4,804)	4,957
<b>Net cash provided by operating activities</b>	<b>404,532</b>	<b>273,764</b>	<b>566,286</b>
<b>Cash flows from investing activities:</b>			
Purchases of property, plant and equipment	(119,080)	(86,097)	(76,044)
Purchases of available-for-sale marketable securities	(751,129)	(691,802)	(870,777)
Proceeds from maturities of available-for-sale marketable securities	171,054	518,483	136,837
Proceeds from sales of available-for-sale marketable securities	95,215	676,386	154,903
Proceeds from sales of trading marketable securities			26,330
Proceeds from life insurance			1,091
Acquisition of businesses, net of cash acquired		(537,489)	
<b>Net cash used for continuing operations</b>	<b>(603,940)</b>	<b>(120,519)</b>	<b>(627,660)</b>
Net cash provided by discontinued operations		39,062	
<b>Net cash used for investing activities</b>	<b>(603,940)</b>	<b>(81,457)</b>	<b>(627,660)</b>
<b>Cash flows from financing activities:</b>			
Issuance of common stock under stock option and stock purchase plans	18,476	17,385	44,679
Payments of long-term debt	(2,532)	(2,518)	(2,305)
Payments of contingent consideration	(59,710)		
Tax benefit related to stock options and restricted stock units	8,358		
Repurchase of common stock		(31,175)	

## Edgar Filing: TERADYNE, INC - Form 10-K

Net cash (used for) provided by financing activities	(35,408)	(16,308)	42,374
(Decrease) increase in cash and cash equivalents	(234,816)	175,999	(19,000)
Cash and cash equivalents at beginning of year	573,736	397,737	416,737
Cash and cash equivalents at end of year	\$ 338,920	\$ 573,736	\$ 397,737
Supplementary disclosure of cash flow information:			
Cash paid during the year for:			
Interest	\$ 8,602	\$ 8,645	\$ 8,695
Income taxes payments (refunds)	\$ 8,084	\$ 36,043	\$ (2,091)

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

---

**Table of Contents**

**TERADYNE, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**A. THE COMPANY**

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

semiconductor test ( Semiconductor Test ) systems;

wireless test ( Wireless Test ) systems; and

military/aerospace ( Mil/Aero ) test instrumentation and systems, storage test ( Storage Test ) systems, and circuit-board test and inspection ( Commercial Board Test ) systems (collectively these products represent Systems Test Group ).

**B. ACCOUNTING POLICIES**

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

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

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

**Revenue Recognition**

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

Teradyne's equipment has non-software and software components that function together to deliver the equipment's essential functionality. Revenue is recognized upon shipment or at delivery destination point, provided that customer acceptance criteria can be demonstrated prior to shipment. Certain contracts require Teradyne to perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, revenue is deferred until customer acceptance has been received. Teradyne also defers the portion of the sales price that is not due until acceptance, which represents deferred profit.

For multiple element arrangements, Teradyne allocates revenue to all deliverables based on their relative selling prices. In such circumstances, a hierarchy is used to determine the selling price for allocating revenue to deliverables as follows: (i) vendor-specific objective evidence of selling price ( VSOE ), (ii) third-party

**Table of Contents**

evidence of selling price ( TPE ), and (iii) best estimate of the selling price ( BEBP ). For a delivered item to be considered a separate unit the delivered item must have value to the customer on a standalone basis and the delivery or performance of the undelivered item must be considered probable and substantially in Teradyne's control.

Teradyne's post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customer's ability to use the product. Teradyne defers revenue for the selling price of installation and training. Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) 605-20, *Separately Priced Extended Warranty and Product Maintenance Contracts* and ASC 605-25, Revenue Recognition Multiple-Element Arrangements. Service revenue is recognized over the contractual period or as services are performed.

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

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

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

As of December 31, 2012 and 2011, deferred revenue and customer advances consisted of the following and are included in the short and long-term deferred revenue and customer advances:

	2012	2011
	(in thousands)	
Customer advances	\$ 39,613	\$ 70,001
Maintenance, training and extended warranty	51,198	33,953
Undelivered elements	6,773	7,939
Acceptance		318
<b>Total deferred revenue and customer advances</b>	<b>\$ 97,584</b>	<b>\$ 112,211</b>

**Table of Contents****Retirement and Postretirement Plans**

Effective January 1, 2012, Teradyne changed the method of recognizing actuarial gains and losses for its defined benefit pension plans and postretirement benefit plan and calculating the expected return on plan assets for its defined benefit pension plans. Historically, Teradyne recognized net actuarial gains and losses in accumulated other comprehensive income within shareholders' equity on its consolidated balance sheets on an annual basis and amortized them into operating results over the average remaining years of service of the plan participants, to the extent such gains and losses were outside of a range ( "corridor" ). Teradyne elected to immediately recognize net actuarial gains and losses and the change in the fair value of the plan assets in its operating results in the year in which they occur or upon any interim remeasurement of the plans. In addition, Teradyne used to calculate the expected return on plan assets using a calculated market-related value of plan assets. Effective January 1, 2012, Teradyne elected to calculate the expected return on plan assets using the fair value of the plan assets.

Teradyne believes that this new method is preferable as it eliminates the delay in recognizing gains and losses in its operating results and it will improve the transparency by faster recognition of the effects of economic and interest rate trends on plan obligations and investments. These actuarial gains and losses are generally measured annually as of December 31 and, accordingly, will be recorded during the fourth quarter of each year or upon any interim remeasurement of the plans. In accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 250, Accounting Changes and Error Corrections, all prior periods presented in this Annual Report on Form 10-K have been adjusted to apply the new accounting method retrospectively.

**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.

	<b>Amount (in thousands)</b>
Balance at December 31, 2009	\$ 6,435
Accruals for warranties issued during the period	17,084
Accruals related to pre-existing warranties	(1,338)
Settlements made during the period	(12,295)
<b>Balance at December 31, 2010</b>	<b>9,886</b>
Acquisition	327
Accruals for warranties issued during the period	13,167
Accruals related to pre-existing warranties	(2,689)
Settlements made during the period	(12,538)
<b>Balance at December 31, 2011</b>	<b>8,153</b>
Accruals for warranties issued during the period	14,704
Accruals related to pre-existing warranties	877
Settlements made during the period	(13,948)
<b>Balance at December 31, 2012</b>	<b>\$ 9,786</b>



**Table of Contents**

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

	<b>Amount (in thousands)</b>
Balance at December 31, 2009	\$ 4,462
Deferral of new extended warranty revenue	7,696
Recognition of extended warranty deferred revenue	(3,186)
Balance at December 31, 2010	8,972
Acquisition	3,151
Deferral of new extended warranty revenue	8,659
Recognition of extended warranty deferred revenue	(8,040)
Balance at December 31, 2011	12,742
Deferral of new extended warranty revenue	22,344
Recognition of extended warranty deferred revenue	(8,099)
Balance at December 31, 2012	\$ 26,987

**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 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

## Edgar Filing: TERADYNE, INC - Form 10-K

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.

---

## **Table of Contents**

As defined in ASC 820-10 *Fair Value Measurements and Disclosures*, 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 years ended December 31, 2012, 2011 and 2010. 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 1 and 2, with the exception of LitePoint acquisition-related contingent consideration, which was classified within Level 3. Teradyne determines the fair value of acquisition-related contingent consideration based on assessment of the probability that it would be required to make such payment.

### **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. In September 2011, the FASB issued new guidance which provides an entity with the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If an entity determines this is the case, it is required to perform the two-step goodwill impairment test to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized. If an entity determines that it is more-likely-than-not that the fair value of the reporting unit is greater than its carrying amounts, the two-step goodwill impairment test is not required. This new guidance is effective for fiscal years beginning after December 15, 2011 with early adoption permitted. Teradyne adopted this guidance as of the fourth quarter of 2011.

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

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

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

**Table of Contents**

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

Buildings	40 years
Building improvements	5 to 10 years
Leasehold improvements	Lesser of lease term or useful life
Furniture and fixtures	10 years
Test systems manufactured internally	6 years
Machinery and equipment	3 to 5 years
Software	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, engineering and development, 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, 2012, 2011 and 2010 was \$6.0 million, \$7.8 million and \$12.2 million, respectively.

**Engineering and Development Costs**

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

**Stock Compensation Plans and Employee Stock Purchase Plan***Equity Plans and Employee Stock Purchase Plan*

Stock-based compensation expense is based on the grant-date fair value estimated in accordance with the provisions of ASC 718-10

*Compensation Stock Compensation.* As required by ASC 718-10, Teradyne has made an estimate of expected forfeitures and is recognizing compensation costs only for those stock-based compensation awards expected to vest.

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

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

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

**Table of Contents**

are not considered issued and outstanding until they become vested. Teradyne expenses the cost of the restricted stock unit awards subject to time-based vesting, which is determined to be the fair market value of the shares at the date of grant, ratably over the period during which the restrictions lapse.

Under the ESPP, eligible employees may purchase shares of common stock through regular payroll deductions of up to 10% of their eligible compensation, to a maximum of shares with a fair market value of \$25,000 per calendar year, not to exceed 6,000 shares. The price paid for the common stock is equal to 85% of the lower of the fair market value of Teradyne's common stock on the first business day and the last business day of the purchase period. Beginning in January 2013, the price paid will be equal to 85% of the stock price on the last business day of the purchase period. There are two six-month purchase periods in each fiscal year.

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

	2012	2011 (in thousands)	2010
Cost of revenue	\$ 6,604	\$ 7,097	\$ 6,536
Engineering and development	13,589	10,001	9,209
Selling and administrative	19,727	15,239	14,032
Stock-based compensation	39,920	32,337	29,777
Income tax benefit	(9,548)	(8,509)	
Total stock-based compensation expense after income taxes	\$ 30,372	\$ 23,828	\$ 29,777

*Valuation Assumptions*

The total number of stock options granted in 2012, 2011 and 2010 were 0.2 million, 0.1 million and 0.3 million, respectively, at the weighted average grant date fair value of \$6.85, \$6.74 and \$4.10, respectively. The fair value of the stock options at grant date was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2012	2011	2010
Expected life (years)	3.50	4.00	4.75
Interest rate	0.4%	1.5%	2.4%
Volatility-historical	56.0%	52.1%	48.8%
Dividend yield	0.0%	0.0%	0.0%

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

The weighted-average fair value of employee stock purchase rights granted pursuant to the ESPP in the first and last six months of 2012 was \$4.09 and \$3.42, respectively, the first and last six months of 2011 was \$3.66 and \$4.01, respectively, and the first and last six months of 2010 was \$3.05 and \$2.77, respectively. The fair value of the employees' purchase rights was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2012	2011	2010
Expected life (years)	0.5	0.5	0.5
Interest rate	0.1%	0.1%	0.2%
Volatility-historical	42.7%	41.0%	48.0%
Dividend yield	0.0%	0.0%	0.0%



---

## **Table of Contents**

As of December 31, 2012, there were 2.8 million shares available for grant under the ESPP.

### **Income Taxes**

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The measurement of deferred tax assets is reduced by a valuation allowance if, based upon weighted available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. U.S. income taxes are not provided for on the earnings of non-U.S. subsidiaries, except Japan, 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. Teradyne uses the with-and-without method for calculating excess stock compensation deductions and does not take into account any indirect impacts of excess stock compensation deductions on its research and development tax credits, domestic production activities deduction, and other differences between financial reporting and tax reporting.

On January 2, 2013, the American Taxpayer Relief Act of 2012 was enacted which retrospectively reinstated the research and development tax credit for 2012 and extended it through December 31, 2013. As a result, in the first quarter of 2013, Teradyne expects to record a discrete benefit related to 2012 of approximately \$7.0 million.

### **Advertising Costs**

Teradyne expenses all advertising costs as incurred. Advertising costs were \$1.6 million, \$1.0 million and \$0.6 million in 2012, 2011 and 2010, respectively.

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

The functional currency for all non-U.S. subsidiaries is the U.S. dollar. 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 into the functional currency using historical exchange rates. Net foreign exchange gains and losses resulting from re-measurement are included in interest expense and other and were a loss of \$4.5 million, a gain of \$0.9 million and a gain of \$2.5 million, respectively, for the years ended December 31, 2012, 2011 and 2010. These amounts do not reflect the corresponding gain (loss) from foreign exchange contracts. See Note H: Financial Instruments regarding foreign exchange contracts. Revenue and expense amounts are translated using an average of exchange rates in effect during the period.

### **Net Income (Loss) per Common Share**

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

Prior to the fourth quarter of 2010, net income for diluted net income (loss) per share includes an adjustment related to the convertible notes that represents interest expense that would have not been recorded if the notes converted at the beginning of the period. Dilutive potential common shares include incremental shares from assumed conversion of the convertible notes and the convertible notes hedge warrant shares. Incremental shares from assumed conversion of the convertible notes are calculated using the difference between the average Teradyne stock price for the period and the conversion price of \$5.48, multiplied by the 34.7 million shares that will be issued upon conversion. The result of this calculation, representing the total intrinsic value of the convertible debt, is divided by the average Teradyne stock price for the period. Convertible notes hedge warrant shares are calculated using the difference between the average Teradyne stock price for the period and the warrant price of \$7.67, multiplied by the 34.7 million shares that will be issued upon conversion. The result of

## **Table of Contents**

this calculation, representing the total intrinsic value of the warrant, is divided by the average Teradyne stock price for the period. Teradyne's call option for 34.7 million shares at an exercise price of \$5.48 is not used in the GAAP earnings per share calculation as its effect would be anti-dilutive.

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

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

Comprehensive income (loss) includes net income (loss), unrealized pension prior service costs and benefits, unrealized gains and losses on certain investments in debt and equity securities and foreign currency translation adjustments.

### **C. CHANGE IN ACCOUNTING PRINCIPLE**

Effective January 1, 2012, Teradyne changed the method of recognizing actuarial gains and losses for its defined benefit pension plans and postretirement benefit plan and calculating the expected return on plan assets for its defined benefit pension plans. Historically, Teradyne recognized net actuarial gains and losses in accumulated other comprehensive income within shareholders' equity on the consolidated balance sheets on an annual basis and amortized them into operating results over the average remaining years of service of the plan participants, to the extent such gains and losses were outside of a range (corridor). Teradyne has elected to immediately recognize net actuarial gains and losses and the change in the fair value of the plan assets in its operating results in the year in which they occur or upon any interim remeasurement of the plans. In addition, Teradyne used to calculate the expected return on plan assets using a calculated market-related value of plan assets. Effective January 1, 2012, Teradyne elected to calculate the expected return on plan assets using the fair value of the plan assets.

Teradyne believes that this new method is preferable as it eliminates the delay in recognizing gains and losses in its operating results and it will improve the transparency by faster recognition of the effects of economic and interest rate trends on plan obligation and investments. These actuarial gains and losses are generally measured annually as of December 31 and, accordingly, will be recorded during the fourth quarter of each year or upon any interim remeasurement of the plans. In accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 250, Accounting Changes and Error Corrections, all prior periods presented in this Annual Report on Form 10-K have been adjusted to apply the new accounting method retrospectively.

Had these changes not been made, net income for the year ended December 31, 2012 would have been \$207.0 million compared to \$217.0 million actually recorded. Diluted earnings per share would have been \$0.90 compared to \$0.94 for the year ended December 31, 2012.

The effects of the change in accounting principle on the condensed consolidated financial statements for 2011 and 2010 are presented below. We have condensed the comparative financial statements for financial statement line items that were not affected by the change in accounting principle.



**Table of Contents****Condensed Consolidated Balance Sheets**

	Originally Reported	December 31, 2011 Effect of Accounting Change (in thousands)	As Adjusted
<b>Assets:</b>			
Total assets	\$ 2,188,639	\$	\$ 2,188,639
<b>Liabilities:</b>			
Total liabilities	683,579		683,579
<b>Shareholders' Equity:</b>			
Common stock	22,948		22,948
Additional paid-in capital	1,293,130		1,293,130
Accumulated other comprehensive (loss) income	(129,875)	134,621	4,746
Retained earnings	318,857	(134,621)	184,236
Total shareholders' equity	1,505,060		1,505,060
Total liabilities and shareholders' equity	\$ 2,188,639	\$	\$ 2,188,639

**Condensed Consolidated Statements of Operations**

	Originally Reported	For the Year Ended December 31, 2011 Effect of Accounting Change (in thousands, except per share amounts)	As Adjusted
Net revenues	\$ 1,429,061	\$	\$ 1,429,061
Cost of revenues	715,368	1,870	717,238
Gross profit	713,693	(1,870)	711,823
Operating expenses:			
Engineering and development	195,600	2,198	197,798
Selling and administrative	233,711	1,608	235,319
Acquired intangible asset amortization	40,465		40,465
Restructuring and other	8,203	(1,460)	6,743
Total operating expenses	477,979	2,346	480,325
Income from operations	235,714	(4,216)	231,498
Interest income	6,617		6,617
Interest expense and other	(23,694)		(23,694)
Income from continuing operations before income taxes	218,637	(4,216)	214,421
Income tax benefit	(129,256)	(280)	(129,536)
Income from continuing operations	347,893	(3,936)	343,957

Edgar Filing: TERADYNE, INC - Form 10-K

Income from discontinued operations before income taxes	1,278		1,278
Benefit from income taxes	(267)		(267)
Income from discontinued operations	1,545		1,545
Gain on disposal of discontinued operations (net of tax of \$4,578)	24,371		24,371
Net income	\$ 373,809	\$ (3,936)	\$ 369,873

**Table of Contents**

	Originally Reported	For the Year Ended December 31, 2011 Effect of Accounting Change (in thousands, except per share amounts)	As Adjusted
Net income per common share from continuing operations:			
Basic	\$ 1.88	\$ (0.02)	\$ 1.86
Diluted	\$ 1.53	\$ (0.01)	\$ 1.52
Net income per common share:			
Basic	\$ 2.02	\$ (0.02)	\$ 2.00
Diluted	\$ 1.65	\$ (0.02)	\$ 1.63
Weighted average common shares basic	184,683		184,683
Weighted average common shares diluted	226,820		226,820

	Originally Reported	For the Year Ended December 31, 2010 Effect of Accounting Change (in thousands, except per share amounts)	As Adjusted
Net revenues	\$ 1,566,162	\$	\$ 1,566,162
Cost of revenues	710,196	(1,617)	708,579
Gross profit	855,966	1,617	857,583
Operating expenses:			
Engineering and development	193,017	(1,154)	191,863
Selling and administrative	226,820	(1,487)	225,333
Acquired intangible asset amortization	29,250		29,250
Restructuring and other	(817)	(2,983)	(3,800)
Total operating expenses	448,270	(5,624)	442,646
Income from operations	407,696	7,241	414,937
Interest income	5,861		5,861
Interest expense and other	(24,451)		(24,451)
Income from continuing operations before income taxes	389,106	7,241	396,347
Provision for income taxes	14,504	2,151	16,655
Income from continuing operations	374,602	5,090	379,692
Income from discontinued operations before income taxes	5,406		5,406
Provision for income taxes	278		278
Income from discontinued operations	5,128		5,128
Net income	\$ 379,730	\$ 5,090	\$ 384,820

Edgar Filing: TERADYNE, INC - Form 10-K

Net income per common share from continuing operations:

Basic	\$	2.08	\$	0.03	\$	2.11
Diluted	\$	1.71	\$	0.02	\$	1.73

**Table of Contents**

	Originally Reported	For the Year Ended December 31, 2010 Effect of Accounting Change (in thousands, except per share amounts)	As Adjusted
Net income per common share:			
Basic	\$ 2.11	\$ 0.03	\$ 2.14
Diluted	\$ 1.73	\$ 0.02	\$ 1.75
Weighted average common share basic	179,924		179,924
Weighted average common share diluted	226,807		226,807

**Condensed Consolidated Statements of Comprehensive Income**

	Originally Reported	For the Year Ended December 31, 2011 Effect of Accounting Change (in thousands)	As Adjusted
Net income	\$ 373,809	\$ (3,936)	\$ 369,873
Other comprehensive income, net of tax:			
Foreign currency translation reclassification adjustment included in net income	2,266		2,266
Unrealized gains on marketable securities	(3)		(3)
Defined benefit pension and post-retirement plans:			
Actuarial losses arising during period, net of tax of (\$3,427), \$3,427	(9,496)	9,496	
Less: Amortization included in net periodic pension and postretirement costs:			
Actuarial losses, net of tax of \$3,385, (\$3,385)	5,560	(5,560)	
Prior service costs, net of tax of \$9	14		14
	5,574	(5,560)	14
Other comprehensive (loss) income	(1,659)	3,936	2,277
Comprehensive income	\$ 372,150	\$	\$ 372,150

**Table of Contents**

	<b>For the Year Ended December 31, 2010</b>		
	<b>Originally Reported</b>	<b>Effect of Accounting Change (in thousands)</b>	<b>As Adjusted</b>
Net income	\$ 379,730	\$ 5,090	\$ 384,820
Other comprehensive income, net of tax:			
Foreign currency translation reclassification adjustment included in net income	(349)		(349)
Unrealized gains on marketable securities	1,559		1,559
Defined benefit pension and post-retirement plans:			
Actuarial gains arising during period, net of tax of (\$1,826), \$1,826	(288)	288	
Prior service cost arising during period, net of tax of \$0	3,279		3,279
Less: Amortization included in net periodic pension and post-retirement costs:			
Actuarial losses, net of tax of \$133, (\$133)	5,378	(5,378)	
Prior service costs, net of tax of \$0	310		310
	5,688	(5,378)	310
Other comprehensive income	9,889	(5,090)	4,799
Comprehensive income	\$ 389,619	\$	\$ 389,619

**Condensed Consolidated Statements of Cash Flows**

	<b>For the Year Ended December 31, 2011</b>		
	<b>Originally Reported</b>	<b>Effect of Accounting Change (in thousands)</b>	<b>As Adjusted</b>
Cash flows from operating activities:			
Net income	\$ 373,809	\$ (3,936)	\$ 369,873
Less: Income from discontinued operations	1,545		1,545
Less: Gain on disposal of discontinued operations	24,371		24,371
Income from continuing operations	347,893	(3,936)	343,957
Adjustments to reconcile income from continuing operations to net cash provided by operating activities:			
Depreciation	51,040		51,040
Amortization	62,284	(8,946)	53,338
Stock-based compensation	32,337		32,337
Provision for excess and obsolete inventory	11,601		11,601
Non cash charge for the sale of inventories revalued at the date of acquisition	12,178		12,178
Retirement plan actuarial losses		13,564	13,564
Deferred taxes	(146,669)	(280)	(146,949)
Other	1,911	(402)	1,509
Changes in operating assets and liabilities, net of businesses sold and acquired:			
Accounts receivable	66,367		66,367
Inventories	(615)		(615)
Other assets	(22,600)		(22,600)
Deferred revenue and customer advances	(68,359)		(68,359)
Accounts payable and other accrued expenses	(48,222)		(48,222)
Retirement plan contributions	(11,851)		(11,851)
Accrued income taxes	(8,727)		(8,727)



**Table of Contents**

	<b>For the Year Ended December 31, 2011</b>		
	<b>Originally Reported</b>	<b>Effect of Accounting Change (in thousands)</b>	<b>As Adjusted</b>
Net cash provided by continuing operations	\$ 278,568	\$	\$ 278,568
Net cash used for discontinued operations	(4,804)		(4,804)
Net cash provided by operating activities	273,764		273,764
Net cash used for investing activities	(81,457)		(81,457)
Net cash used for financing activities	(16,308)		(16,308)
Increase in cash and cash equivalents	175,999		175,999
Cash and cash equivalents at beginning of year	397,737		397,737
Cash and cash equivalents at end of year	\$ 573,736	\$	\$ 573,736

	<b>For the Year Ended December 31, 2010</b>		
	<b>Originally Reported</b>	<b>Effect of Accounting Change (in thousands)</b>	<b>As Adjusted</b>
<b>Cash flows from operating activities:</b>			
Net income	\$ 379,730	\$ 5,090	\$ 384,820
Less: Income from discontinued operations	5,128		5,128
Income from continuing operations	374,602	5,090	379,692
<b>Adjustments to reconcile income from continuing operations to net cash provided by operating activities:</b>			
Depreciation	52,810		52,810
Amortization	46,217	(5,511)	40,706
Stock-based compensation	29,777		29,777
Provision for excess and obsolete inventory	5,971		5,971
Retirement plan actuarial losses		(1,351)	(1,351)
Deferred taxes	(3,670)	2,151	(1,519)
Other	2,907	(379)	2,528
<b>Changes in operating assets and liabilities, net of businesses sold:</b>			
Accounts receivable	(50,418)		(50,418)
Inventories	3,715		3,715
Other assets	8,460		8,460
Deferred revenue and customer advances	72,744		72,744
Accounts payable and other accrued expenses	62,201		62,201
Retirement plan contributions	(52,452)		(52,452)
Accrued income taxes	8,465		8,465
Net cash provided by continuing operations	561,329		561,329
Net cash provided by discontinued operations	4,957		4,957
Net cash provided by operating activities	566,286		566,286
Net cash used for investing activities	(627,660)		(627,660)
Net cash provided by financing activities	42,374		42,374
Decrease in cash and cash equivalents	(19,000)		(19,000)



Edgar Filing: TERADYNE, INC - Form 10-K

Cash and cash equivalents at beginning of year	416,737		416,737
Cash and cash equivalents at end of year	\$ 397,737	\$	\$ 397,737

**Table of Contents****D. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

In December 2011, the FASB issued ASU No. 2011-11, *Disclosures about Offsetting Assets and Liabilities*. This ASU is intended to enhance the understanding of the effects of netting arrangements on an entity's financial statements, including financial instruments and derivative instruments that are either offset or subject to a master netting arrangement. The scope of this ASU includes sale and repurchase agreements, reverse sale and repurchase agreements, and securities borrowing and lending arrangements. In January 2013, the FASB issued ASU No. 2013-01 *Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities*. This standard provided additional guidance on the scope of ASU 2011-11. The provisions of this ASU are effective for interim and annual periods beginning on or after January 1, 2013.

In February 2013, the FASB issued ASU No. 2013-02, *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*. Under this ASU, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income (AOCI) by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. The provisions of this ASU are effective for interim and annual periods beginning on or after January 1, 2013.

**E. DISCONTINUED OPERATIONS**

On March 21, 2011, Teradyne completed the sale of its Diagnostic Solutions business unit, which was included in the Systems Test Group segment, to SPX Corporation for \$40.2 million in cash. Teradyne sold this business as its growth potential as a stand-alone business within Teradyne was significantly less than if it was part of a larger automotive supplier. The financial information for Diagnostic Solutions has been reclassified to discontinued operations for all periods presented. Net revenues and income from discontinued operations for the years ended December 31, 2012, 2011 and 2010 were as follows:

	2012	2011	2010
		(in thousands)	
Net revenues	\$	\$ 9,086	\$ 42,488
Income from discontinued operation before income taxes	\$	\$ 1,278	\$ 5,406
Gain from disposal of discontinued operation before income taxes		28,949	
Income tax provision		4,311	278
Income from discontinued operations	\$	\$ 25,916	\$ 5,128

**F. ACQUISITIONS****Business****LitePoint Corporation**

On October 5, 2011, Teradyne completed its acquisition of LitePoint Corporation (LitePoint) located in Sunnyvale, California. The total purchase price of \$646.0 million consisted of \$572.7 million of cash paid to acquire the outstanding common and preferred stock of LitePoint, \$68.9 million in fair value of contingent consideration payable upon achievement of certain revenue targets through 2012 and \$4.5 million in fair value of assumed vested stock options, which were converted into stock options to purchase Teradyne's common stock. The fair value of stock options was estimated using the following weighted average assumptions:

Expected life (years)	6.2
Expected volatility	49.1%
Risk-free interest rate	1.3%
Dividend yield	0.0%



**Table of Contents**

LitePoint designs, develops, and supports advanced wireless test solutions for the development and manufacturing of wireless devices, including smart phones, tablets, notebooks/laptops, personal computer peripherals, and other Wi-Fi enabled devices. LitePoint's IQ product line consists of cellular and connectivity test solutions used by developers and manufacturers of wireless devices and consumer electronics. LitePoint is Teradyne's Wireless Test operating and reportable segment.

The LitePoint 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 LitePoint 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 \$349.3 million was allocated to goodwill, which is not deductible for tax purposes. The following represents the allocation of the purchase price:

	<b>Purchase Price Allocation (in thousands)</b>
Goodwill	\$ 349,272
Intangible assets	310,500
<b>Tangible assets acquired and liabilities assumed:</b>	
Cash, cash equivalents and short term marketable securities	61,250
Other current assets	75,615
Non-current assets	5,838
Accounts payable and current liabilities	(37,177)
Long-term deferred tax liabilities	(115,463)
Other long-term liabilities	(3,788)
 Total purchase price	 \$ 646,047

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

	<b>Fair Value (in thousands)</b>	<b>Estimated Useful Life (in years)</b>
Developed technology	\$ 237,100	6.4
Customer relationships	53,700	7.0
Tradenames	19,000	7.0
Customer backlog	700	0.3
 Total intangible assets	 \$ 310,500	 6.5

For the period from October 5, 2011 to December 31, 2011, LitePoint contributed \$28.4 million of revenues and had a \$(20.6) million loss from continuing operations before income taxes.

**Table of Contents**

The following unaudited pro forma information gives effect to the acquisition of LitePoint as if the acquisition occurred on January 1, 2010. The unaudited pro forma results are not necessarily indicative of what actually would have occurred had the acquisition been in effect for the periods presented:

	<b>For the Year Ended</b>	
	<b>December 31,</b>	<b>December 31,</b>
	<b>2011</b>	<b>2010</b>
	<b>(in thousands, except per share amounts)</b>	
Revenue	\$ 1,527,044	\$ 1,652,153
Income from continuing operations	\$ 357,060	\$ 309,549
Net income	\$ 382,976	\$ 314,972
Income from continuing operations per common share:		
Basic	\$ 1.93	\$ 1.72
Diluted	\$ 1.56	\$ 1.42
Net income per common share:		
Basic	\$ 2.07	\$ 1.75
Diluted	\$ 1.67	\$ 1.44

Pro forma results for the year ended December 31, 2010 include non-recurring expenses related to acquired inventory fair value adjustment of \$18.3 million and \$13.3 million of transaction fees incurred by both Teradyne and LitePoint.

**G. PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment consist of the following:

	<b>2012</b>	<b>2011</b>
	<b>(in thousands)</b>	
Land	\$ 16,561	\$ 16,561
Buildings	106,706	105,846
Machinery and equipment	606,414	556,661
Furniture and fixtures, and software	93,683	91,948
Leasehold improvements	29,585	25,898
Construction in progress	3,425	1,280
	856,374	798,194
Less: accumulated depreciation and amortization	590,592	565,987
	\$ 265,782	\$ 232,207

Depreciation and amortization of property, plant and equipment for the years ended December 31, 2012, 2011 and 2010 was \$55.0 million, \$51.0 million and \$52.8 million, respectively.

**H. 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.



## Table of Contents

### Marketable Securities

Teradyne accounts for its investments in debt and equity securities in accordance with the provisions of ASC 320-10, *Investments Debt and Equity Securities*. ASC 320-10 requires that certain debt and equity securities be classified into one of three categories; trading, available-for-sale or held-to-maturity securities. On a quarterly basis, Teradyne reviews its investments to identify and evaluate those that have an indication of a potential other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include:

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

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

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

Teradyne uses the market and income approach techniques to value its financial instruments and there were no changes in valuation techniques during the years ended December 31, 2012, 2011 and 2010. As defined in ASC 820-10 *Fair Value Measurements and Disclosures*, 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. 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.

Most of Teradyne's fixed income securities are classified as Level 2, with the exception of U.S. Treasury securities and investments in equity and debt mutual funds, which are classified as Level 1, and contingent consideration, which is classified as Level 3. The majority of Level 2 securities are priced by third party pricing vendors. These pricing vendors utilize the most recent observable market information in pricing these securities or, if specific prices are not available, use other observable inputs like market transactions involving identical or comparable securities.

There were no realized losses recorded in 2012, 2011 and 2010. Realized gains recorded in 2012, 2011 and 2010 were \$1.4 million, \$2.7 million and \$3.2 million, respectively. Realized gains are included in interest income. Unrealized gains and losses are included in accumulated other comprehensive income (loss). The cost of securities sold is based on the specific identification method.

During the years ended December 31, 2012 and 2011, there were no transfers in or out of Level 1, Level 2 or Level 3 financial instruments.

**Table of Contents**

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, 2012 and 2011.

	December 31, 2012			Total
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
(in thousands)				
<b>Assets</b>				
Cash	\$ 139,354	\$	\$	\$ 139,354
Cash equivalents	183,039	16,527		199,566
Available for sale securities:				
U.S. Treasury securities	312,116			312,116
U.S. government agency securities		217,655		217,655
Commercial paper		70,434		70,434
Corporate debt securities		55,755		55,755
Equity and debt mutual funds	9,717			9,717
Certificates of deposit and time deposits		1,627		1,627
Non-U.S. government securities		84		84
<b>Total</b>	<b>644,226</b>	<b>362,082</b>		<b>1,006,308</b>
Derivatives		121		121
<b>Total</b>	<b>\$ 644,226</b>	<b>\$ 362,203</b>	<b>\$</b>	<b>\$ 1,006,429</b>
<b>Liabilities</b>				
Contingent consideration	\$	\$	\$ 388	\$ 388
<b>Total</b>	<b>\$</b>	<b>\$</b>	<b>\$ 388</b>	<b>\$ 388</b>

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
(in thousands)				
<b>Assets</b>				
Cash and cash equivalents	\$ 322,393	\$ 16,527	\$	\$ 338,920
Marketable securities	239,192	192,324		431,516
Long-term marketable securities	82,641	153,231		235,872
Prepayments and other current assets		121		121
<b>Total</b>	<b>\$ 644,226</b>	<b>\$ 362,203</b>	<b>\$</b>	<b>\$ 1,006,429</b>
<b>Liabilities</b>				
Contingent consideration	\$	\$	\$ 388	\$ 388
<b>Total</b>	<b>\$</b>	<b>\$</b>	<b>\$ 388</b>	<b>\$ 388</b>





**Table of Contents**

	December 31, 2011			Total
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
(in thousands)				
<b>Assets</b>				
Cash	\$ 161,243	\$	\$	\$ 161,243
Cash equivalents	396,329	16,164		412,493
Available for sale securities:				
U.S. government agency securities		83,197		83,197
Corporate debt securities		44,829		44,829
Commercial paper		22,075		22,075
U.S. Treasury securities	14,180			14,180
Equity and debt mutual funds	8,237			8,237
Certificates of deposit and time deposits		8,117		8,117
Non-U.S. government securities		274		274
<b>Total</b>	<b>\$ 579,989</b>	<b>\$ 174,656</b>	<b>\$</b>	<b>\$ 754,645</b>
<b>Liabilities</b>				
Derivatives	\$	\$ 314	\$	\$ 314
Contingent consideration			68,892	68,892
<b>Total</b>	<b>\$</b>	<b>\$ 314</b>	<b>\$ 68,892</b>	<b>\$ 69,206</b>

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
(in thousands)				
<b>Assets</b>				
Cash and cash equivalents	\$ 557,572	\$ 16,164	\$	\$ 573,736
Marketable securities	9,044	87,458		96,502
Long-term marketable securities	13,373	71,034		84,407
	\$ 579,989	\$ 174,656	\$	\$ 754,645
<b>Liabilities</b>				
Other accrued liabilities	\$	\$ 314	\$	\$ 314
Contingent consideration			68,892	68,892
		\$ 314	\$ 68,892	\$ 69,206

Changes in the fair value of Level 3 contingent consideration for the year ended December 31, 2012 and December 31, 2011 were as follows:

	Contingent Consideration (in thousands)
Balance at December 31, 2010	\$
Acquisition of LitePoint	68,892

Edgar Filing: TERADYNE, INC - Form 10-K

Balance at December 31, 2011	68,892
Fair value adjustment	(8,794)
Payments	(59,710)
Balance at December 31, 2012	\$ 388

**Table of Contents**

The carrying amounts and fair values of financial instruments at December 31, 2012 and 2011 were as follows:

	December 31, 2012		December 31, 2011	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(in thousands)			
Cash and cash equivalents	\$ 338,920	\$ 338,920	\$ 573,736	\$ 573,736
Marketable securities	667,388	667,388	180,909	180,909
Convertible debt (1)	169,896	589,000	156,098	485,925
Japan loan	3,491	3,491	6,431	6,431

(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.

The following tables summarize the composition of available for sale marketable securities at December 31, 2012 and 2011:

	December 31, 2012				Fair Market Value of Investments with Unrealized Losses
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	
	Available-for-Sale				
	(in thousands)				
U.S. Treasury securities	\$ 311,915	\$ 216	\$ (15)	\$ 312,116	\$ 1,018
U.S. government agency securities	217,396	262	(3)	217,655	9,018
Commercial paper	70,431	9	(6)	70,434	25,209
Corporate debt securities	53,405	2,414	(64)	55,755	23,255
Equity and debt mutual funds	8,767	961	(11)	9,717	600
Certificates of deposit and time deposits	1,627			1,627	
Non-U.S. government securities	84			84	
	\$ 663,625	\$ 3,862	\$ (99)	\$ 667,388	\$ 59,100

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market
					Value of Investments with Unrealized Losses
	(in thousands)				
Marketable securities	\$ 431,324	\$ 203	\$ (11)	\$ 431,516	\$ 41,110
Long-term marketable securities	232,301	3,659	(88)	235,872	17,990
	\$ 663,625	\$ 3,862	\$ (99)	\$ 667,388	\$ 59,100

**Table of Contents**

	December 31, 2011				Fair Market Value of Investments with Unrealized Losses
	Cost	Available-for-Sale		Fair Market Value	
		Unrealized Gain	Unrealized (Loss) (in thousands)		
U.S. government agency securities	\$ 83,070	\$ 152	\$ (25)	\$ 83,197	\$ 28,510
Corporate debt securities	43,077	1,893	(141)	44,829	17,033
Commercial paper	22,083	2	(10)	22,075	9,479
U.S. Treasury securities	14,141	39		14,180	
Equity and debt mutual funds	7,876	477	(116)	8,237	3,749
Certificates of deposit and time deposits	8,122		(5)	8,117	5,800
Non-U.S. government securities	256	18		274	
	\$ 178,625	\$ 2,581	\$ (297)	\$ 180,909	\$ 64,571

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss) (in thousands)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
Marketable securities	\$ 96,518	\$ 24	\$ (40)	\$ 96,502	\$ 35,595
Long-term marketable securities	82,107	2,557	(257)	84,407	28,976
	\$ 178,625	\$ 2,581	\$ (297)	\$ 180,909	\$ 64,571

As of December 31, 2012, the fair market value of investments with unrealized losses totaled \$59.1 million. There were no unrealized losses greater than one year. As of December 31, 2011, the fair market value of investments with unrealized losses totaled \$64.6 million. Of this value, \$2.4 million had unrealized losses for greater than one year and \$62.2 million had unrealized losses for less than one year. Teradyne reviews its investments to identify and evaluate investments that have an indication of possible impairment. Based on this review, Teradyne determined that the unrealized losses related to these investments, at December 31, 2012 and 2011, were temporary.

The contractual maturities of investments held at December 31, 2012 were as follows:

	Cost	Fair Value
	(in thousands)	
Due within one year	\$ 431,324	\$ 431,516
Due after 1 year through 5 years	208,754	209,902
Due after 5 years through 10 years	7,493	7,773
Due after 10 years	16,054	18,197
Total	\$ 663,625	\$ 667,388

**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.

## Edgar Filing: TERADYNE, INC - Form 10-K

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

**Table of Contents**

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, 2012 and 2011, 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, 2012			December 31, 2011		
	Buy Position	Sell Position	Net Total	Buy Position	Sell Position	Net Total
			(in millions)			
Japanese Yen	\$	\$ 36.3	\$ 36.3	\$	\$ 50.8	\$ 50.8
Taiwan Dollar		4.2	4.2	(0.8)	6.3	5.5
British Pound Sterling		5.5	5.5		10.1	10.1
Euro	(16.8)	1.3	(15.5)	(15.2)	2.1	(13.1)
Total	\$ (16.8)	\$ 47.3	\$ 30.5	\$ (16.0)	\$ 69.3	\$ 53.3

The fair value of the outstanding contracts was a gain of \$0.1 million and a loss of \$0.3 million at December 31, 2012 and 2011, respectively.

In 2012, Teradyne recorded net realized gains of \$4.0 million related to foreign currency forward contracts hedging net monetary positions. In 2011 and 2010, Teradyne recorded net realized losses of \$1.3 million and \$2.3 million, respectively, related to foreign currency forward contracts hedging net monetary positions. Gains and losses on foreign currency forward contracts and foreign currency remeasurement gains and losses on monetary assets and liabilities are included in interest expense and other.

The following table summarizes the fair value of derivative instruments as of December 31, 2012 and 2011:

Balance Sheet Location	December 31,	December 31,
	2012	2011
	(in thousands)	
Derivatives not designated as hedging instruments:		
Foreign exchange contracts	\$ 121	\$
Foreign exchange contracts		314
Total derivatives	\$ 121	\$ 314

The following table summarizes the effect of derivative instruments in the statement of operations recognized for the years ended December 31, 2012, 2011 and 2010 (the table does not reflect the corresponding gain (loss) from the remeasurement of the balance sheet):

Location of Gains (Losses) Recognized in Statement of Operations	December 31,	December 31,	December 31,
	2012	2011	2010
	(in thousands)		
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	\$ 3,974	\$ (1,327)	\$ (2,289)
Total derivatives	\$ 3,974	\$ (1,327)	\$ (2,289)

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





**Table of Contents****Concentration of Credit Risk**

Financial instruments which potentially subject Teradyne to concentrations of credit risk consist principally of cash equivalents, marketable securities, forward currency contracts and accounts receivable. Teradyne's cash equivalents consist primarily of money market funds invested in U.S. Treasuries and government agencies. Teradyne's fixed income available-for-sale marketable securities have a minimum rating of AA by one or more of the major credit rating agencies. Teradyne places foreign currency forward contracts with high credit-quality financial institutions in order to minimize credit risk exposure. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of geographically dispersed customers. Teradyne performs ongoing credit evaluations of its customers' financial condition and from time to time may require customers to provide a letter of credit from a bank to secure accounts receivable.

**I. DEBT**

Long-term debt at December 31, 2012 and 2011 consisted of the following:

	2012 (in thousands)	2011 (in thousands)
Convertible senior notes	\$ 169,896	\$ 156,098
Japan loan	3,491	6,431
<b>Total debt</b>	<b>173,387</b>	<b>162,529</b>
Current portion of long-term debt	2,328	2,573
<b>Long-term debt</b>	<b>\$ 171,059</b>	<b>\$ 159,956</b>

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

Payments Due by Period	Debt Principal Payment (in thousands)
2013	\$ 2,328
2014	191,163
2015	
2016	
2017	
Beyond 2017	
<b>Total</b>	<b>\$ 193,491</b>

**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 0.8%. 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 \$12.3 million as of December 31, 2012) 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, 2012, approximately \$2.3 million of the outstanding loan principal is included in current debt and approximately \$1.2 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).



---

**Table of Contents**

On April 1, 2009, the underwriters exercised their option to purchase an additional \$15.0 million aggregate principal amount of the Notes for a total aggregate principal amount of \$190.0 million. The Notes bear interest at a rate of 4.50% per annum, payable semi-annually in arrears on March 15 and September 15 of each year, beginning on September 15, 2009. The Notes will mature on March 15, 2014, unless earlier repurchased by Teradyne or converted. The Notes are senior unsecured obligations and rank equally with all of Teradyne's existing and future senior debt and senior to any of Teradyne's subordinated debt.

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

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

During each calendar quarter of 2012 and 2011, 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 February 28, 2013, one holder exercised the option to convert two thousand dollars worth of 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.

**Table of Contents**

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.

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

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

The provisions of ASC 470-20, *Debt with Conversion and Other Options* are applicable to the Notes. ASC 470-20 requires Teradyne to separately account for the liability (debt) and equity (conversion feature) components of the Notes in a manner that reflects Teradyne's nonconvertible debt borrowing rate at the date of issuance when interest cost is recognized in subsequent periods. Teradyne allocated \$63.4 million of the \$190.0 million principal amount of the Notes to the equity component, which represents a discount to the debt and will be amortized into interest expense using the effective interest method through March 2014. Accordingly, Teradyne's effective annual interest rate on the Notes will be approximately 14.5%. The Notes are classified as long-term debt in the balance sheet based on their March 15, 2014 maturity date. Debt issuance costs of approximately \$4.1 million are being amortized to interest expense over the five year term of the Notes. As of December 31, 2012, debt issuance costs were approximately \$1.0 million.

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

	December 31, 2012	December 31, 2011
	(in thousands)	
Debt principal	\$ 190,000	\$ 190,000
Unamortized discount	20,104	33,902
Net carrying amount of the convertible debt	\$ 169,896	\$ 156,098

**Table of Contents**

	For the year ended	
	December 31, 2012	December 31, 2011
	(in thousands)	
Contractual interest expense on the coupon	\$ 8,550	\$ 8,550
Amortization of the discount component and debt issue fees recognized as interest expense	14,612	12,853
<b>Total interest expense on the convertible debt</b>	<b>\$ 23,162</b>	<b>\$ 21,403</b>

As of December 31, 2012, the unamortized discount was \$20.1 million, which will be amortized over approximately 1.25 years, and the carrying amount of the equity component was \$63.4 million. As of December 31, 2012, 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 \$586.1 million.

**J. ACCUMULATED OTHER COMPREHENSIVE INCOME**

At December 31, 2012 and 2011, the accumulated other comprehensive income balances were as follows:

	2012	2011
	(in thousands)	
Retirement plans prior service credit, net of tax of \$(125) and \$9	\$ 2,895	\$ 3,128
Unrealized gain on marketable securities, net of tax of \$835 and \$666	2,925	1,618
<b>Total accumulated other comprehensive income</b>	<b>\$ 5,820</b>	<b>\$ 4,746</b>

**K. 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 2012 and 2011 annual goodwill impairment test at the Wireless Test reporting unit level which is an operating and reportable segment and the only operating and reportable segment that has goodwill. There was no impairment.

During 2012, Teradyne recorded a \$3.5 million decrease in goodwill and a \$3.5 million increase in income tax receivable.

**Table of Contents**

The changes in the carrying amount of goodwill by reporting units for the years ended December 31, 2012 and 2011 are as follows:

	Semiconductor Test	Systems Test Group (in thousands)	Wireless Test	Total
Balance at December 31, 2010:				
Goodwill	\$ 260,540	\$ 148,183	\$	\$ 408,723
Accumulated impairment losses	(260,540)	(148,183)		(408,723)
Activity during the year			352,778	352,778
Balance at December 31, 2011:				
Goodwill	260,540	148,183	352,778	761,501
Accumulated impairment losses	(260,540)	(148,183)		(408,723)
Activity during the year			352,778	352,778
			(3,506)	(3,506)
Balance at December 31, 2012:				
Goodwill	260,540	148,183	349,272	757,995
Accumulated impairment losses	(260,540)	(148,183)		(408,723)
	\$	\$	\$ 349,272	\$ 349,272

**Intangible Assets**

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

	Gross Carrying Amount	December 31, 2012		Weighted Average Useful Life
		Accumulated Amortization (in thousands)	Net Carrying Amount	
Developed technology	\$ 357,555	\$ 143,126	\$ 214,429	6.3 years
Customer relationships and service and software maintenance contracts	144,971	63,464	81,507	8.0 years
Tradenames and trademarks	33,840	10,909	22,931	9.0 years
Customer backlog	1,000	1,000		0.4 years
Total intangible assets	\$ 537,366	\$ 218,499	\$ 318,867	7.0 years

	Gross Carrying Amount	December 31, 2011		Weighted Average Useful Life
		Accumulated Amortization (in thousands)	Net Carrying Amount	
Developed technology	\$ 358,155	\$ 91,391	\$ 266,764	6.3 years
Customer relationships and service and software maintenance contracts	144,971	45,230	99,741	8.0 years
Tradenames and trademarks	33,840	7,370	26,470	9.0 years

Edgar Filing: TERADYNE, INC - Form 10-K

Customer backlog	1,000	1,000		0.4 years
Total intangible assets	\$ 537,966	\$ 144,991	\$ 392,975	7.0 years

**Table of Contents**

During the year ended December 31, 2012, Teradyne reduced the gross amount of intangible assets by \$0.6 million for the excess tax benefit realized due to the exercise of stock options vested as of the Nextest acquisition date.

Aggregate intangible assets amortization expense for the years ended December 31, 2012, 2011 and 2010 was \$73.5 million, \$40.5 million, and \$29.3 million, respectively. Estimated intangible assets amortization expense for each of the five succeeding fiscal years is as follows:

Year	Amortization Expense (in thousands)
2013	\$ 72,132
2014	69,102
2015	52,351
2016	52,351
2017	46,193

**L. COMMITMENTS AND CONTINGENCIES****Purchase Commitments**

As of December 31, 2012, Teradyne had entered into non-cancelable purchase commitments for certain components and materials. The purchase commitments covered by the agreements aggregate to approximately \$210.0 million.

**Commitments**

Rental expense for the years ended December 31, 2012, 2011 and 2010 was \$15.5 million, \$13.4 million and \$12.9 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 (in thousands)
2013	\$ 14,174
2014	12,024
2015	9,770
2016	7,761
2017	3,749
Beyond 2017	7,437
Total	\$ 54,915

**Legal Claims**

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



## **Table of Contents**

### **Guarantees and Indemnification Obligations**

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

Teradyne enters into agreements in the ordinary course of business with customers, resellers, distributors, integrators and suppliers. Most of these agreements require Teradyne to defend and/or indemnify the other party against intellectual property infringement claims brought by a third party with respect to Teradyne's products. From time to time, Teradyne also indemnifies customers and business partners for damages, losses and liabilities they may suffer or incur relating to personal injury, personal property damage, product liability, breach of confidentiality obligations 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 delivery and 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 based 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, 2012 and 2011, Teradyne had a product warranty accrual of \$9.8 million and \$8.2 million, respectively, included in other accrued liabilities, and revenue deferrals related to extended warranties of \$27.0 million and \$12.7 million, respectively, included in short and long-term deferred revenue and customer advances.

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

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

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

Based on historical experience and information known as of December 31, 2012 and 2011, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations as of December 31, 2012 and 2011 because the amount would be immaterial.

**Table of Contents****M. NET INCOME PER COMMON SHARE**

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

	2012	2011	2010
	(in thousands, except per share amounts)		
Income from continuing operations	\$ 217,049	\$ 343,957	\$ 379,692
Income from discontinued operations		1,545	5,128
Gain on disposal of discontinued operations		24,371	
Net income or basic net income per share	217,049	369,873	384,820
Income impact of assumed conversion of convertible notes (1)			13,203
Net income for diluted net income per share	\$ 217,049	\$ 369,873	\$ 398,023
Weighted average common shares-basic	186,878	184,683	179,924
Effect of dilutive potential common shares:			
Incremental shares from assumed conversion of convertible notes (2)	22,367	21,504	30,848
Convertible note hedge warrant shares (3)	17,433	16,224	10,492
Restricted stock units	2,291	3,773	5,001
Stock options	1,213	566	443
Employee stock purchase rights	64	70	99
Dilutive potential common shares	43,368	42,137	46,883
Weighted average commons shares-diluted	230,246	226,820	226,807
Net income per common shares-basic:			
Continuing operations	\$ 1.16	\$ 1.86	\$ 2.11
Discontinued operations		0.14	0.03
	\$ 1.16	\$ 2.00	\$ 2.14
Net income per common shares-diluted:			
Continuing operations	\$ 0.94	\$ 1.52	\$ 1.73
Discontinued operations		0.11	0.02
	\$ 0.94	\$ 1.63	\$ 1.75

- (1) Income impact of convertible notes for 2010 represents interest expense that would have not been recorded if the notes converted at the beginning of the period.
- (2) Incremental shares from assumed conversion of the convertible notes for 2012 and 2011 are calculated using the difference between the average Teradyne stock price for the period and the conversion price of \$5.48, multiplied by the 34.7 million shares that will be issued upon conversion. The result of this calculation, representing the total intrinsic value of the convertible debt, is divided by the average Teradyne stock price for the period. For 2010, incremental shares from assumed conversion of the convertible notes represent the 34.7 million of shares that will be issued upon conversion.
- (3) Convertible notes hedge warrant shares for 2012, 2011 and 2010 are calculated using the difference between the average Teradyne stock price for the period and the warrant price of \$7.67, multiplied by the 34.7 million shares that will be issued upon conversion. The result of this calculation, representing the total intrinsic value of the warrant, is divided by the average Teradyne stock price for the period. Teradyne's call option on its common stock (convertible note hedge transaction) is excluded from the calculation of diluted shares because

## Edgar Filing: TERADYNE, INC - Form 10-K

the effect would be anti-dilutive. See Note I: Debt regarding convertible note hedge transaction. The computation of diluted net income per common share for 2012 excludes the effect of the potential exercise of stock options to purchase approximately 0.3 million shares and restricted stock units to purchase approximately 0.3 million shares because the effect would have been anti-dilutive.

## **Table of Contents**

The computation of diluted net income per common share for 2011 excludes the effect of the potential exercise of stock options to purchase approximately 0.7 million shares because the effect would have been anti-dilutive.

The computation of diluted net income per common share for 2010 excludes the effect of the potential exercise of stock options to purchase approximately 5.3 million shares because the effect would have been anti-dilutive.

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

## **N. RESTRUCTURING AND OTHER**

### **Other**

During the year ended December 31, 2012, due to a decrease in specified new product revenue through the December 31, 2012 earn-out period end date, Teradyne recorded an \$8.8 million fair value adjustment to decrease the LitePoint acquisition contingent consideration. The \$68.5 million decrease in the contingent consideration liability from December 31, 2011 is due to \$59.7 million in payments and an \$8.8 million fair value decrease.

During the year ended December 31, 2011, Teradyne recorded \$5.8 million of other charges in which \$4.6 million related to acquisition costs and \$1.2 million related to a non-U.S pension settlement.

During the year ended December 31, 2010, Teradyne had \$3.0 million of other gains related to non-U.S pension settlements.

### **Restructuring**

In response to a downturn in the industry in 2008 and 2009, Teradyne initiated restructuring activities across its Semiconductor Test and Systems Test Group segments to reduce costs, principally through headcount reductions and facility consolidations. The remaining accrual for severance and benefits of \$0.2 million is reflected in the accrued employees' compensation and withholdings account on the balance sheet and is expected to be paid by June 2013. The remaining accrual for lease payments on vacated facilities of \$1.1 million is

**Table of Contents**

reflected in the other accrued liabilities account and is expected to be paid over the next twelve months. As of December 31, 2012, Teradyne has subleased approximately 37% of its unoccupied space.

	Severance and Benefits	Facility Exit Costs (in thousands)	Total
<b>Pre-2010 Activities</b>			
Balance at December 31, 2009	\$ 2,905	\$ 10,056	\$ 12,961
Change in estimate	240	(2,672)	(2,432)
Cash payments	(3,145)	(4,121)	(7,266)
Balance at December 31, 2010		3,263	3,263
Change in estimate		(485)	(485)
Cash payments		(916)	(916)
Balance at December 31, 2011		1,862	1,862
Cash payments		(778)	(778)
Balance at December 31, 2012	\$	\$ 1,084	\$ 1,084
<b>2010 Activities</b>			
<b>Q1 2010 Activity:</b>			
Provision	\$ 405	\$	\$ 405
Cash payments	(405)		(405)
Balance at December 31, 2010	\$	\$	\$
<b>Q2 2010 Activities:</b>			
Provision	\$ 890	\$	\$ 890
Cash payments	(402)		(402)
Balance at December 31, 2010	488		488
Change in estimate	202		202
Cash payments	(690)		(690)
Balance at December 31, 2011	\$	\$	\$
<b>Q3 2010 Activity:</b>			
Provision	\$ 382	\$	\$ 382
Cash payments	(72)		(72)
Other	(184)		(184)
Balance at December 31, 2010	126		126
Change in estimate	(47)		(47)
Cash payments	(79)		(79)
Balance at December 31, 2011	\$	\$	\$
<b>Q4 2010 Activity:</b>			
Provision	\$ 98	\$	\$ 98

Edgar Filing: TERADYNE, INC - Form 10-K

Balance at December 31, 2010	98	98
Provision	117	117
Cash payments	(215)	(215)
Balance at December 31, 2011	\$	\$

**Table of Contents**

	Severance and Benefits	Facility Exit Costs (in thousands)	Total
<b>2011 Activities</b>			
<i>Q1 2011 Activity:</i>			
Provision	\$ 572	\$	\$ 572
Cash payments	(476)		(476)
Balance at December 31, 2011	96		96
Cash payments	(96)		(96)
Balance at December 31, 2012	\$	\$	\$
<i>Q2 2011 Activities:</i>			
Provision	\$ 344	\$	\$ 344
Cash payments	(115)		(115)
Balance at December 31, 2011	229		229
Cash payments	(229)		(229)
Balance at December 31, 2012	\$	\$	\$
<b>2012 Activities</b>			
<i>Q2 2012 Activities:</i>			
Provision	\$ 286	\$	\$ 286
Change in estimate	(4)		(4)
Cash payments	(282)		(282)
Balance at December 31, 2012	\$	\$	\$
<i>Q3 2012 Activity:</i>			
Provision	\$ 687	\$	\$ 687
Cash payments	(444)		(444)
Balance at December 31, 2012	\$ 243	\$	\$ 243
Balance at December 31, 2012	\$ 243	\$ 1,084	\$ 1,327

During the year ended December 31, 2012, Teradyne recorded the following restructuring activities:

Q2 2012 Actions:

\$0.3 million of severance charges related to headcount reductions of 10 people in Semiconductor Test.

Q3 2012 Actions:

\$0.7 million of severance charges related to headcount reductions of 9 people, of which \$0.5 million and 7 people were in Systems Test Group and \$0.2 million and 2 people in Wireless Test.

During the year ended December 31, 2011, Teradyne recorded the following restructuring activities:

Q1 2011 Actions:

\$0.6 million of severance charges related to headcount reductions of 5 people in Semiconductor Test.

Q2 2011 Actions:

Edgar Filing: TERADYNE, INC - Form 10-K

\$0.3 million of severance charges related to headcount reductions of 2 people in Semiconductor Test.  
Q2 2010 Actions:

\$0.2 million related to a change in the estimated severance benefits related to headcount reductions in Semiconductor Test.



---

**Table of Contents**

Q4 2010 Actions:

\$0.1 million of severance charges related to headcount reductions in Semiconductor Test.

Pre-2010 Actions:

\$(0.5) million credit related to changes in the estimated exit costs related to the Westford, MA and Poway, CA facilities in Systems Test Group, and the North Reading, MA facility in Semiconductor Test and Systems Test Group.

During the year ended December 31, 2010, Teradyne recorded the following restructuring activities:

Q1 2010 Actions:

\$0.4 million of severance charges related to headcount reductions of approximately 4 people in Semiconductor Test.

Q2 2010 Actions:

\$0.9 million of severance charges related to headcount reductions of approximately 6 people in Systems Test Group.

Q3 2010 Actions:

\$0.4 million of severance charges related to headcount reductions of approximately 10 people in Systems Test Group.

Q4 2010 Actions:

\$0.1 million of severance charges related to the headcount reduction of 1 person in Systems Test Group.

Pre-2010 Actions:

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

\$0.5 million and \$(0.2) million related to a change in the estimated severance benefits related to headcount reduction activities in Semiconductor Test and Systems Test Group, respectively.

**O. RETIREMENT PLANS**

ASC 715, *Compensation Retirement Benefits* 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.

**Defined Benefit Pension Plans**

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

**Table of Contents**

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

	2012	2011
	(in thousands)	
<b>Assets and Obligations</b>		
<b>Change in benefit obligation:</b>		
Projected benefit obligation:		
Beginning of year	\$ 390,278	\$ 337,796
Service cost	2,787	2,735
Interest cost	15,670	17,466
Actuarial loss	31,912	54,248
Benefits paid	(65,650)	(13,260)
Curtailment		210
Settlement		(7,637)
Transfers		(564)
Non-U.S. currency movement	1,501	(716)
End of year	376,498	390,278
<b>Change in plan assets:</b>		
Fair value of plan assets:		
Beginning of year	339,580	294,988
Company contributions	3,306	10,169
Plan participants' contributions	108	51
Actual return on plan assets	24,621	55,345
Benefits paid	(65,650)	(13,260)
Settlement		(7,637)
Non-U.S. currency movement	934	(76)
End of year	302,899	339,580
Funded status	\$ (73,599)	\$ (50,698)

During the year ended December 31, 2012, Teradyne offered to certain former U.S. employees the option to receive their vested pension benefit as a one-time, lump sum payment. Approximately 2,000 former employees elected to receive a one-time, lump sum payment. Total one-time, lump sum payments were approximately \$52.0 million.

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

	2012	2011
	(in thousands)	
Retirement plans assets	\$ 3,282	\$ 8,840
Accrued employees' compensation and withholdings	(2,810)	(2,524)
Retirement plans liabilities	(74,071)	(57,014)
Funded status	\$ (73,599)	\$ (50,698)

**Table of Contents**

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

	2012	2011
	(in thousands)	
Prior service cost	\$ 656	\$ 888
Total recognized in other comprehensive income (loss), before tax	656	888
Deferred taxes	321	236
Total recognized in other comprehensive income (loss), net of tax	\$ 977	\$ 1,124

The estimated portion of prior service cost remaining in accumulated other comprehensive income (loss) that is expected to be recognized as a component of net periodic pension cost in 2013 is \$0.2 million.

The accumulated benefit obligation for all defined benefit pension plans was \$360.4 million and \$370.1 million at December 31, 2012 and 2011, respectively.

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

	2012	2011
	(in millions)	
Projected benefit obligation	\$ 75.6	\$ 60.2
Accumulated benefit obligation	65.7	52.2
Fair value of plan assets	0.8	0.7

**Expense**

For the years ended December 31, 2012, 2011 and 2010, Teradyne's net periodic pension cost was comprised of the following:

	2012	2011	2010
	(in thousands)		
<b>Components of Net Periodic Pension Cost:</b>			
Service cost	\$ 2,787	\$ 2,735	\$ 3,655
Interest cost	15,670	17,466	17,716
Expected return on plan assets	(15,946)	(15,602)	(17,585)
Amortization of prior service cost	232	621	726
Net actuarial loss (gain)	23,237	12,583	(469)
Settlement loss (gain)		1,567	(3,113)
Total net periodic pension cost	\$ 25,980	\$ 19,370	\$ 930

**Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income:**

Reversal of amortization items:			
Prior service cost	(232)	(621)	(726)
Total recognized in other comprehensive income	(232)	(621)	(726)

Total recognized in net periodic pension cost and other comprehensive income	\$ 25,748	\$ 18,749	\$ 204
--	-----------	-----------	--------

**Table of Contents****Weighted Average Assumptions to Determine Net Periodic Pension Cost at January 1**

	United States Plans			Foreign Plans		
	2012	2011	2010	2012	2011	2010
Discount rate	4.2%	5.3%	5.8%	4.9%	5.0%	5.4%
Expected return on plan assets	5.0	5.5	7.5	3.1	3.5	3.7
Salary progression rate	3.0	4.0	4.0	3.4	4.0	4.2

**Weighted Average Assumptions to Determine Pension Obligations at December 31**

	United States Plans		Foreign Plans	
	2012	2011	2012	2011
Discount rate	3.6%	4.2%	3.7%	4.9%
Salary progression rate	3.0	3.0	3.5	3.4

In developing the expected return on plan assets assumption, Teradyne evaluates input from its investment manager and pension consultants, including their review of asset class return expectations. Based on this review, Teradyne believes that 5.0% was an appropriate rate to use for fiscal 2012 for the U.S. Qualified Pension Plan ( U.S. Plan ).

Effective January 1, 2012, Teradyne has elected to immediately recognize net actuarial gains and losses and the change in the fair value of the plan assets in its operating results in the year in which they occur or upon any interim rereasurement of the plans. In addition, Teradyne used to calculate the expected return on plan assets using a calculated market-related value of plan assets. Effective January 1, 2012, Teradyne elected to calculate the expected return on plan assets using the fair value of the plan assets.

The discount rate utilized to determine future pension obligations for the U.S. Plan is based on Citigroup Pension Index adjusted for the plan's expected cash flows and was 3.6% at December 31, 2012, down from 4.2% at December 31, 2011.

**Plan Assets**

As of December 31, 2012, the fair value of Teradyne's pension plans' assets totaled \$302.9 million of which \$278.9 million was related to the U.S. Plan, \$23.2 million was related to the U.K. defined benefit pension plan, and \$0.8 million was related to the Taiwan defined benefit pension plan. Teradyne's pension plans' assets consisted primarily of investments in fixed-income and equity securities. Substantially all our pension plan 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, 2012 and 2011, by asset category is as follows:

	United States Plan		Foreign Plans	
	2012	2011	2012	2011
Fixed Income Securities	85.8%	86.7%	49.2%	49.7%
Equity Securities	13.0	12.3	49.6	48.3
Other	1.2	1.0	1.2	2.0
	100.0%	100.0%	100.0%	100.0%

The assets of the U.S. Plan are overseen by the Teradyne Fiduciary Committee which is comprised of members of senior management drawn from appropriate diversified levels of the management team. The

**Table of Contents**

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

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

<b>Asset Category:</b>	<b>Policy Index:</b>	<b>Target Allocation</b>
Passive and Active Fixed Income	Barclays Capital Long Government Credit Index	85%
Equity (Large cap)	S&P 500 Stock Index	10
International Equity	MSCI EAFE Index (Net Dividends)	5

The assets of Teradyne's foreign pension plans are invested in funds which seek to combine long-term growth potential offered through equity exposure with the relative security provided by bonds, and 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 \$24.0 million as of December 31, 2012. There were no investments with significant unobservable inputs (Level 3) in the non-U.S. pension plans. During the years ended December 31, 2012 and 2011, there were no transfers of pension assets in or out of Level 1, Level 2 or Level 3.

Teradyne's U.S. Plan invests primarily in common trust funds and fixed income securities. 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. Substantially all of these investments are valued using significant observable inputs (Level 2). The fair market value of assets for the U.S. Plan was \$278.9 million as of December 31, 2012. There were no investments with significant unobservable inputs (Level 3) in the U.S. Plan. During the years ended December 31, 2012 and 2011, there were no transfers of pension assets in or out of Level 1, Level 2 or Level 3.

**Table of Contents**

The fair value of pension plan assets by asset category and by level at December 31, 2012 and December 31, 2011 were as follows:

	Level 1	December 31, 2012		Total
		Level 2	Level 3 (in thousands)	
Fixed income securities:				
Corporate debt securities	\$	\$ 157,263	\$	\$ 157,263
U.S. government securities	23,712	58,962		82,674
U.K. government securities		8,593		8,593
Asset backed securities		2,042		2,042
U.S. equity (large cap)		23,832		23,832
International equity		23,990		23,990
Guarantee annuity contract		3,108		3,108
Other		839		839
Cash and cash equivalents		558		558
<b>Total</b>	<b>\$ 23,712</b>	<b>\$ 279,187</b>	<b>\$</b>	<b>\$ 302,899</b>

	Level 1	December 31, 2011		Total
		Level 2	Level 3 (in thousands)	
Fixed income securities:				
Corporate debt securities	\$	\$ 172,401	\$	\$ 172,401
U.S. government securities	5,136	96,891		102,027
U.K. government securities		7,553		7,553
Asset backed securities		4,604		4,604
U.S. equity (large cap)		27,725		27,725
International equity		21,285		21,285
Guarantee annuity contract		2,863		2,863
Other		711		711
Cash and cash equivalents		411		411
<b>Total</b>	<b>\$ 5,136</b>	<b>\$ 334,444</b>	<b>\$</b>	<b>\$ 339,580</b>

**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 2012, Teradyne contributed \$1.7 million to the U.S. supplemental executive defined benefit pension plan and \$1.6 million to certain qualified plans for non-U.S. subsidiaries. During 2011, Teradyne contributed \$1.7 million to the U.S. supplemental executive defined benefit pension plan and \$8.5 million to certain qualified plans for non-U.S. subsidiaries. In 2013, contributions to certain qualified plans for non-U.S. subsidiaries are based on local statutory requirements and will be approximately \$2.0 million. In 2013, contributions to the U.S. supplemental executive defined benefit pension Plan will be approximately \$1.8 million. Teradyne does not expect to make any contributions to the U.S. Plan in 2013.

**Table of Contents****Expected Future Pension Benefits Payments**

Future benefit payments are expected to be paid as follows:

	United States (in thousands)	Foreign
2013	\$ 14,398	\$ 2,109
2014	15,283	1,499
2015	16,248	1,397
2016	17,368	2,070
2017	17,868	2,206
2018-2022	97,607	10,395

**Postretirement Benefit Plans**

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

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

	2012 (in thousands)	2011
<b>Assets and Obligations</b>		
<b>Change in benefit obligation:</b>		
Projected benefit obligation:		
Beginning of year	\$ 12,793	\$ 12,896
Service cost	67	59
Interest cost	437	539
Actuarial loss	82	981
Benefits paid	(1,472)	(1,682)
Plan amendment		
End of year	11,907	12,793
Change in plan assets:		
Fair value of plan assets:		
Beginning of year		
Company contributions	1,472	1,682
Benefits paid	(1,472)	(1,682)
End of year		
Funded status	\$ (11,907)	\$ (12,793)



**Table of Contents**

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

	2012	2011
	(in thousands)	
Accrued employees compensation and withholdings	\$ (1,322)	\$ (1,484)
Retirement plans liability	(10,585)	(11,309)
Funded status	\$ (11,907)	\$ (12,793)

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

	2012	2011
	(in thousands)	
Prior service credit	\$ (3,427)	\$ (4,025)
Total recognized in other comprehensive (income) loss before tax	(3,427)	(4,025)
Deferred taxes	(445)	(227)
Total recognized in other comprehensive income, net of tax	\$ (3,872)	\$ (4,252)

The estimated portion of 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 2013 is \$(0.6) million.

**Expense**

For the years ended December 31, 2012, 2011 and 2010, Teradyne's net periodic postretirement benefit (income) cost was comprised of the following:

	2012	2011	2010
	(in thousands)		
<b>Components of Net Periodic Postretirement Benefit (Income) Cost:</b>			
Service cost	\$ 67	\$ 59	\$ 57
Interest cost	437	539	668
Amortization of prior service cost	(599)	(598)	(416)
Net actuarial loss (gain)	83	981	(882)
Total net periodic postretirement (income) cost	(12)	981	(573)
<b>Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income:</b>			
Net prior service credit arising during period			(3,279)
Reversal of amortization items:			
Prior service credit	599	598	416
Total recognized in other comprehensive income	599	598	(2,863)
Total recognized in net periodic postretirement benefit cost and other comprehensive income	\$ 587	\$ 1,579	\$ (3,436)



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

	2012	2011	2010
Discount rate	3.7%	4.5%	5.1%
Initial Health Care Cost Trend Rate	9.0	8.5	8.5
Ultimate Health Care Cost Trend Rate	5.0	5.0	5.0
Year in which Ultimate Health Care Cost Trend Rate is reached	2018	2018	2018

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

	2012	2011	2010
Discount rate	3.1%	3.7%	4.5%
Initial Medical Trend	8.5	9.0	8.5
Ultimate Health Care Trend	5.0	5.0	5.0
Medical cost trend rate decrease to ultimate rate in year	2018	2018	2018

Assumed health care trend rates could have a significant effect on the amounts reported for health care plans. A one percentage point change in the assumed health care cost trend rates for the year ended December 31, 2012, would have the following effects:

	1 Percentage Point Increase	1 Percentage Point Decrease
	(in thousands)	
Effect on total service and interest cost components	\$ 16	\$ (15)
Effect on postretirement benefit obligations	322	(302)

**Expected Future Benefits Payments**

Future benefit payments are expected to be paid as follows:

	Benefits Payments (in thousands)
2013	\$ 1,322
2014	1,202
2015	1,111
2016	1,106
2017	966
2018-2022	3,943

**P. STOCK BASED COMPENSATION****Stock Compensation Plans**

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

Restricted stock unit awards granted to employees vest in equal annual installments over four years. Restricted stock unit awards granted to non-employee directors vest after a one year period, with 100% of the award vesting on the first anniversary of the grant date. A portion of the restricted stock unit awards granted to executive officers is subject to time-based vesting and a portion is subject to performance-based vesting. The



**Table of Contents**

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.

In 2012, 2011 and 2010, Teradyne granted service-based stock options to executive officers. These stock options vest in equal installments over four years and have a term of seven years.

Stock compensation plan activity for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
	(in thousands)		
<b>Restricted Stock Units:</b>			
Non-vested at January 1	5,840	6,963	6,896
Awarded	1,844	1,936	2,626
Vested	(2,510)	(2,624)	(2,406)
Forfeited	(204)	(435)	(153)
Non-vested at December 31	4,970	5,840	6,963
<b>Stock Options:</b>			
Outstanding at January 1	5,335	7,194	11,238
Granted	151	145	329
Assumed from acquisition		2,828	
Exercised	(1,396)	(965)	(4,031)
Forfeited	(203)		
Cancelled	(46)	(3,867)	(342)
Outstanding at December 31	3,841	5,335	7,194
Vested and expected to vest at December 31	3,785	4,904	7,193
Exercisable at December 31	2,004	1,844	6,046

Total shares available for the years 2012, 2011 and 2010:

	2012	2011	2010
	(in thousands)		
<b>Shares available:</b>			
Available for grant at January 1	8,205	9,851	12,653
Options granted	(151)	(145)	(329)
Restricted stock units granted	(1,844)	(1,936)	(2,626)
Restricted stock units forfeited	204	435	153
Available for grant at December 31	6,414	8,205	9,851

Weighted-average restricted stock unit award date fair value information for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
Non-vested at January 1	\$ 10.01	\$ 7.92	\$ 7.31

Edgar Filing: TERADYNE, INC - Form 10-K

Awarded	16.67	15.77	9.39
Vested	9.29	8.56	7.73
Forfeited	13.32	9.24	8.11
Non-vested at December 31	\$ 12.72	\$ 10.01	\$ 7.92

**Table of Contents**

Restricted stock unit awards aggregate intrinsic value information at December 31 for the years 2012, 2011 and 2010 follows:

	2012	2011 (in thousands)	2010
Outstanding	\$ 83,949	\$ 79,598	\$ 97,762
Expected to vest	78,718	75,860	90,283

Restricted stock units weighted average contractual terms (in years) information at December 31, for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
Outstanding	1.01	1.04	1.13
Expected to vest	1.00	1.03	1.12

Weighted average stock options exercise price information for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
Outstanding at January 1	\$ 4.12	\$ 16.32	\$ 13.87
Options granted	16.95	16.23	9.34
Assumed from acquisition		2.69	
Options exercised	3.87	4.38	8.65
Options forfeited	3.11		
Options cancelled	16.21	26.38	19.54
Outstanding at December 31	4.64	4.12	16.32
Exercisable at December 31	3.70	4.10	18.24

Stock option aggregate intrinsic value information for the years ended December 31, 2012, 2011 and 2010 follows:

	2012	2011 (in thousands)	2010
Exercised	\$ 17,136	\$ 11,307	\$ 15,096
Outstanding	47,051	51,306	30,871
Vested and expected to vest	46,283	46,655	30,868
Exercisable	26,436	17,766	21,872

Stock options weighted average contractual terms (in years) information at December 31, for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
Outstanding	5.7	6.4	2.3
Vested and Expected to vest	5.6	6.2	5.4
Exercisable	4.9	4.0	1.7

**Table of Contents**

Significant option groups outstanding at December 31, 2012 and related weighted average price and remaining contractual life information follow:

Range Of Exercise Prices	Options Outstanding		Options Exercisable		
	Weighted-Average Remaining Contractual Life (Years)	Shares	Weighted-Average Exercise Price (shares in thousands)	Shares	Weighted-Average Exercise Price
\$0.47 \$2.58	6.31	864	\$ 1.69	492	\$ 1.60
\$2.67 \$2.74	6.76	1,278	2.69	661	2.70
\$3.23 \$4.81	3.88	795	4.29	490	4.14
\$5.80 \$16.95	5.26	904	10.54	361	7.76
		3,841	\$ 4.64	2,004	\$ 3.70

As of December 31, 2012, total unrecognized expense related to non-vested restricted stock unit awards and stock options totaled \$52.1 million, and is expected to be recognized over a weighted average period of 2.0 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, not to exceed 6,000 shares. 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. Beginning in January 2013, the price paid will be equal to 85% of the stock price on the last business day of the purchase period.

In July 2012, 0.6 million shares of common stock were issued to employees who participated in the plan during the first half of 2012, at the price of \$11.69 per share. In January 2013, Teradyne issued 0.6 million shares of common stock to employees who participated in the plan during the second half of 2012, at the price of \$11.91 per share.

In July 2011, 0.6 million shares of common stock were issued to employees who participated in the plan during the first half of 2011, at the price of \$11.65 per share. In January 2012, Teradyne issued 0.6 million shares of common stock to employees who participated in the plan during the second half of 2011, at the price of \$11.59 per share.

In July 2010, 0.6 million shares of common stock were issued to employees who participated in the plan during the first half of 2010, at the price of \$8.29 per share. In January 2011, Teradyne issued 0.8 million shares of common stock to employees who participated in the plan during the second half of 2010, at the price of \$8.12 per share.

**Q. 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 2012, 2011 and 2010, Teradyne matched 100% of eligible employee contributions up to 4% of their compensation for employees not accruing benefits in the U.S. Qualified Pension Plan. There was no match for employees still actively accruing benefits in the U.S. Qualified Pension Plan. 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 U.S. 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 for the years ended December 31, 2012, 2011 and 2010 were \$10.6 million, \$11.3 million and \$7.5 million, respectively.





**Table of Contents****R. INCOME TAXES**

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

	2012	2011 (in thousands)	2010
<b>Income from continuing operations before income taxes:</b>			
U.S.	\$ 112,008	\$ 68,943	\$ 120,330
Non-U.S.	153,968	145,478	276,017
	\$ 265,976	\$ 214,421	\$ 396,347
<b>Provision (benefit) for income taxes from continuing operations:</b>			
<b>Current:</b>			
U.S. Federal	\$ 22,695	\$ 3,668	\$ (1,555)
Non-U.S.	18,261	23,994	16,547
State	(12)	760	553
	40,944	28,422	15,545
<b>Deferred:</b>			
U.S. Federal	8,158	(139,929)	
Non-U.S.	5,997	(10,549)	1,110
State	(6,172)	(7,480)	
	7,983	(157,958)	1,110
<b>Total provision (benefit) for income taxes from continuing operations:</b>	<b>\$ 48,927</b>	<b>\$ (129,536)</b>	<b>\$ 16,655</b>

For the tax year ended December 31, 2012, the income tax expense from continuing operations for 2012 totaled \$48.9 million, primarily attributable to a U.S. federal tax provision and tax provisions for foreign taxes. As of December 31, 2012, Teradyne evaluated the likelihood that it would realize the deferred income taxes to offset future taxable income and concluded that it is more likely than not that a substantial majority of its deferred tax assets will be realized through consideration of both the positive and negative evidence. Teradyne maintains a valuation allowance for certain deferred tax assets of \$55.4 million, primarily related to excess stock compensation deductions associated with pre-2006 activity, state net operating losses and state tax credit carryforwards, due to the uncertainty regarding their realization. Adjustments could be required in the future if Teradyne estimates that the amount of deferred tax assets to be realized is more or less than the net amount recorded.

For the year ended December 31, 2011, income tax benefit from continuing operations totaled \$129.5 million, primarily attributable to the reduction of Teradyne's deferred income tax valuation allowance. As of December 31, 2011, Teradyne evaluated the likelihood that it would realize the deferred income taxes to offset future taxable income and concluded that it is more likely than not that a substantial majority of its deferred tax assets will be realized through consideration of both the positive and negative evidence. The evidence consisted primarily of its three year U.S. historical cumulative profitability, projected future taxable income, forecasted utilization of the deferred tax assets and the fourth quarter of 2011 acquisition of LitePoint, offset by the volatility of the industries Teradyne operates in, primarily the semiconductor industry. As such, Teradyne reduced the valuation allowance by \$190.2 million, which was recorded as a tax benefit in the year ended December 31, 2011. At December 31, 2011, Teradyne maintained a valuation allowance for certain deferred tax assets of \$51.1 million, primarily related to excess stock compensation deductions associated with pre-2006 activity, state net operating losses and state tax credit carryforwards, due to the uncertainty regarding their realization. Adjustments could be required in the future if Teradyne estimates that the amount of deferred tax assets to be realized is more or less than the net amount recorded.

**Table of Contents**

For the year ended December 31, 2010, income tax expense from continuing operations totaled \$16.7 million, primarily related to tax provisions for foreign taxes.

The total income tax provision (benefit) for the years ended December 31, 2012, 2011 and 2010 was as follows:

	2012	2011 (in thousands)	2010
Continuing operations	\$ 48,927	\$ (129,536)	\$ 16,655
Discontinued operations		4,311	278
<b>Total income tax provision (benefit)</b>	<b>\$ 48,927</b>	<b>\$ (125,225)</b>	<b>\$ 16,933</b>

Significant components of Teradyne's deferred tax assets (liabilities) as of December 31, 2012 and 2011 were as follows:

	2012 (in thousands)	2011
<b>Deferred tax assets:</b>		
Net operating loss carryforwards	\$ 36,674	\$ 37,899
Tax credits	64,123	76,248
Inventory valuations	50,886	42,760
Pension liability	28,674	21,119
Research and development	284	10,028
Accruals	14,246	13,817
Equity compensation	9,355	8,729
Vacation accrual	6,452	6,267
Other	282	398
Deferred revenue	15,118	35,869
<b>Gross deferred tax assets</b>	<b>226,094</b>	<b>253,134</b>
<b>Less: valuation allowance</b>	<b>(55,446)</b>	<b>(51,066)</b>
<b>Total deferred tax assets</b>	<b>170,648</b>	<b>202,068</b>
<b>Deferred tax liabilities:</b>		
Marketable securities	(996)	(827)
Intangible assets	(114,730)	(144,925)
Excess of tax over book depreciation	(22,446)	(18,417)
<b>Total deferred tax liabilities</b>	<b>(138,172)</b>	<b>(164,169)</b>
<b>Net deferred assets</b>	<b>\$ 32,476</b>	<b>\$ 37,899</b>

**Table of Contents**

At December 31, 2012, Teradyne had operating loss carryforwards that expire in the following years:

	U.S. Federal Operating Loss Carryforwards	State Net Operating Loss Carryforwards (in thousands)	Foreign Net Operating Loss Carryforwards
2013	\$	\$ 2,708	\$
2014		2	
2015		2	
2016		58	
2017		847	
2018-2023	22,354	3,592	
2024-2026		269	9
Beyond 2026		3,667	622
Non-expiring			8,038
Total	\$ 22,354	\$ 11,145	\$ 8,669

Of the U.S. federal operating loss carryforwards, \$22.4 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 carryforward does not include any excess tax deduction related to stock based compensation which has not been recognized for financial statement purposes. Certain of the above tax attribute carryovers included in deferred tax assets, primarily the net operating loss carryovers, will be recorded through additional paid-in capital when realized, with the exception of the GenRad net operating losses.

Teradyne has approximately \$119.0 million of tax credit carry forwards. Federal business tax credits of approximately \$15.5 million expire in the years 2028 through 2031. Teradyne has foreign tax credits of approximately \$42.5 million expiring in the years 2013 through 2022 and alternative minimum tax credits of approximately \$6.6 million, which do not expire. In addition, there are state tax credits of \$54.4 million which begin to expire in 2013.

During 2012, Teradyne's valuation allowance increased by \$4.4 million primarily due to the increase in the deferred tax assets related to state tax credits generated in 2012. During 2011, Teradyne's beginning of the year valuation allowance decreased by \$190.2 million due to a release of the valuation allowance. During 2010, Teradyne's valuation allowance decreased by \$60.0 million primarily due to the reduction in the deferred tax assets related to the decrease in net operating loss carryovers used in 2010.

A reconciliation of the effective tax rate for the years 2012, 2011 and 2010 follows:

	2012	2011	2010
U.S. statutory federal tax rate	35.0%	35.0%	35.0%
State income taxes, net of federal tax benefit	(1.7)		0.4
Foreign taxes	(11.5)	(12.6)	(13.9)
Valuation allowance	(0.5)	(87.7)	(17.4)
Other U.S. permanent items	(2.8)	5.7	
Other, net	(0.1)	(0.8)	0.1
	18.4%	(60.4)%	4.2%

Teradyne qualifies for a tax holiday in Singapore by fulfilling the requirements of an agreement with the Singapore Economic Development Board under which certain headcount and spending requirements must be met. The tax savings due to the tax holiday for the years ended December 31, 2012 and 2011 were \$10.9 million



**Table of Contents**

or \$0.05 per diluted share and \$0.2 million or \$0.00 per diluted share, respectively. There were no tax savings from the tax holiday for the year ended December 31, 2010. The tax holiday is currently expected to expire on December 31, 2015.

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, 2012 were not material.

Teradyne's gross unrecognized tax benefits for the years ended December 31, 2012, 2011 and 2010 were as follows:

	2012	2011 (in thousands)	2010
Beginning balance, as of January 1	\$ 19,678	\$ 12,028	\$ 12,767
Additions:			
Tax positions for current year	459	6,131	106
Tax positions for prior years	1,402	1,296	2,435
Acquired tax positions		1,388	
Reductions:			
Tax positions for prior years	(4,072)	(1,165)	(3,280)
Settlements with tax authorities			
Ending Balance as of December 31	\$ 17,467	\$ 19,678	\$ 12,028

Current year and prior year additions include assessment of potential transfer pricing issues worldwide, federal tax credits, state tax credits, and domestic production activities deduction. Reductions for tax positions for prior years primarily relate to statute expiration and the effective settlement of a state tax audit. Of the \$17.5 million of unrecognized tax benefits as of December 31, 2012, \$14.8 million would impact the consolidated income tax rate if ultimately recognized. The remaining \$2.7 million would impact the valuation allowance if recognized.

As of December 31, 2012, Teradyne has open tax years beginning in 2006 for major jurisdictions including the U.S., Japan, Singapore and the United Kingdom. Teradyne estimates that it is reasonably possible that the balance of unrecognized tax benefits as of December 31, 2012 may decrease approximately \$0.3 million in the next twelve months, as a result of a lapse of statutes of limitation.

As of December 31, 2012, a deferred tax liability has not been established for approximately \$10.6 million of cumulative undistributed earnings of non-U.S. subsidiaries, which are expected to be reinvested indefinitely in operations outside the U.S. Determination of the unrecognized deferred tax liability on unremitted earnings is not practical.

On January 2, 2013, the American Taxpayer Relief Act of 2012 was enacted which retrospectively reinstated the research and development tax credit for 2012 and extended it through December 31, 2013. As a result, in the first quarter of 2013, Teradyne expects to record a discrete benefit related to 2012 of approximately \$7.0 million.

**S. OPERATING SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION**

Teradyne has three operating segments (Semiconductor Test, Wireless Test and Systems Test Group), which are its reportable segments. The Semiconductor Test segment includes operations related to the design, manufacturing and marketing of semiconductor test products and services. The Wireless Test segment includes operations related to the design, manufacturing and marketing of wireless 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, storage test and circuit-board test. Each operating

**Table of Contents**

segment has a segment manager who is directly accountable to and maintains regular contact with Teradyne's chief operating decision maker (Teradyne's chief executive officer) to discuss operating activities, financial results, forecasts, and plans for the segment.

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

Segment information for the years ended December 31, 2012, 2011 and 2010 is as follows:

	Semiconductor Test	Wireless Test	Systems Test Group (in thousands)	Corporate And Eliminations	Consolidated
<b>2012</b>					
Net revenue	\$ 1,127,726	\$ 286,355	\$ 242,669	\$	\$ 1,656,750
Income (loss) from continuing operations before taxes (1)(2)	185,985	83,077	34,164	(37,250)	265,976
Total assets from continuing operations (3)	604,127	672,048	71,116	1,082,054	2,429,345
Property additions (4)	96,590	7,608	5,146	9,736	119,080
Depreciation and amortization expense (4)	67,922	50,242	3,747	20,888	142,799
<b>2011</b>					
Net revenue	\$ 1,106,191	\$ 28,390	\$ 294,480	\$	\$ 1,429,061
Income (loss) from continuing operations before taxes (1)(2)	212,201	(20,579)	51,802	(29,003)	214,421
Total assets from continuing operations (3)	581,026	725,940	77,277	804,396	2,188,639
Property additions (4)	76,164	794	4,043	5,096	86,097
Depreciation and amortization expense (4)	60,985	13,057	1,857	28,479	104,378
<b>2010</b>					
Net revenue	\$ 1,413,295	\$	\$ 152,867	\$	\$ 1,566,162
Income (loss) from continuing operations before taxes (1)(2)	414,994		(8,877)	(9,770)	396,347
Total assets from continuing operations (3)	611,694		95,402	1,094,077	1,801,173
Property additions (4)	69,935		3,142	2,967	76,044
Depreciation and amortization expense (4)	66,709		1,854	24,953	93,516

- (1) Interest income, interest expense and other, and pension and postretirement plans actuarial gains and losses are included in Corporate and Eliminations.
- (2) Included in income (loss) from continuing operations before taxes are charges and credits related to restructuring and other, net and inventory charges.
- (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.

**Table of Contents**

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

	For the Year Ended December 31,		
	2012	2011	2010
	(in thousands)		
Cost of revenues inventory charge (1)	\$ 18,433	\$ 10,370	\$ 4,521
Restructuring and other, net	386	2,142	1,437

(1) Included in the cost of revenues for the years ended December 31, 2012 and 2011 are charges for excess inventory provisions recorded primarily as a result of product transition.

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

	For the Year Ended December 31,		
	2012	2011	2010
	(in thousands)		
Cost of revenues inventory charge	\$ 4,271	\$ 1,090	\$ 1,450
Restructuring and other, net	451	(300)	(2,133)

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

	For the Year Ended December 31,		
	2012	2011	2010
	(in thousands)		
Cost of revenues inventory step-up (1)	\$ 6,089	\$ 12,178	
Cost of revenues inventory charge	4,145	141	
Restructuring and other, net	236		

(1) Included in the cost of revenues for the years ended December 31, 2012 and 2011 is the cost for purchase accounting inventory step-up. Included in the Corporate and Eliminations segment are charges and credits in the following accounts:

	For the Year Ended December 31,		
	2012	2011	2010
	(in thousands)		
Restructuring and other, net	\$ (8,794)	\$ 4,901	\$ (3,104)

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

	2012	2011	2010
	(in thousands)		
Revenues from customers (1):			
China	\$ 354,076	\$ 180,441	\$ 136,628
Taiwan	303,360	172,700	286,138
United States	233,573	221,895	235,171



Edgar Filing: TERADYNE, INC - Form 10-K

Korea	225,099	145,958	124,738
Japan	105,981	148,699	77,518
Philippines	106,609	130,484	185,533
Europe	84,508	101,208	99,580
Singapore	80,571	90,622	145,543
Thailand	76,069	80,539	56,978
Malaysia	71,151	138,107	207,471
Rest of the World	15,753	18,408	10,864
	\$ 1,656,750	\$ 1,429,061	\$ 1,566,162

**Table of Contents**

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

In 2012, one customer accounted for 10% of total consolidated revenues. In 2011 and 2010, no customer accounted for 10% or more of total consolidated revenues.

Long-lived assets by geographic area:

	United States	Foreign Countries (in thousands)	Total
December 31, 2012	\$ 211,422	\$ 54,360	\$ 265,782
December 31, 2011	192,336	39,871	232,207

**T. STOCK REPURCHASE PROGRAM**

In November 2010, the Board cancelled the November 2007 stock repurchase program and authorized a new stock repurchase program for up to \$200 million. The cumulative repurchases under the new program as of December 31, 2012 totaled 2.6 million shares of common stock for \$31.2 million at an average price of \$11.84.

**Table of Contents****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.

	2012			
	1st Quarter (1)	2nd Quarter (2)	3rd Quarter (3)	4th Quarter (4)(5)(6)
	(in thousands, except per share amounts)			
<b>Net revenues:</b>				
Products	\$ 330,891	\$ 480,578	\$ 393,037	\$ 179,063
Services	65,777	67,706	70,357	69,341
<b>Total net revenues</b>	<b>396,668</b>	<b>548,284</b>	<b>463,394</b>	<b>248,404</b>
<b>Cost of revenues:</b>				
Cost of products	174,001	206,498	169,782	92,599
Cost of services	31,741	32,280	33,412	30,400
<b>Total cost of revenues</b>	<b>205,742</b>	<b>238,778</b>	<b>203,194</b>	<b>122,999</b>
<b>Gross profit</b>	<b>190,926</b>	<b>309,506</b>	<b>260,200</b>	<b>125,405</b>
<b>Operating expenses:</b>				
Engineering and development	60,135	66,532	63,055	61,660
Selling and administrative	67,777	73,366	69,921	70,436
Acquired intangible assets amortization	18,429	18,429	18,429	18,221
Restructuring and other, net	(1,825)	(6,262)	683	(317)
<b>Total operating expenses</b>	<b>144,516</b>	<b>152,065</b>	<b>152,088</b>	<b>150,000</b>
<b>Income (loss) from operations</b>	<b>46,410</b>	<b>157,441</b>	<b>108,112</b>	<b>(24,595)</b>
Interest income	893	874	1,067	1,256
Interest expense and other	(6,059)	(6,323)	(6,154)	(6,946)
<b>Income (loss) from continuing operations before income taxes</b>	<b>41,244</b>	<b>151,992</b>	<b>103,025</b>	<b>(30,285)</b>
Provision (benefit) for income taxes	7,680	40,605	14,384	(13,742)
<b>Income (loss) from continuing operations</b>	<b>33,564</b>	<b>111,387</b>	<b>88,641</b>	<b>(16,543)</b>
Income from discontinued operations before income taxes				
(Benefit) provision for income taxes				
<b>Income from discontinued operations</b>				
<b>Net income (loss)</b>	<b>\$ 33,564</b>	<b>\$ 111,387</b>	<b>\$ 88,641</b>	<b>\$ (16,543)</b>
<b>Income (loss) per common share from continuing operations - basic</b>	<b>\$ 0.18</b>	<b>\$ 0.60</b>	<b>\$ 0.47</b>	<b>\$ (0.09)</b>
<b>Income (loss) per common share from continuing operations - diluted</b>	<b>\$ 0.15</b>	<b>\$ 0.49</b>	<b>\$ 0.39</b>	<b>\$ (0.09)</b>

## Edgar Filing: TERADYNE, INC - Form 10-K

Net income (loss) per common share basic	\$	0.18	\$	0.60	\$	0.47	\$	(0.09)
Net income (loss) per common share diluted	\$	0.15	\$	0.49	\$	0.39	\$	(0.09)

- (1) Restructuring and other, net includes a (\$1.8) million fair value adjustment to decrease the LitePoint acquisition contingent consideration.
- (2) Restructuring and other, net includes \$0.3 million of severance charges related to headcount reductions of 10 people in Semiconductor Test and (\$6.5) million fair value adjustment to decrease the LitePoint acquisition contingent consideration.
- (3) Restructuring and other, net includes \$0.7 million of severance charges related to the headcount reductions of 9 people, of which \$0.5 million and 7 people were in Systems Test Group, \$0.2 million and 2 people were in Wireless Test.
- (4) Restructuring and other, net includes a (\$0.4) million fair value adjustment to decrease LitePoint acquisition contingent consideration.
- (5) In the fourth quarter ended December 31, 2012, we corrected prior period income tax provision (benefit) errors that resulted in a \$0.2 million income tax provision. These errors were not individually or in aggregate material to the fourth quarter of 2012 or any prior period.
- (6) In the fourth quarter ended December 31, 2012, the change in recognizing pension and postretirement benefit plans expense, as a result of the mark-to-market adjustments, decreased gross profit and net income by \$8.1 million and \$18.3 million, respectively. See Note B: Accounting Policies for a discussion of our accounting policy.

**Table of Contents**

	2011			
	1st Quarter (1)	2nd Quarter (2)	3rd Quarter (3)	4th Quarter (4)(5)
	(in thousands, except per share amounts)			
<b>Net revenues:</b>				
Products	\$ 315,719	\$ 341,316	\$ 274,944	\$ 228,212
Services	61,442	69,203	69,445	68,780
<b>Total net revenues</b>	<b>377,161</b>	<b>410,519</b>	<b>344,389</b>	<b>296,992</b>
<b>Cost of revenues:</b>				
Cost of products	152,880	160,491	138,088	127,477
Cost of services	31,389	35,438	35,927	35,548
<b>Total cost of revenues</b>	<b>184,269</b>	<b>195,929</b>	<b>174,015</b>	<b>163,025</b>
<b>Gross profit</b>	<b>192,892</b>	<b>214,590</b>	<b>170,374</b>	<b>133,967</b>
<b>Operating expenses:</b>				
Engineering and development	47,144	48,394	45,896	56,364
Selling and administrative	57,573	58,028	54,775	64,943
Acquired intangible assets amortization	7,291	7,291	6,754	19,129
Restructuring and other, net	413	1,041	1,465	3,824
<b>Total operating expenses</b>	<b>112,421</b>	<b>114,754</b>	<b>108,890</b>	<b>144,260</b>
Income (loss) from operations	80,471	99,836	61,484	(10,293)
Interest income	1,287	1,403	3,049	878
Interest expense and other	(6,176)	(5,316)	(6,068)	(6,134)
<b>Income (loss) from continuing operations before taxes</b>	<b>75,582</b>	<b>95,923</b>	<b>58,465</b>	<b>(15,549)</b>
Provision (benefit) for income taxes	5,486	7,839	1,759	(144,620)
<b>Income from continuing operations</b>	<b>70,096</b>	<b>88,084</b>	<b>56,706</b>	<b>129,071</b>
Income (loss) from discontinued operations before income taxes	1,278			
Income tax provision	(267)			
<b>Income from discontinued operations</b>	<b>1,545</b>			
Gain (loss) on disposal of discontinued operations (net of income tax provision of \$4,578)	25,203	(832)		
<b>Net income</b>	<b>\$ 96,844</b>	<b>\$ 87,252</b>	<b>\$ 56,706</b>	<b>\$ 129,071</b>
<b>Income per common share from continuing operations basic</b>	<b>\$ 0.38</b>	<b>\$ 0.48</b>	<b>\$ 0.31</b>	<b>\$ 0.70</b>
<b>Income per common share from continuing operations diluted</b>	<b>\$ 0.30</b>	<b>\$ 0.38</b>	<b>\$ 0.26</b>	<b>\$ 0.58</b>
<b>Net income per common share basic</b>	<b>\$ 0.52</b>	<b>\$ 0.47</b>	<b>\$ 0.31</b>	<b>\$ 0.70</b>
<b>Net income per common share diluted</b>	<b>\$ 0.42</b>	<b>\$ 0.38</b>	<b>\$ 0.26</b>	<b>\$ 0.58</b>

(1) Restructuring and other, net includes \$0.8 million of severance charges related to headcount reductions of approximately 5 people in Semiconductor Test and \$(0.4) million credit related to early exit of previously impaired leased facilities in Westford and North Reading, Massachusetts.

## Edgar Filing: TERADYNE, INC - Form 10-K

- (2) Restructuring and other, net includes \$0.3 million of severance charges related to headcount reductions of approximately 2 people in Semiconductor Test and \$0.7 million related to pension settlement charges.
- (3) Restructuring and other, net includes \$1.4 million of charges related to the acquisition of LitePoint.
- (4) Restructuring and other, net includes \$0.5 million of charges related to pension settlement and \$3.3 million to the acquisition of LitePoint.
- (5) In the fourth quarter ended December 31, 2011, the change in recognizing pension and postretirement benefit plans expense, as a result of the mark-to-market adjustments, decreased gross profit and net income by \$2.4 million and \$6.1 million, respectively. See Note B: Accounting Policies for a discussion of our accounting policy.

**Table of Contents**

**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, 2012 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, 2012.

The effectiveness of our internal control over financial reporting as of December 31, 2012 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.

**Table of Contents**

**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 21, 2013. 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 21, 2013. 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 21, 2013. 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 21, 2013. 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 21, 2013. 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.



---

**Table of Contents**

**PART IV**

**Item 15: Exhibits and Financial Statement Schedules.**

**15(a)(1) Financial Statements**

The following consolidated financial statements are included in Item 8:

	<b>Page</b>
<u>Report of Independent Registered Public Accounting Firm</u>	38
<u>Consolidated Balance Sheets as of December 31, 2012 and 2011</u>	39
<u>Consolidated Statements of Operations for the years ended December 31, 2012, 2011 and 2010</u>	40
<u>Consolidated Statements of Comprehensive Income for the years ended December 31, 2012, 2011 and 2010</u>	41
<u>Consolidated Statements of Shareholders' Equity for the years ended December 31, 2012, 2011 and 2010</u>	42
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010</u>	43

**15(a)(2) Financial Statement Schedule**

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**

**Table of Contents****TERADYNE, INC.****SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS**

<b>Column A</b>	<b>Column B</b>	<b>Column C</b>	<b>Column D</b>	<b>Column E</b>	<b>Column F</b>
<b>Description</b>	<b>Balance at Beginning of Period</b>	<b>Additions Charged to Cost and Expenses</b>	<b>Other (in thousands)</b>	<b>Deductions</b>	<b>Balance at End of Period</b>
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Accounts receivable:					
2012 Allowance for doubtful accounts	\$ 4,102	\$ 78	\$	\$ 62	\$ 4,118
2011 Allowance for doubtful accounts	\$ 3,752	\$	\$ 429	\$ 79	\$ 4,102
2010 Allowance for doubtful accounts	\$ 3,770	\$	\$	\$ 18	\$ 3,752

<b>Column A</b>	<b>Column B</b>	<b>Column C</b>	<b>Column D</b>	<b>Column E</b>	<b>Column F</b>
<b>Description</b>	<b>Balance at Beginning of Period</b>	<b>Additions Charged to Cost and Expenses</b>	<b>Other (in thousands)</b>	<b>Deductions</b>	<b>Balance at End of Period</b>
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Inventory:					
2012 Inventory reserve	\$ 123,512	\$ 26,849	\$ 5,353	\$ 13,876	\$ 141,838
2011 Inventory reserve	\$ 122,434	\$ 11,601	\$ 6,815	\$ 17,338	\$ 123,512
2010 Inventory reserve	\$ 125,320	\$ 5,971	\$ 4,110	\$ 12,967	\$ 122,434

**Table of Contents****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**

<b>No.</b>	<b>Description</b>	<b>SEC Document Reference</b>
2.1	Agreement and Plan of Merger by and among Teradyne, Inc., Lager Acquisition Corp., LitePoint Corporation and Michael Goguen as the Stockholder Representative dated September 14, 2011.	Exhibit 2.1 to Teradyne's Current Report on Form 8-K filed October 6, 2011.
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 Soletron.	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 Soletron.	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 Soletron.	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.	Exhibit 10.4 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2009.
10.5	Sixth Amendment to Standard Manufacturing Agreement, dated as of July 27, 2009, by and between Teradyne and Flextronics Corporation.	Exhibit 10.5 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2009.
10.6	Addendum to Standard Manufacturing Agreement (Authorized Purchase Agreement) Revised July 1, 2010.	Exhibit 10.6 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.

**Table of Contents****Exhibit**

<b>No.</b>	<b>Description</b>	<b>SEC Document Reference</b>
10.7	Eighth Amendment to Standard Manufacturing Agreement, dated as of April 13, 2012, by and between Teradyne and Flextronics Sales & Marketing North Asia (L) LTD.	Filed herewith.
10.8	Ninth Amendment to Standard Manufacturing Agreement, dated as of September 17, 2012, by and between Teradyne and Flextronics Sales & Marketing North Asia (L) LTD.	Filed herewith.
10.9	2006 Equity and Cash Compensation Incentive Plan, as amended.*	Filed herewith.
10.10	Form of Performance-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.8 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
10.11	Form of Time-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.9 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
10.12	Form of Restricted Stock Unit Agreement for Directors under 2006 Equity and Cash Compensation Incentive Plan.*	Exhibit 10.10 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
10.13	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.
10.14	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.
10.15	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.
10.16	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.
10.17	1996 Non-Employee Director Stock Option Plan, as amended.*	Exhibit 10.34 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.
10.18	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.

**Table of Contents****Exhibit**

<b>No.</b>	<b>Description</b>	<b>SEC Document Reference</b>
10.19	1996 Employee Stock Purchase Plan, as amended.*	Filed herewith.
10.20	Deferral Plan for Non-Employee Directors, as amended.*	Exhibit 10.2 to Teradyne's Quarterly Report on form 10-Q for the quarter ended September 28, 2008.
10.21	Supplemental Savings Plan, as amended and restated.*	Exhibit 10.18 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.22	Supplemental Executive Retirement Plan, as restated.*	Exhibit 10.19 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.23	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Michael A. Bradley, as amended.*	Filed herewith.
10.24	Amended and Restated Agreement Regarding Termination Benefits dated December 30, 2008 between Teradyne and Michael A. Bradley, as amended.*	Filed herewith.
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 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.
10.28	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Gregory R. Beecher, as amended.*	Filed herewith.
10.29	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Mark Jagiela, as amended.*	Filed herewith.
10.30	Amended and Restated Executive Officer Change in Control Agreement dated May 26, 2009 between Teradyne and Charles J. Gray, as amended.	Filed herewith.
10.31	Employment Agreement dated July 24, 2009 between Teradyne and Charles J. Gray.	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended April 4, 2010.

**Table of Contents****Exhibit**

<b>No.</b>	<b>Description</b>	<b>SEC Document Reference</b>
10.32	Amended and Restated Executive Officer Change in Control Agreement dated June 30, 2012 between Teradyne and Walter G. Vahey, as amended.	Filed herewith.
10.33	Employment Agreement dated February 6, 2013 between Teradyne and Walter G. Vahey	Filed herewith.
10.34	Executive Officer Agreement dated June 29, 2012 between Teradyne and Jeffrey Hotchkiss.	Exhibit 10.1 to Teradyne's Quarterly Report on Form 10-Q for the quarter ended July 1, 2012.
10.35	Form of Executive Officer Stock Option Agreement under 2006 Equity and Cash Compensation Incentive Plan, as amended.*	Exhibit 10.34 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2010.
10.36	Form of Indemnification Agreement.*	Exhibit 10.24 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.
10.37	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.
10.38	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.
10.39	Eagle Test Systems, Inc. 2003 Stock Option and Grant Plan.	Exhibit 10.35 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.40	Eagle Test Systems, Inc. 2006 Stock Option and Incentive Plan.	Exhibit 10.36 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
10.41	Convertible Note Hedge Transaction Confirmation dated as of March 31, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.1 to Current Report on Form 8-K filed April 6, 2009.
10.42	Warrant Transaction Confirmation dated as of March 31, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.2 to Current Report on Form 8-K filed April 6, 2009.
10.43	Amendment to Warrant Transaction Confirmation dated as of April 1, 2009 between Teradyne and Goldman, Sachs & Co.	Exhibit 10.3 to Current Report on Form 8-K filed April 6, 2009.
10.44	LitePoint Corporation 2002 Stock Plan	Exhibit 10.42 to Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2011.
21.1	Subsidiaries of Teradyne.	Filed herewith.

**Table of Contents****Exhibit**

<b>No.</b>	<b>Description</b>	<b>SEC Document Reference</b>
23.1	Consent of PricewaterhouseCoopers LLP.	Filed herewith.
31.1	Rule 13a-14(a) Certification of Principal Executive Officer.	Filed herewith.
31.2	Rule 13a-14(a) Certification of Principal Financial Officer.	Filed herewith.
32.1	Section 1350 Certification of Principal Executive Officer.	Furnished herewith.
32.2	Section 1350 Certification of Principal Financial Officer.	Furnished herewith.
101.INS	XBRL Instance Document	
101.SCH	XBRL Taxonomy Extension Schema Document	
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	

-Confidential treatment granted.

-Confidential treatment requested.

\* -Management contract or compensatory plan.

**Table of Contents****SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized this 1st day of March, 2013.

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.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ ALBERT CARNESALE  <b>Albert Carnesale</b>	Chair of the Board	March 1, 2013
/s/ MICHAEL A. BRADLEY  <b>Michael A. Bradley</b>	Chief Executive Officer (Principal Executive Officer)	March 1, 2013
/s/ GREGORY R. BEECHER  <b>Gregory R. Beecher</b>	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March 1, 2013
/s/ JAMES W. BAGLEY  <b>James W. Bagley</b>	Director	March 1, 2013
/s/ DANIEL W. CHRISTMAN  <b>Daniel W. Christman</b>	Director	March 1, 2013
/s/ EDWIN J. GILLIS  <b>Edwin J. Gillis</b>	Director	March 1, 2013
/s/ TIMOTHY E. GUERTIN  <b>Timothy E. Guertin</b>	Director	March 1, 2013
/s/ PAUL J. TUFANO  <b>Paul J. Tufano</b>	Director	March 1, 2013
/s/ ROY A. VALLEE  <b>Roy A. Vallee</b>	Director	March 1, 2013



