TERADYNE, INC
Form 10-K
February 29, 2016
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)

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

For the fiscal year ended December 31, 2015

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	**04-2272148**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification Number)**
600 RIVERPARK DRIVE	**01864**

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:

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x 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 x

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 x 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 x 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 x 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 x

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 2, 2015 was approximately $4.1 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, 2016 was 204,336,493 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s proxy statement in connection with its 2016 annual meeting of shareholders are incorporated by reference into Part III of this Form 10-K.

Table of Contents

TERADYNE, INC.

INDEX

		Page No.
	PART I.	
Item 1.	Business	1
Item 1A.	Risk Factors	9
Item 1B.	Unresolved Staff Comments	17
Item 2.	Properties	18
Item 3.	Legal Proceedings	18
Item 4.	Mine Safety Disclosure	18
	PART II.	
Item 5.	Market for Registrant s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities	19
Item 6.	Selected Financial Data	20
Item 7.	Management s Discussion and Analysis of Financial Condition and Results of Operation	21
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	39
Item 8.	Financial Statements and Supplementary Data	41
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	98
Item 9A.	Controls and Procedures	98
Item 9B.	Other Information	98
	PART III.	
Item 10.	Directors, Executive Officers and Corporate Governance	99
Item 11.	Executive Compensation	99
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	99
Item 13.	Certain Relationships and Related Transactions, and Director Independence	99
Item 14.	Principal Accountant Fees and Services	99
	PART IV.	
Item 15.	Exhibits and Financial Statement Schedule	100
	Signatures	106

Table of Contents

TERADYNE, INC.

FORM 10-K

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act and Section 21E of the Securities Exchange Act. When used herein, the words will, would, believe, anticipate, plan, expect, estimate, project, intend, may, see, target and other words and terms of similar meaning are intended to i forward-looking statements although not all forward looking statements contain these identifying words. Forward looking statements involve risks and uncertainties, including, but not limited to, those discussed in the section entitled Risk Factors of this annual report on Form 10-K and elsewhere, and in other reports we file 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 and are subject to risks and uncertainties that could cause actual results to differ materially from those stated or implied. Teradyne assumes no obligation to update these forward-looking statements for any reason, except as may be required by law.

PART I

Item 1: ***Business***

Teradyne, Inc. (Teradyne) was founded in 1960 and is a leading global supplier of automation equipment for test and industrial applications.

We design, develop, manufacture and sell automatic test systems used to test semiconductors, wireless products, data storage and complex electronics systems in the consumer electronics, wireless, automotive, industrial, computing, communications, and aerospace and defense industries. Our industrial automation products include collaborative robots used by global manufacturing and light industrial customers to improve quality and increase manufacturing efficiency. Our automatic test equipment and industrial automation products and services include:

- semiconductor test (Semiconductor Test) systems;
- defense/aerospace (Defense/Aerospace) test instrumentation and systems, storage test (Storage Test) systems, and circuit-board test and inspection (Production Board Test) systems (collectively these products represent System Test);
- wireless test (Wireless Test) systems; and
- industrial automation (Industrial Automation) products.

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, and distributors that sell collaborative robots.

On June 11, 2015, we acquired Universal Robots A/S (Universal Robots) for approximately $284 million of cash plus up to an additional $65 million of cash if certain performance targets are met extending through 2018. Universal Robots is the leading supplier of collaborative robots which are low-cost, easy-to-deploy and simple-to-program robots that work side by side with production workers to improve quality and increase manufacturing efficiency. Universal Robots is a separate operating and reportable segment, Industrial Automation. The acquisition of Universal Robots provides a growth engine to our business and complements our

1

Table of Contents

existing System Test and Wireless Test segments. The total purchase price for Universal Robots was approximately $315 million.

In 2014, we acquired Avionics Interface Technologies LLC (AIT), a supplier of equipment for testing state-of-the-art data communication buses. The acquisition of AIT complements our Defense/Aerospace line of bus test instrumentation for commercial and defense avionics systems. AIT is included in our System Test segment. The total purchase price for AIT was approximately $21 million, which included cash paid of approximately $19 million and $2 million in fair value of contingent consideration payable upon achievement of revenue and gross margin targets in 2015 and 2016. No contingent consideration was paid for 2015. The maximum remaining contingent consideration that could be paid is $1.1 million.

In 2013, we acquired ZTEC Instruments Inc. (ZTEC), a supplier of modular wireless test instruments. The acquisition of ZTEC expands our Wireless Test segment into the design verification test of wireless components and chipsets. The total purchase price for ZTEC was approximately $17 million, which included cash paid of approximately $15 million and $2 million in fair value of contingent consideration payable upon achievement of certain customer order and revenue targets through 2015. None of the contingent consideration was paid.

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 manufacturing of wireless devices, including smart phones, tablets, notebooks, laptops, personal computer peripherals, and other Wi-Fi, Bluetooth and cellular enabled devices. The total purchase price for LitePoint was approximately $646 million. LitePoint and ZTEC represent our Wireless Test segment.

Investor Information

We are a Massachusetts corporation incorporated on September 23, 1960. We are subject to the informational requirements of the Securities Exchange Act of 1934 (Exchange Act). We file periodic reports, proxy statements and other information with the Securities and Exchange Commission (SEC). Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, N.E., Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file documents electronically.

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

Products

Semiconductor Test

We design, manufacture, sell and support Semiconductor Test products and services on a worldwide basis. The test systems we provide are used both for wafer level and device package testing. These chips are used in automotive, industrial, communications, consumer, and 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 and microprocessors as well as 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

Table of Contents

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 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:

- A high efficiency multi-site architecture that reduces tester overhead such as instrument setup, synchronization and data movement, and signal processing;
- The IG-XL software operating system which provides fast program development, including instant conversion from single to multi-site test; and
- 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 by providing versatile testers that can handle the widest range of devices, allowing OSATs to leverage their capital investments. The broad consumer, automotive and broadband markets have historically driven most of the device volume growth in the semiconductor industry. These markets include 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 UltraFLEX-M tester extends the FLEX Test Platform into the High Speed DRAM testing market. The FLEX Test Platform has an installed base of more than 4,700 systems.

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 smart phones and other imaging products. We have continued 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. In 2013, we introduced the J750 Ex-HD which includes system enhancements and new high density instruments that enable the J750 test platform to provide higher test cell productivity. The J750 platform has an installed base of over 4,800 systems.

Our Magnum platform addresses 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 V, the newest member of the family, is a next generation memory test solution designed for parallel memory

test in the flash, DRAM and multi-chip package markets. The Magnum platform has an installed base of over 1,800 systems.

Table of Contents

Our 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. Our proprietary SmartPin technology enables high efficiency multi-site testing, on an individual test system, permitting greater test throughput. Semiconductors tested by ETS platform systems are incorporated into a wide range of products in historically high-growth markets, including mobile devices, video/multimedia products, automotive electronics, computer peripherals, and notebook and desktop computers. In 2013, we introduced the ETS-88, a high performance multi-site production test system designed to test a wide variety of high volume commodity and precision devices. In 2015, we introduced the ETS-800, a high performance multi-site production test system to test high complexity power devices in automotive, industrial and consumer applications. The ETS platform has an installed base of over 3,700 systems.

Wireless Test

Our acquisition of LitePoint in 2011 and ZTEC in 2013 expanded our product offerings in the wireless test market. LitePoint designs, develops, and supports advanced wireless test equipment for the manufacturing of wireless devices, including smart phones, tablets, notebooks, laptops, personal computer peripherals, and other Wi-Fi, Bluetooth, Near Field Communication (NFC) and cellular enabled devices. LitePoint collaborates with developers, chipset/component manufacturers, and manufacturing leaders to create agile systems designed to ensure the quality of wireless products manufactured in very large numbers. Using easy-to-deploy, innovative test methodologies, LitePoint s IQ product line is designed for high-volume, low-cost production test, and falls into two test categories: cellular and connectivity. Our acquisition of ZTEC expanded our wireless product offerings into modular wireless test instruments for the design verification test of wireless components and chipsets.

Cellular

The IQxstream is a multi-DUT optimized solution for high-speed testing of GSM, EDGE, CDMA2000, TD-SCDMA, WCDMA, HSPA+, LTE-FDD, TD_LTE, and LTE-A technologies used for calibration and verification of smartphones, tablets, small cell wireless gateways and embedded cellular modules. As the industry s first multi-DUT test solution, IQxstream greatly increased production output through the implementation of parallel test methods of multiple devices. IQxstream is complemented by IQvector , a turnkey production-optimized testing package that supports the leading cellular chipset solutions, which allows manufacturers to ramp volume production in a matter of weeks, rather than months. Drivers for IQxstream are found in the test software solutions provided by leading cellular chipset companies including Qualcomm, Intel, MediaTek, Spreadtrum, Marvell and others.

Connectivity

We offer a comprehensive range of test equipment for multi-DUT connectivity testing. The IQxel family enables calibration and verification of the latest Wi-Fi standard 802.11ac taking wireless data rates beyond the gigabit per second barrier. The IQxel family supports multiple bandwidth and channel configurations, MIMO antenna arrangements, Bluetooth Classic and Low Energy, and covers the full range of communication standards. These solutions target manufacturers of networking equipment, Internet access devices, Internet of Things (IoT) products and embedded modules used in smartphones, tablets, and PCs. We were the first to introduce a production focused parametric test solution for NFC technology with our IQnfc addressing the growing use of NFC technology for mobile payments with smartphones.

To complement the IQ family of connectivity testers, we offer IQfact+ a turnkey, chipset-optimized, customizable software library covering over 300 wireless IC solutions, enabling the rapid development of volume manufacturing solutions with a minimum of engineering effort by our customers. Similar to our cellular products, drivers for our connectivity products are found in the test software solutions from Broadcom, Qualcomm, Marvell, MediaTek and others.

Table of Contents

Design Verification Test

We offer the zSeries of modular wireless test instruments for the design verification test of wireless components and chipsets. The lab-in-a-box zSeries solution provides simple and fast design verification of RF power amplifier and smart device RF front end modules. It is capable of rapid analysis of the latest digital pre-distortion and envelope tracking technologies for both LTE and WiFi standards.

System Test

Our System Test segment is comprised of three business units: Defense/Aerospace, Storage Test and Production Board Test.

Defense/Aerospace

We are a leading provider of high-performance test systems, subsystems, instruments and service for the defense and aerospace markets. Our test products 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 test products 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. Our acquisition of AIT in 2014 complements our line of bus test instrumentation for commercial and defense avionics systems. AIT is a supplier of equipment for testing state-of-the-art data communication buses.

Storage Test

The Storage Test business unit addresses the high throughput, automated manufacturing test requirements of hard disk drive (HDD) and solid state disk (SSD) manufacturers. Our products address the client and enterprise storage markets. The client market is driven by the needs of desktop, laptop, and external HDD and SSD storage products. The enterprise market is driven by the needs of data centers and cloud storage. Our products lead in addressing customer requirements related to factory density, throughput, thermal performance and vibration isolation.

Production Board Test

Our test systems are used by electronics manufacturers worldwide to perform In-Circuit-Test (ICT) and device programming of printed circuit board assemblies. Fast, accurate and cost-effective test capabilities are hallmark features of our Test Station and Spectrum ICT product families. We offer the Test Station in off-line and automated in-line configurations. The automated in-line configurations address the growing requirements for automating production lines for high volume applications, such as automotive electronics.

Industrial Automation

Universal Robots, which we acquired in June 2015, is the leading supplier of collaborative robots, which are low-cost, easy-to-deploy and simple-to-program robots that work side by side with production workers to improve quality, increase manufacturing efficiency and decrease manufacturing costs. Collaborative robots are designed to mimic the motion of a human arm and can be fitted with task specific grippers or fixtures to support a wide range of applications. Universal Robots offers three collaborative robot models, the UR3, UR5, and UR10, each with different weight carrying capacity and arm reach. All models are easily integrated into existing production environments. Universal Robots products are differentiated by their:

easy programming using a graphical interface which allows users to program the collaborative robot in a few hours;

Table of Contents

flexibility and ease of use in allowing customers to change the task the collaborative robot is performing as their production demands dictate;

safe operations as the collaborative robots can assist workers in side by side production environments requiring no special safety enclosures or shielding to protect workers; and

short payback period, on average less than 12 months.

Cumulatively, Universal Robots has sold over 6,500 collaborative robots in diverse production environments and applications.

Summary of Revenues by Reportable Segment

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

	2015	2014	2013
Semiconductor Test	73%	79%	71%
System Test	13	10	11
Wireless Test	11	11	18
Industrial Automation	3		
	100%	100%	100%

Sales and Distribution

In 2015, revenues from JA Mitsui Leasing, Ltd. accounted for 13% of our consolidated revenues. JA Mitsui Leasing, Ltd. is a customer of our Semiconductor Test segment. In 2014, no single customer accounted for more than 10% of our consolidated revenues. In 2013, revenues from Apple Inc. accounted for 12% of our consolidated revenues. In 2013, Apple Inc. was a customer of our Semiconductor Test and Wireless Test segments. In each of the years, 2015, 2014 and 2013, our three largest customers in aggregate accounted for 25%, 21% and 26% of our consolidated revenues, respectively. OSAT customers often purchase our test systems based upon recommendations from IDMs and Fabless companies. In all cases when an OSAT customer purchases a test system from us, we consider the OSAT as the customer since credit risk, title and risk of loss, among other things, are between Teradyne and the OSAT.

Direct sales to United States government agencies accounted for 1%, 2% and 3% of our consolidated revenues in 2015, 2014 and 2013, respectively. Approximately 7%, 20% and 32% of System Test s revenues in 2015, 2014 and 2013, respectively, were to United States government agencies and 26%, 23% and 24% of System Test s revenues in 2015, 2014 and 2013, respectively, were to government contractor customers.

We have sales and service offices located throughout North America, Asia and Europe. 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 87%, 87% and 84% of our consolidated revenues in 2015, 2014 and 2013, respectively. Sales are attributed to geographic areas based on the location of the customer site.

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

	2015	2014	2013
Taiwan	27%	30%	19%

China	16	18	23

Table of Contents

See also Item 1A: Risk Factors and Note Q: 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 Xcerra Corporation.

Competitors in the System Test segment include, among others, Keysight Technologies, Inc. (formerly Agilent Technologies), Astronics, Test Research Inc. and SPEA S.p.A.

Competitors in our Wireless Test segment include, among others, Rohde & Schwarz GmbH & Co. KG, Anritsu Company, Keysight Technologies, Inc., Cobham/Aeroflex, Inc. and National Instruments Corporation.

Competitors in our Industrial Automation segment include manufacturers of traditional industrial robots such as KUKA Robotics Corporation, ABB, FANUC and Yaskawa Electric Corporation as well as emerging companies developing collaborative robots.

Some of our competitors have substantially greater financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. We also face competition from emerging Asian equipment companies and from internal suppliers at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. See also Item 1A: Risk Factors.

Backlog

At December 31, 2015 and 2014, our backlog of unfilled orders in our four reportable segments was as follows:

	2015	2014
	(in millions)	
Semiconductor Test	$ 472.9	$ 262.8
System Test	108.8	96.1
Wireless Test	33.4	37.0
Industrial Automation	0.6	
	$ 615.7	$ 395.9

Of the backlog at December 31, 2015, approximately 99% of the Semiconductor Test backlog, 93% of System Test backlog, 46% of Wireless Test backlog and 100% of the Industrial Automation backlog, is expected to be delivered in 2016.

Customers may delay delivery of products or cancel orders suddenly and without advanced 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

Table of Contents

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.

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, 2015, we employed approximately 4,100 people. Since the inception of our business, we have experienced no work stoppages or other labor disturbances.

Engineering and Development Activities

The highly technical nature of our products requires a large and continuing engineering and development effort. For the years ended December 31, 2015, 2014 and 2013, our engineering and development expenditures were $292.3 million, $291.6 million, and $264.1 million, respectively. These expenditures accounted for approximately 17.8%, 17.7%, and 18.5%, of our consolidated revenues in 2015, 2014, and 2013, 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.

8

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.

Executive Officer	Age	Position	Business Experience For The Past 5 Years
Mark E. Jagiela	55	Chief Executive Officer and President	Chief Executive Officer since February 2014; President of Teradyne since January 2013; President of Semiconductor Test from 2003 to February 2016; Vice President of Teradyne from 2001 to 2013.
Gregory R. Beecher	58	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	54	Vice President, General Counsel and Secretary	Vice President, General Counsel and Secretary of Teradyne since April 2009.
Bradford B. Robbins	57	President of Wireless Test	President of Wireless Test since August 2014; Chief Operating Officer of LitePoint Corporation from 2012 to 2014; Vice President of Teradyne since 2001.
Gregory S. Smith	52	President of Semiconductor Test	President of Semiconductor Test since February 2016; Vice President, SOC Business Group and Marketing Manager for Semiconductor Test Group from January 2014 to February 2016; Business Unit Manager, Complex SOC Business Unit from 2009 to January 2014.
Walter G. Vahey	51	President of System Test	President of System Test since July 2012; Vice President of Teradyne since 2008; General Manager of Storage Test since 2008; General Manager of Production Board Test since April 2013; General Manager of Defense/Aerospace 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 global and industry-specific economic cycles, which are difficult to predict, and actions we have taken or may take to offset these cycles may not be sufficient.

Capital equipment providers in the electronics and semiconductor industries, such as Teradyne, have, in the past, been negatively impacted by both sudden slowdowns in the global economies and recurring cyclicality within those industries. These cycles have resulted in periods of over-supply; a trend we believe will continue to

Table of Contents

occur for newer generations of electronic products. 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. 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, and resulting slowdowns in the market for our products, may, among other things, result in increased price competition for our products, increased risk of excess and obsolete inventories, increased risk in the collectability of our accounts receivable from our customers, potential reserves for doubtful accounts and write-offs of accounts receivable, increased risk of restructuring charges, and higher operating costs as a percentage of revenues, which, in each case and together, adversely affect our operating results. 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, and we cannot ensure that the level of revenues or new orders for a fiscal quarter will be sustained in subsequent quarters. We have taken actions to address the effects of general economic variability and recurring industry cyclicality, including implementing cost control and reduction measures. If our businesses experience further downturns, whether due to a deterioration in global economic conditions or slowdowns in specific markets we serve, we may need to take further cost control and reduction measures. We cannot predict whether these measures will be sufficient to offset global or market-specific disruptions that might affect our test businesses.

We are subject to intense competition.

We face significant competition throughout the world in each of our reportable segments. Some of our competitors have substantial financial and other resources to pursue engineering, manufacturing, marketing and distribution of their products. We also face competition from emerging Asian equipment companies and internal development at several of our customers. Some of our competitors have introduced or announced new products with certain performance characteristics which may be considered equal or superior to those we currently offer. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that provide improved cost of ownership and performance characteristics. New product introductions by competitors could cause a decline in revenues or loss of market acceptance of our products.

The 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 2015, 2014 and 2013, our three largest customers in aggregate accounted for 25%, 21% and 26% of consolidated revenues, respectively. In any one reporting period, a single customer or several customers may contribute even a larger percentage of our consolidated 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.

Failure to realize the estimated sales value of equipment leased to our customers may adversely affect our results of operations.

We occasionally lease equipment to our customers, typically for a term of one year. The cost of the leased equipment is recorded as an asset on our balance sheet and depreciated over an estimated useful life of approximately four years. Realization of the leased equipment s value depends on numerous factors including: the technological obsolescence of the leased equipment; elections by customers to terminate a lease prior to

Table of Contents

scheduled termination; the general market conditions at the time of expiration of the lease; the customer s election to renew the lease; and the cost of comparable new equipment. Our inability to realize the value of leased equipment could cause a decrease in revenues and an increase in asset write-offs which would in each case reduce our operating income.

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 could 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;
- an increase in the leasing of our products to customers;
- our ability to expand our global distribution channel for our collaborative robots;
- 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 increases.

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;

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;

Table of Contents

difficulties in staffing and managing international operations;

compliance with customs regulations; and

compliance with international tax laws and 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, China, Singapore and other parts of Asia. As a result, we are subject to a number of economic and other risks, particularly during times of political or financial instability in these regions. Disruption of manufacturing or supply sources in these international locations could materially adversely impact our ability to fill customer orders and potentially result in lost business.

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

We believe that our technological position depends primarily on the technical competence and creative ability of our engineers. In a rapidly evolving market, such as ours, the development 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 25% 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.

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.

Table of Contents

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 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.

In June 2015, we acquired Universal Robots. We may not be able to realize the benefit of acquiring Universal Robots or successfully grow Universal Robots business. We may continue to acquire additional businesses, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing businesses. We may not be able to realize the expected synergies and cost savings from the integration with our existing operations of other businesses or technologies that we may acquire. In addition, the integration process for our acquisitions may be complex, costly and time consuming and include unanticipated issues, expenses and liabilities. We may have difficulty in developing, manufacturing and marketing the products of a newly acquired company in a manner that enhances the performance of our combined businesses or product lines and allows us to realize value from expected synergies. Following an acquisition, we may not achieve the revenue or net income levels that justify the acquisition. Acquisitions may also result in one-time charges (such as acquisition-related expenses, write-offs or restructuring charges) or in the future, impairment of goodwill, that adversely affect our operating results. Additionally, we may fund acquisitions of new businesses, strategic alliances or joint ventures by utilizing our cash, incurring debt, issuing shares of our common stock, or by other means.

In the fourth quarter of 2014, we performed our annual goodwill impairment test and recorded a goodwill impairment charge of $98.9 million in our Wireless Test segment as a result of decreased projected demand attributable to an estimated smaller future wireless test market due to reuse of wireless test equipment, price competition and different testing techniques. Further reductions in the size of the wireless test market may occur, which may result in additional goodwill impairment charges, increased risk of excess and obsolete inventories, asset write-offs and restructuring charges.

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

Table of Contents

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, 2015, 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 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 or regulatory proceedings that could have an adverse effect on our business.

From time to time, we may be subject to litigation or other administrative, regulatory or governmental proceedings, including tax audits and resulting claims that could require significant management time and resources and cause us to incur expenses and, in the event of an adverse decision, pay damages or incur costs 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, operating results or cash flows.

Table of Contents

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, trademark 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.

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 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 December 2015, Teradyne entered into an agreement with the Singapore Economic Development Board which extended our Singapore tax holiday under substantially similar terms to the agreement which expired on December 31, 2015. The new tax holiday is scheduled to expire on December 31, 2020. The tax savings attributable to the Singapore tax holiday for the years ended December 31, 2015, 2014 and 2013 were $11.5 million or $0.05 per diluted share, $13.2 million or $0.06 per diluted share and $4.7 million or $0.02 per diluted share, respectively.

In addition, we may incur additional costs, including headcount expenses, in order to maintain or obtain a foreign tax incentive in a particular foreign jurisdiction.

We have significant guarantees, indemnification and customer confidentiality obligations.

From time to time, we make guarantees to customers regarding the delivery, price 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 and if breached would require the payment of significant penalties. 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 J: Commitments and Contingencies Guarantees and Indemnification Obligations in Notes to Consolidated Financial Statements.

We may discontinue or reduce our quarterly cash dividend or share repurchase program.

In January 2014, our Board of Directors initiated a quarterly dividend of $0.06 per share. In January 2015, our Board of Directors authorized Teradyne to repurchase up to $500 million of common stock. In 2015, we

Table of Contents

repurchased $300 million of common stock. In 2016, we intend to repurchase between $100 million and $200 million of common stock. Holders of our common stock are only entitled to receive dividends when and if they are declared by our Board of Directors. Future cash dividends and share repurchases are subject to the discretion of our Board of Directors and will depend, among other things, upon our earnings, capital requirements and financial condition. While we have declared a quarterly cash dividend on our common stock and authorized a share repurchase program, we are not required to do either and may reduce or eliminate our cash dividend or share repurchase program in the future. The reduction or elimination of our cash dividend or our share repurchase program could adversely affect the market price of our common stock.

We may incur indebtedness.

On April 27, 2015, we entered into a five-year, senior secured revolving credit facility of up to $350 million. Subject to customary conditions, we may seek to obtain from existing or new lenders incremental commitments under the credit facility in an aggregate principal amount not to exceed $150 million. We have not borrowed any funds under this credit facility. We could borrow funds under this credit facility at any time for general corporate purposes and working capital. Incurring indebtedness, among other things, could:

- make it difficult to pay 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 our 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 markets in which we compete.

Restrictive covenants in the agreement governing our senior secured revolving credit facility may restrict our ability to pursue business strategies.

The agreement governing our senior secured revolving credit facility limits our ability, among other things, to: incur additional secured indebtedness; sell, transfer, license or dispose of assets; consolidate or merge; enter into transactions with our affiliates; and incur liens. In addition, our senior secured revolving credit facility contains financial and other restrictive covenants that limit our ability to engage in activities that may be in our long term best interest, such as, subject to permitted exceptions, making capital expenditures in excess of certain thresholds, making investments, loans and other advances, and prepaying any additional indebtedness while our indebtedness under our senior secured revolving credit facility is outstanding. Our failure to comply with financial and other restrictive covenants could result in an event of default, which if not cured or waived, could result in the lenders requiring immediate payment of all outstanding borrowings or foreclosing on collateral pledged to them to secure the indebtedness.

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

Table of Contents

in our products, whether or not these products are manufactured by third parties. This requirement could affect the pricing, sourcing and availability of minerals used in the manufacture of components we use in our products. In addition, there are 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 minerals 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.

A breach of our operational or security systems could negatively affect our business and results of operations.

We rely on various information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, including confidential data, and to carry out and support a variety of business activities, including manufacturing, research and development, supply chain management, sales and accounting. A failure in or a breach of our operational or security systems or infrastructure, or those of our suppliers and other service providers, including as a result of cyber attacks, could disrupt our business, result in the disclosure or misuse of proprietary or confidential information, damage our reputation, cause losses and increase our costs.

We may face risks associated with shareholder activism.

Publicly traded companies have increasingly become subject to campaigns by shareholders advocating corporate actions such as financial restructuring, increased borrowing, special dividends, stock repurchases or divestitures. We may become subject in the future to such shareholder activity and demands. Such activities could interfere with our ability to execute our business plans, be costly and time-consuming, disrupt our operations, divert the attention of management or result in our initiating borrowing or increasing our share repurchase plan or dividend, any of which could have an adverse effect on our business or stock price.

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.

Table of Contents

Item 2: ***Properties***

The following table provides information as to our principal facilities:

Location	Operating Segment	Major Activity+	Approximate Square Feet of Floor Space
Properties owned:			
North Reading, Massachusetts	Semiconductor Test & System Test	1-2-3-4-5	422,000
Agoura Hills, California	Semiconductor Test	3-4	120,000
Kumamoto, Japan	Semiconductor Test	2-3-4-5	79,000
			621,000
Properties leased:			
Cebu, Philippines	Semiconductor Test	1-2-5	183,000
San Jose, California	Semiconductor Test	2-3-4-5	128,000
Odense, Denmark	Industrial Automation	2-3-4-5	121,000
Buffalo Grove, Illinois	Semiconductor Test	2-3-4-5	95,000
Sunnyvale, California	Wireless Test & Semiconductor Test	2-3-4-5	91,000
Shanghai, China	Semiconductor Test, System Test, Wireless Test & Industrial Automation	3-4-5	80,000
Heredia, Costa Rica	Semiconductor Test	1-5	49,000
Hsinchu, Taiwan	Semiconductor Test & System Test	4	43,000
Singapore, Singapore	Semiconductor Test & Industrial Automation	1-3-4	32,000
Seoul, Korea	Semiconductor Test	4	28,000
			850,000

\+ Major activities have been separated into the following categories: 1. Corporate Administration, 2. Manufacturing, 3. Engineering, 4. Sales and Marketing, 5. 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 results of operations, financial condition or cash flows.

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 and the dividends declared per share during such periods:

Period	High	Low	Dividends
2014			
First quarter	$ 20.54	$ 17.36	$ N/A
Second quarter	20.72	16.95	0.06(1)
Third quarter	20.88	17.74	0.06
Fourth quarter	20.49	16.02	0.06
2015			
First quarter	$ 20.15	$ 17.60	$ 0.06
Second quarter	21.33	18.03	0.06
Third quarter	20.00	16.06	0.06
Fourth quarter	21.58	18.09	0.06

(1) Dividend declared January 22, 2014 with a record date of May 9, 2014 and a payment date of June 2, 2014.

The number of record holders of our common stock at February 22, 2016 was 1,898.

In January 2015, May 2015, August 2015 and November 2015, our Board of Directors declared a quarterly cash dividend of $0.06 per share.

In January 2014, August 2014 and November 2014, our Board of Directors declared a quarterly cash dividend of $0.06 per share.

In January 2015, our Board of Directors cancelled the November 2010 stock repurchase program and authorized a new stock repurchase program for up to $500 million of common stock. The cumulative repurchases as of December 31, 2015 totaled 15.6 million shares of common stock for $300 million at an average price per share of $19.20. In 2016, we intend to repurchase between $100 million and $200 million of common stock.

In November 2010, our Board of Directors authorized a stock repurchase program for up to $200 million. Under the November 2010 program, we repurchased 2.6 million shares of common stock for $31.2 million at an average price of $11.84 per share.

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

Table of Contents

The following table includes information with respect to repurchases we made of our common stock during the quarter ended December 31, 2015 (in thousands except per share price):

Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may Yet Be Purchased Under the Plans or Programs
October 5, 2015 November 1, 2015	1,492	$ 18.49	1,480	$ 245,801
November 2, 2015 November 29, 2015	1,229	$ 20.09	1,228	$ 221,120
November 30, 2015 December 31, 2015	1,031	$ 20.48	1,029	$ 200,051
	3,752(1)	$ 19.56(1)	3,737	

(1) Includes approximately fifteen thousand shares at an average price of $20.25 withheld from employees for the payment of taxes. We satisfy U.S. federal and state minimum withholding tax obligations 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 minimum withholding amount due.

Item 6: ***Selected Financial Data***

	Years Ended December 31,				
	2015	2014	2013	2012	2011
	(dollars in thousands, except per share amounts)				
Consolidated Statement of Operations Data (1)(2)(3)(4)(5)(6)(7):					
Revenues	$ 1,639,578	$ 1,647,824	$ 1,427,933	$ 1,656,750	$ 1,429,061
Income from continuing operations	206,477	81,272	164,947	217,049	343,957
Net income	$ 206,477	$ 81,272	$ 164,947	$ 217,049	$ 369,873
Income from continuing operations per common share basic	$ 0.98	$ 0.40	$ 0.86	$ 1.16	$ 1.86
Income from continuing operations per common share diluted	$ 0.97	$ 0.37	$ 0.70	$ 0.94	$ 1.52
Net income per common share basic	$ 0.98	$ 0.40	$ 0.86	$ 1.16	$ 2.00
Net income per common share diluted	$ 0.97	$ 0.37	$ 0.70	$ 0.94	$ 1.63
Cash dividend declared per common share	$ 0.24	$ 0.18	$	$	$

Consolidated Balance Sheet Data:					
Total assets	$ 2,548,674	$ 2,538,520	$ 2,629,824	$ 2,429,345	$ 2,188,639
Short-term debt obligations	$	$	$ 186,663	$ 2,328	$ 2,573
Long-term debt obligations	$	$	$	$ 171,059	$ 159,956

(1) The Consolidated Statement of Operations Data for the year ended December 31, 2015 includes $17.7 million of pension actuarial losses, a $5.4 million gain from the sale of an equity investment and the results of operations of Universal Robots from June 12, 2015.

Table of Contents

(2) The Consolidated Statement of Operations Data for the year ended December 31, 2014 includes a $98.9 million goodwill impairment charge related to the Wireless Test segment and $46.6 million of pension actuarial losses.
(3) The Consolidated Statement of Operations Data for the year ended December 31, 2013 includes a $34.2 million gain from the sale of an equity investment and $10.3 million of pension actuarial gains.
(4) The Consolidated Statement of Operations Data for the year ended December 31, 2012 includes $23.3 million of pension actuarial losses.
(5) 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 and $13.6 million of pension actuarial losses.
(6) The Consolidated Statement of Operations Data for the year ended December 31, 2011 includes the results of operations of LitePoint from October 5, 2011.
(7) As a result of the divestiture of Diagnostic Test Solutions in 2011, we are reporting this business unit as discontinued operations for 2011.

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

Overview

We are a leading global supplier of automation equipment for test and industrial applications. We design, develop, manufacture and sell automatic test systems used to test semiconductors, wireless products, data storage and complex electronics systems in the consumer electronics, wireless, automotive, industrial, computing, communications, and aerospace and defense industries. Our industrial automation products include collaborative robots used by global manufacturing and light industrial customers to improve quality, increase manufacturing efficiency and decrease manufacturing costs. Our automatic test equipment and industrial automation products and services include:

semiconductor test (Semiconductor Test) systems;

defense/aerospace (Defense/Aerospace) test instrumentation and systems, storage test (Storage Test) systems, and circuit-board test and inspection (Production Board Test) systems (collectively these products represent System Test);

wireless test (Wireless Test) systems; and

industrial automation (Industrial Automation) products.

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, and distributors that sell collaborative robots.

On June 11, 2015, we acquired Universal Robots A/S (Universal Robots) for approximately $284 million of cash plus up to an additional $65 million of cash if certain performance targets are met extending through 2018. Universal Robots is the leading supplier of collaborative robots which are low-cost, easy-to-deploy and simple-to-program robots that work side by side with production workers to improve quality, increase manufacturing efficiency and decrease manufacturing costs. Universal Robots is a separate operating and reportable segment, Industrial Automation. The acquisition of Universal Robots provides a growth engine to our business and complements our existing System Test and Wireless Test segments. The total purchase price for Universal Robots was approximately $315 million.

In 2014, we acquired Avionics Interface Technologies, LLC (AIT), a supplier of equipment for testing state-of-the-art data communication buses. The acquisition of AIT complements our Defense/Aerospace line of bus test instrumentation for commercial and defense avionics systems. AIT is included in our System Test

Table of Contents

segment. The total purchase price for AIT was approximately $21 million, which included cash paid of approximately $19 million and $2 million in fair value of contingent consideration payable upon achievement of revenue and gross margin targets in 2015 and 2016. No contingent consideration was paid for 2015. The maximum remaining contingent consideration that could be paid is $1.1 million.

In 2013, we acquired ZTEC Instruments Inc. (ZTEC), a supplier of modular wireless test instruments. The acquisition of ZTEC expands our Wireless Test segment into the design verification test of wireless components and chipsets. The total purchase price for ZTEC was approximately $17 million, which included cash paid of approximately $15 million and $2 million in fair value of contingent consideration payable upon achievement of certain customer order and revenue targets through 2015. None of the contingent consideration was paid.

We believe our recent acquisitions have enhanced our opportunities for growth. We will continue to invest in our business, grow market share in our markets and expand further our addressable markets while tightly managing our costs.

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 and electronics industries. Historically, these demand fluctuations have resulted in significant variations in our results of operations. The sharp swings in the semiconductor and electronics industries in recent years have generally affected the semiconductor and electronics test equipment and services industries more significantly than the overall capital equipment sector.

In the fourth quarter of 2014, we performed our annual goodwill impairment test and recorded a goodwill impairment charge of $98.9 million in our Wireless Test segment as a result of decreased projected demand attributable to an estimated smaller future wireless test market due to reuse of wireless test equipment, price competition and different testing techniques. Further reductions in the size of the wireless test market may occur, which may result in additional goodwill impairment charges, increased risk of excess and obsolete inventories, asset write-offs and restructuring charges.

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.

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 except when title transfer is tied to cash payment outside the United States. Outside the United States, we recognize revenue upon shipment or at delivery destination point, even if we retain a form of title to products delivered to customers, provided the sole purpose is to enable us to recover the products in the event of customer payment default and the arrangement does not prohibit the customer s use or resale of the product in the ordinary course of business.

Our equipment has non-software and embedded 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

Table of Contents

perform tests of the product to ensure that performance meets the published product specifications or customer requested specifications, which are generally conducted prior to shipment. Where the criteria cannot be demonstrated prior to shipment, revenue is deferred until customer acceptance has been received. We also defer the portion of the sales price that is not due until acceptance, which represents deferred profit.

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

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

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

Translation of Non-U.S. Currencies

The functional currency for all non-U.S. subsidiaries is the U.S. dollar, except for the Industrial Automation segment for which the local currency is its functional currency. All foreign currency denominated monetary assets and liabilities are remeasured 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 remeasured into the functional currency using historical exchange rates. Net foreign exchange gains and losses resulting from remeasurement are included in other (income) expense, net. For Industrial Automation, assets and liabilities are translated into U.S. dollars using exchange rates in effect at the end of the period. Revenue and expense amounts are translated using an average of exchange rates in effect during the period. Translation adjustments are recorded within accumulated other comprehensive income (loss).

Retirement and Postretirement Plans

We 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. We calculate the expected return on plan assets using the fair value of the plan assets. Actuarial gains and losses are generally measured annually as of December 31 and, accordingly, recorded during the fourth quarter of each year or upon any interim remeasurement of the plans.

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

Table of Contents

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

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis 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 it is more likely than not that some or all of the deferred tax assets will not be realized. We performed the required assessment of positive and negative evidence regarding the realization of the net deferred tax assets in accordance with ASC 740, *Accounting for Income Taxes.* This assessment included the evaluation of scheduled reversals of deferred tax liabilities, estimates of projected future taxable income and tax-planning strategies. Although realization is not assured, based on our assessment, we concluded that it is more likely than not that such assets, net of the existing valuation allowance, will be realized. U.S. income taxes are not provided for on the earnings of non-U.S. subsidiaries which are expected to be reinvested indefinitely in operations outside the U.S. For intra-period tax allocations, we first utilize non-equity related tax attributes, such as net operating losses and credit carryforwards, and then equity-related tax attributes. We use the with-and-without method for calculating excess stock compensation deductions and do 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.

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 goodwill for impairment at least annually in the fourth quarter, as of December 31, 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 charge is recorded in an amount equal to that excess. No goodwill impairment was identified in 2015 or 2013. In the fourth quarter of 2014, we performed our annual goodwill impairment test and recorded a goodwill impairment charge of $98.9 million in our Wireless Test segment as a result of decreased projected demand attributable to an estimated smaller future wireless test market due to reuse of wireless test equipment, price competition and different testing techniques.

Table of Contents

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.

There were no events or circumstances indicating that the carrying value may not be recoverable in 2015 or 2013. As a result of the Wireless Test segment goodwill impairment charge in the fourth quarter of 2014 described above, we performed an impairment test of the Wireless Test segment s intangible and long-lived assets based on a comparison of the estimated undiscounted cash flows to the recorded value of the assets and there was no indication of impairment. When we determine that the carrying value of intangible 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.

SELECTED RELATIONSHIPS WITHIN THE CONSOLIDATED

STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2015	2014	2013
Percentage of revenues:			
Revenues:			
Products	81.8%	82.8%	80.9%
Services	18.2	17.2	19.1
Total revenues	100.0	100.0	100.0
Cost of revenues:			
Cost of products	36.1	38.9	34.9
Cost of services	8.1	7.8	8.4
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	44.2	46.7	43.4
Gross profit	55.8	53.3	56.6
Operating expenses:			
Engineering and development	17.8	17.7	18.5
Selling and administrative	18.7	19.4	19.6
Goodwill impairment		6.0	
Acquired intangible assets amortization	4.2	4.3	5.1
Restructuring and other	0.3	0.1	0.1
Total operating expenses	41.0	47.5	43.3
Income from operations	14.8	5.9	13.4
Non-operating (income) expenses:			
Interest income	(0.4)	(0.4)	(0.3)
Interest expense	0.1	0.4	1.8
Other (income) expense, net	(0.3)		(2.3)
Income before income taxes	15.4	5.8	14.1
Income tax provision	2.8	0.9	2.6
Net income	12.6%	4.9%	11.6%

Table of Contents

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,		
	2015	2014	2013
Semiconductor Test	2.0	1.0	1.0
System Test	1.1	1.5	1.0
Wireless Test	0.9	1.0	0.7
Industrial Automation	0.8		
Total Company	1.6	1.0	1.0

Revenues

Revenues for our four reportable segments were as follows:

	2015	2014	2013	2014-2015 Dollar Change	2013-2014 Dollar Change
			(in millions)		
Semiconductor Test	$ 1,201.5	$ 1,300.8	$ 1,023.0	$ (99.3)	$ 277.8
System Test	211.6	162.5	153.0	49.1	9.5
Wireless Test	184.6	184.5	251.9	0.1	(67.4)
Industrial Automation	41.9			41.9	
	$ 1,639.6	$ 1,647.8	$ 1,427.9	$ (8.2)	$ 219.9

The decrease in Semiconductor Test revenues of $99.3 million, or 8%, from 2014 to 2015 was primarily due to a decrease in system-on-a-chip (SOC) product volume, driven by smaller microcontroller, power management and radio frequency test markets.

The increase in Semiconductor Test revenues of $277.8 million, or 27%, from 2013 to 2014 was primarily due to higher SOC product volume, driven by a larger application processor test market.

The increase in System Test revenues of $49.1 million, or 30%, from 2014 to 2015 was primarily due to higher sales in Storage Test of 3.5 hard disk drive testers used for testing drives for cloud storage applications.

The increase in System Test revenues of $9.5 million, or 6%, from 2013 to 2014 was primarily due to higher product volume in Storage Test driven by solid state disk testers and by Production Board Test driven by automotive test applications, partially offset by lower Defense/Aerospace product sales.

Wireless Test revenues were approximately flat from 2014 to 2015 as an increase in cellular product volume was offset by lower connectivity product volume.

The decrease in Wireless Test revenues of $67.4 million, or 27%, from 2013 to 2014 was primarily due to lower cellular and connectivity product volume driven by a smaller wireless test market.

The acquisition of Universal Robots, completed in June of 2015, added $41.9 million of revenue in 2015. Universal Robots is our Industrial Automation segment.

26

Table of Contents

Our four reportable segments accounted for the following percentages of consolidated revenues:

	2015	2014	2013
Semiconductor Test	73%	79%	71%
System Test	13	10	11
Wireless Test	11	11	18
Industrial Automation	3		
	100%	100%	100%

Revenues by country as a percentage of total revenues were as follows (1):

	2015	2014	2013
Taiwan	27%	30%	19%
China	16	18	23
United States	13	13	16
Japan	8	4	6
Korea	7	9	8
Europe	7	7	6
Singapore	6	7	8
Philippines	6	4	4
Malaysia	5	5	6
Thailand	4	2	2
Rest of the World	1	1	2
	100%	100%	100%

(1) Revenues attributable to a country are based on the location of the customer site.

The breakout of product and service revenues was as follows:

	2015	2014	2013	2014-2015 Dollar Change	2013-2014 Dollar Change
			(in millions)		
Product Revenues	$ 1,340.6	$ 1,364.0	$ 1,154.9	$ (23.4)	$ 209.1
Service Revenues	299.0	283.8	273.0	15.2	10.8
	$ 1,639.6	$ 1,647.8	$ 1,427.9	$ (8.2)	$ 219.9

Our product revenues decreased $23.4 million, or 2%, in 2015 from 2014 primarily due to lower SOC product volume, driven by smaller microcontroller, power management and radio frequency test markets. This decrease was partially offset by higher sales in Storage Test of 3.5 hard disk drive testers for cloud storage and the addition of Universal Robots in 2015. Service revenues, which are derived from the servicing of our installed base of products and include equipment maintenance contracts, repairs, extended warranties, parts sales, and applications support, increased $15.2 million or 5%.

Our product revenues increased $209.1 million, or 18%, in 2014 from 2013 primarily due to an increase in SOC test product volume, driven by a larger application processor test market. This increase was partially offset by lower cellular and connectivity product volume in Wireless Test.

Service revenues increased $10.8 million or 4%.

In 2015, revenues from one customer accounted for 13% of our consolidated revenues. In 2013, revenues from a different customer accounted for 12% of our consolidated revenues. In 2014, no single customer

Table of Contents

accounted for more than 10% of our consolidated revenues. In each of the years, 2015, 2014 and 2013, our three largest customers in aggregate accounted for 25%, 21% and 26%, respectively, of our consolidated revenues.

Gross Profit

	2015	2014	2013	2014-2015 Dollar / Point Change	2013-2014 Dollar / Point Change
			(dollars in millions)		
Gross Profit	$ 915.6	$ 878.8	$ 808.8	$ 36.8	$ 70.0
Percent of Total Revenues	55.8%	53.3%	56.6%	2.5	(3.3)

Gross profit as a percent of total revenues increased from 2014 to 2015 by 2.5 points due to favorable Semiconductor Test product mix and sales of previously leased testers in Semiconductor Test.

Gross profit as a percent of total revenues decreased from 2013 to 2014 by 3.3 points, of which 2.8 points was related to unfavorable product mix in SOC Semiconductor Test and lower Wireless Test sales and 1.1 points was due to pension expense in 2014 as a result of increases in life expectancy in the U.S., compared to pension income in 2013, partially offset by an increase of 1.1 points due to higher sales volume.

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

	2015	2014	2013	2014-2015 Dollar / Point Change	2013-2014 Dollar / Point Change
			(dollars in millions)		
Product Gross Profit	$ 748.8	$ 723.2	$ 655.9	$ 25.6	$ 67.3
Percent of Product Revenues	55.9%	53.0%	56.8%	2.9	(3.8)
Service Gross Profit	$ 166.8	$ 155.6	$ 152.9	$ 11.2	$ 2.7
Percent of Service Revenues	55.8%	54.8%	56.0%	1.0	(1.2)

We assess the carrying value of our inventory on a quarterly basis by estimating future demand and comparing that demand against on-hand and on-order inventory positions. Forecasted revenue information is obtained from the sales and marketing groups and incorporates factors such as backlog and future product 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 twelve quarters for our Semiconductor Test, System Test and Industrial Automation segments and next four quarters for our Wireless Test segment, is written-down to estimated net realizable value.

During the year ended December 31, 2015, we recorded an inventory provision of $21.3 million included in cost of revenues, due to the following factors:

- A charge of $15.3 million due to downward revisions to previously forecasted demand levels, of which $8.2 million was for our 2.5 hard disk drive testers in Storage Test, $4.5 million was in Semiconductor Test and $2.5 million was in Wireless Test; and
- A $6.0 million inventory write-down as a result of product transition in Semiconductor Test.

During the year ended December 31, 2014, we recorded an inventory provision of $22.2 million included in cost of revenues, due to the following factors:

A charge of $15.4 million due to downward revisions to previously forecasted demand levels, of which $8.1 million was in Semiconductor Test, $5.2 million was in Wireless Test and $2.1 million was in System Test; and

Table of Contents

A $6.8 million inventory write-down as a result of product transition, of which $6.3 million was in Semiconductor Test and $0.5 million in Wireless Test.

During the year ended December 31, 2013, we recorded an inventory provision of $16.6 million included in cost of revenues, due to the following factors:

A charge of $12.2 million due to downward revisions to previously forecasted demand levels, of which $5.2 million was in Semiconductor Test, $4.2 million was in System Test and $2.8 million was in Wireless Test; and

A $4.4 million inventory write-down as a result of product transition in Wireless Test.

During the years ended December 31, 2015, 2014 and 2013, we scrapped $7.0 million, $20.8 million and $35.3 million of inventory, respectively, and sold $7.9 million, $13.1 million and $9.8 million of previously written-down or written-off inventory, respectively. As of December 31, 2015, we had inventory related reserves for amounts which had been written-down or written-off totaling $119.4 million. We have no pre-determined timeline to scrap the remaining inventory.

Engineering and Development

Engineering and development expenses were as follows:

	2015	2014	2013	2014-2015 Change	2013-2014 Change
			(dollars in millions)		
Engineering and Development	$ 292.3	$ 291.6	$ 264.1	$ 0.7	$ 27.5
Percent of Total Revenues	17.8%	17.7%	18.5%		

The increase of $0.7 million in engineering and development expenses from 2014 to 2015 was due to $3.9 million of higher variable compensation, $2.6 million of additional costs related to the acquisition of Universal Robots in June 2015 and a $1.8 million increase in spending primarily in Storage Test, partially offset by lower pension expense related to actuarial losses, $4.7 million in 2015 compared to $12.2 million in 2014.

The increase of $27.5 million from 2013 to 2014 was due primarily to $12.2 million of pension expense related to actuarial losses in 2014, as a result of increases in life expectancy in the U.S., compared to $4.4 million of pension income related to actuarial gains in 2013, a $10.9 million increase in Semiconductor Test spending, $2.7 million of higher variable compensation and $2.6 million of increased spending in Wireless Test, partially offset by lower System Test spending.

Selling and Administrative

Selling and administrative expenses were as follows:

	2015	2014	2013	2014-2015 Change	2013-2014 Change
			(dollars in millions)		
Selling and Administrative	$ 306.3	$ 319.7	$ 279.6	$ (13.4)	$ 40.1
Percent of Total Revenues	18.7%	19.4%	19.6%		

The decrease of $13.4 million in selling and administrative expenses from 2014 to 2015 was due primarily to lower pension expense related to actuarial losses, $4.8 million in 2015 compared to $21.6 million in 2014, and a one-time $6.6 million stock-based compensation charge in 2014 related to a retirement agreement entered into with our retired chief executive officer, partially offset by higher variable compensation.

The increase of $40.1 million from 2013 to 2014 was due primarily to $21.6 million of pension expense related to actuarial losses in 2014, as a result of increases in life expectancy in the U.S., compared to $2.9 million

29

Table of Contents

of pension income related to actuarial gains in 2013, a one-time $6.6 million stock-based compensation charge in 2014 related to a retirement agreement entered into with our retired chief executive officer and increased spending in Semiconductor Test and Corporate.

Acquired Intangible Assets Amortization

Acquired intangible assets amortization expense was as follows:

	2015	2014	2013	2014-2015 Change	2013-2014 Change
			(dollars in millions)		
Acquired Intangible Assets Amortization	$ 69.0	$ 70.8	$ 72.4	$ (1.8)	$ (1.6)
Percent of Total Revenues	4.2%	4.3%	5.1%		

Acquired intangible assets amortization expense decreased from 2014 to 2015 due to intangible assets that became fully amortized during the year, partially offset by increased amortization expense due to the Universal Robots acquisition. Acquired intangible assets amortization expense decreased from 2013 to 2014 due to intangible assets that became fully amortized during the year, partially offset by increased amortization expense due to the AIT acquisition.

Goodwill Impairment

We assess goodwill for impairment at least annually, in the fourth quarter, as of December 31. The fourth quarter 2015 and 2013 goodwill impairment tests did not identify any goodwill impairments. In the fourth quarter of 2014, we performed our annual goodwill impairment test and recorded a goodwill impairment charge of $98.9 million in our Wireless Test segment as a result of decreased projected demand attributable to an estimated smaller future wireless test market due to reuse of wireless test equipment, price competition and different testing techniques.

Further reductions in the size of the wireless test market may occur, which may result in additional goodwill impairment charges, increased risk of excess and obsolete inventories, asset write-offs and restructuring charges.

Restructuring and Other

Other

During the year ended December 31, 2015, we recorded $3.6 million of other charges of which $5.3 million was for the increase in the fair value of the Universal Robots contingent consideration liability and $1.0 million for acquisition costs related to Universal Robots, partially offset by a $2.9 million gain from fair value adjustments to decrease the acquisition contingent consideration liability related to ZTEC, $1.6 million, and AIT, $1.3 million.

During the year ended December 31, 2014, we recorded a $0.6 million gain from the fair value adjustment to decrease the ZTEC acquisition contingent consideration, partially offset by $0.4 million of acquisition costs related to AIT.

Restructuring

During the year ended December 31, 2015, we recorded $1.5 million of severance charges related to headcount reductions of 23 people primarily in System Test and Semiconductor Test.

During the year ended December 31, 2014, we recorded $1.6 million of severance charges related to headcount reductions of approximately 43 people, primarily in Semiconductor Test and Wireless Test.

Table of Contents

During the year ended December 31, 2013, we recorded $1.9 million of severance charges related to headcount reductions of 48 people primarily in System Test and Semiconductor Test and a $0.4 million credit in Corporate related to a change in the estimated exit costs related to a leased facility.

The remaining accrual for severance of $0.4 million is reflected in the accrued employees compensation and withholdings on the balance sheet and is expected to be paid by March 2016.

Interest and Other

	2015	2014	2013	2014-2015 Change	2013-2014 Change
			(in millions)		
Interest Income	$ (7.2)	$ (6.3)	$ (4.1)	$ (0.9)	$ (2.2)
Interest Expense	1.9	6.9	26.1	(5.0)	(19.2)
Other (income) expense, net	(4.8)	0.4	(33.2)	(5.2)	33.6

Interest income increased by $0.9 million from 2014 to 2015 due primarily to higher interest rates on marketable securities. Interest income increased by $2.2 million from 2013 to 2014 due to an increase in realized gains from the sale of marketable securities and an increase in cash and marketable securities.

Interest expense decreased by $5.0 million from 2014 to 2015, and $19.2 million from 2013 to 2014, due primarily to the repayment of our convertible debt in the first quarter of 2014.

In 2015 and 2013, other (income) expense, net included a $5.4 million and a $34.2 million gain, respectively, from the sale of an equity investment.

Income (Loss) Before Income Taxes

	2015	2014	2013	2014-2015 Change	2013-2014 Change
			(in millions)		
Semiconductor Test	$ 260.2	$ 255.8	$ 153.8	$ 4.4	$ 102.0
System Test	25.1	12.1	3.1	13.0	9.0
Wireless Test	(13.8)	(116.2)	23.2	102.4	(139.3)
Industrial Automation	(7.6)			(7.6)	
Corporate (1)	(10.7)	(56.3)	21.9	45.5	(78.2)
	$ 253.1	$ 95.4	$ 201.9	$ 157.7	$ (106.5)

(1) Included in Corporate are pension and postretirement plans actuarial gains and losses, contingent consideration adjustments, interest income and interest expense.

The increase in income before income taxes from 2014 to 2015 was primarily due to a $98.9 million goodwill impairment charge related to Wireless Test in 2014 and lower pension expense related to actuarial losses of $17.7 million in 2015 as compared to $46.6 million in 2014. Actuarial losses of $46.6 million in 2014 were primarily related to increases in life expectancy in the U.S.

The decrease in income before income taxes from 2013 to 2014 was primarily due to a $98.9 million goodwill impairment charge related to Wireless Test and $46.6 million pension expense related to actuarial losses in 2014, partially offset by higher income due to higher revenues in Semiconductor Test in 2014.

Income Taxes

Income tax expense for 2015, 2014 and 2013 totaled $46.6 million, $14.1 million and $37.0 million, respectively. The effective tax rate for 2015, 2014 and 2013 was 18.4%, 14.8% and 18.3%, respectively. The

Table of Contents

increase in the effective tax rate from 2014 to 2015 resulted from a shift in the geographic distribution of income which increased income subject to taxation in the United States relative to lower tax rate jurisdictions and a reduction in the benefit from U.S. research and development tax credits. These increases in the effective tax rate were partially offset by decreases associated with uncertain tax positions and a non-deductible goodwill impairment charge. The decrease in the effective tax rate from 2013 to 2014 was primarily attributable to a shift in the geographic distribution of income which decreased income subject to taxation in the United States relative to lower tax rate jurisdictions, partially offset by increases in the effective tax rate associated with uncertain tax positions and a non-deductible goodwill impairment charge.

In December 2015, Teradyne entered into an agreement with the Singapore Economic Development Board which extended our Singapore tax holiday under substantially similar terms to the agreement which expired on December 31, 2015. The new tax holiday is scheduled to expire on December 31, 2020. The tax savings attributable to the Singapore tax holiday for the years ended December 31, 2015, 2014 and 2013 were $11.5 million or $0.05 per diluted share, $13.2 million or $0.06 per diluted share and $4.7 million or $0.02 per diluted share, respectively.

Contractual Obligations

The following table reflects our contractual obligations as of December 31, 2015:

		Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years	Other
			(in thousands)			
Purchase obligations	$ 237,018	$ 230,296	$ 6,722	$	$	$
Retirement plans contributions	107,482	4,044	7,876	8,416	87,146	
Operating lease obligations	68,720	15,665	21,337	15,709	16,009	
Fair value of contingent consideration	37,436	15,500	15,319	6,617		
Other long-term liabilities reflected on the balance sheet under GAAP (1)	84,564		25,745			58,819
Total	$ 535,220	$ 265,505	$ 76,999	$ 30,742	$ 103,155	$ 58,819

(1) Included in other long-term liabilities are liabilities for customer advances, extended warranty, uncertain tax positions, deferred tax liabilities 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 decreased $291 million to $1,008 million from 2014 to 2015.

In 2015, changes in operating assets and liabilities, net of businesses acquired, provided cash of $9.3 million. This was due to a $38.7 million increase in operating assets and a $48.0 million increase in operating liabilities.

The increase in operating assets was due to a $57.3 million increase in accounts receivable due to an increase in sales during the last month of the fourth quarter of 2015 compared to 2014, partially offset by a $15.6 million decrease in inventories and a $3.0 million decrease in prepayments and other assets.

The increase in operating liabilities was due to a $37.0 million increase in accounts payable as a result of our planned inventory increase in the fourth quarter of 2015 as we added material to maintain attractive lead

Table of Contents

times, a $17.0 million increase in customer advance payments and deferred revenue and a $11.3 million increase in other accrued liabilities, partially offset by $12.1 million of retirement plans contributions and a $5.2 million increase in income taxes.

Investing activities during 2015 used cash of $113.7 million, due to $1,424.0 million used for purchases of marketable securities, $282.7 million used for the acquisition of Universal Robots, and $89.9 million used for purchases of property, plant and equipment, partially offset by proceeds from maturities and sales of marketable securities of $360.3 million and $1,316.1 million, respectively, proceeds from the sale of an equity investment of $5.4 million, and proceeds from life insurance of $1.1 million related to the cash surrender value from the cancellation of Teradyne owned life insurance policies. The decrease in purchases of property, plant and equipment of $79.1 million was primarily due to an increase in purchases of testers for customer leasing in 2014.

Financing activities during 2015 used cash of $328.7 million, due to $300.0 million used for the repurchase of 15.6 million shares of common stock at an average price of $19.20 per share, $50.7 million used for dividend payments, and $2.3 million used for debt issuance costs related to our April 2015 revolving credit facility, partially offset by $19.5 million from the issuance of common stock under employee stock purchase and stock option plans and $4.7 million from the tax benefit related to employee stock compensation awards.

In 2014, changes in operating assets and liabilities, net of businesses acquired, provided cash of $68.5 million. This was due to a $101.4 million decrease in operating assets and a $32.9 million decrease in operating liabilities.

The decrease in operating assets was due to a $41.5 million decrease in prepayments and other assets primarily related to a reduction in prepayments to our contract manufacturers, a $51.8 million decrease in inventories due to higher sales, and an $8.1 million decrease in accounts receivable.

The decrease in operating liabilities was due to $33.9 million of retirement plan contributions, a $17.0 million decrease in other accrued liabilities, a $16.9 million decrease in accounts payable, a $7.3 million decrease in accrued employee compensation due primarily to employee stock awards payroll taxes and variable compensation payments, a $4.3 million convertible note interest payment, partially offset by a $24.4 million increase in income taxes, and a $22.0 million increase in customer advance payments and deferred revenue.

Investing activities during 2014 used cash of $332.9 million due to $1,578.7 million used for purchases of marketable securities and $169.0 million used for purchases of property, plant and equipment, and $19.4 million used for the acquisition of AIT, completed in October 2014, partially offset by proceeds from sales and maturities of marketable securities that provided cash of $859.7 million and $570.4 million, respectively, and net proceeds from life insurance of $4.2 million primarily related to the cash surrender value from the cancellation of Teradyne owned life insurance policies on its retired chief executive officer. The increase in purchase of property, plant and equipment of $62.3 million in 2014 compared to the year ended December 31, 2013 is primarily due to testers used for customer leases.

Financing activities during 2014 used cash of $206.6 million, $191.0 million of cash was used for payments on long-term debt related to the convertible note and a loan in Japan and $37.4 million was used for dividend payments, partially offset by $21.3 million provided by the issuance of common stock under employee stock purchase and stock option plans and $0.5 million from the tax benefit related to stock options and restricted stock units.

In 2013, changes in operating assets and liabilities, net of businesses acquired, used cash of $49.6 million. This was due to a $31.0 million increase in operating assets and an $18.6 million decrease in operating liabilities.

The increase in operating assets was due to a $49.6 million increase in prepayments due primarily to prepayments to our contract manufacturers and a $3.7 million increase in accounts receivable, partially offset by a $22.3 million decrease in inventories.

Table of Contents

The decrease in operating liabilities was due to a $2.5 million decrease in accrued employee compensation due primarily to employee stock awards payroll taxes and variable compensation payments, a $28.9 million decrease in customer advance payments and deferred revenue, and $5.5 million of retirement plan contributions, partially offset by a $13.9 million increase in other accrued liabilities, a $3.7 million increase in accounts payable due to higher fourth quarter sales volume, and a $0.7 million increase in income taxes.

Investing activities during 2013 used cash of $283.3 million. In October 2013, we completed the acquisition of ZTEC for an initial cash purchase price, net of cash acquired, of $15.0 million. Purchases of property, plant and equipment were $106.7 million. Purchases of marketable securities used cash of $1,170.5 million, partially offset by proceeds from maturities and sales of marketable securities that provided cash of $516.5 million and $458.5 million, respectively. The sale of an equity investment provided cash of $34.2 million. Purchases of life insurance policies used cash of $0.3 million.

Financing activities during 2013 provided cash of $17.3 million, $17.6 million was from the issuance of common stock under stock option and stock purchase plans, and $2.7 million from the tax benefit related to stock options and restricted stock units, partially offset by $0.4 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 a loan in Japan.

In January 2015, May 2015, August 2015 and November 2015, our Board of Directors declared a quarterly dividend of $0.06 per share. Total dividend payments in 2015 were $50.7 million.

In January 2014, our Board of Directors declared an initial quarterly cash dividend of $0.06 per share. In each of the second, third and fourth quarters of 2014, we paid a cash dividend of $0.06 per share. Total dividend payments in 2014 were $37.4 million.

In January 2016, our Board of Directors declared a quarterly dividend of $0.06 per share to be paid on March 21, 2016 to shareholders of record as of February 26, 2016. Payment of future cash dividends are subject to the discretion of our Board of Directors and will depend, among other things, upon our earnings, capital requirements and financial condition.

In January 2015, our Board of Directors authorized the repurchase of up to $500 million of common stock. As of December 31, 2015, we repurchased 15.6 million shares of common stock at an average price of $19.20, for a total cost of $300.0 million. In 2016, we intend to repurchase between $100 million and $200 million of common stock.

We believe our cash, cash equivalents and marketable securities balance will be sufficient to pay our quarterly dividend, execute our authorized share repurchase program and meet our 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 $588 million of cash outside the U.S. that if repatriated would incur additional taxes. Determination of the additional taxes that would be incurred is not practicable due to uncertainty regarding the remittance structure, the mix of earnings and earnings and profit pools in the year of remittance, and overall complexity of the calculation. 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.

Table of Contents

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 $21.3 million for the year ended December 31, 2015. The largest portion of our 2015 pension expense was $10.5 million for our U.S. Plan. Pension expense or income is calculated based upon a number of actuarial assumptions. Discount rate and expected return on assets are two assumptions which are important elements of pension plan expense/income and asset/liability measurement. We evaluate our discount rate and expected rate of return on assets assumptions 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 the fourth quarter of 2014, we updated the mortality assumptions related to our U.S retirement plans using the mortality tables published in October 2014 by the U.S. Society of Actuaries. The change in the mortality assumptions resulted in approximately $39.0 million of actuarial losses in 2014 for the U.S. retirement plans.

In developing the expected return on U.S. Plan assets assumption, we evaluated input from our investment manager and pension consultants, including their review of asset class return expectations. Based on this review, we believe that 4.8% was an appropriate rate to use for 2015. The December 31, 2015 asset allocation for our U.S. Plan was 89% invested in fixed income securities, 10% invested in equity securities, and 1% invested in other securities. Our investment manager regularly reviews the actual asset allocation and periodically rebalances the portfolio to ensure alignment with our target allocations.

We 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. We calculate the expected return on plan assets using the fair value of the plan assets. Actuarial gains and losses are generally measured annually as of December 31 and, accordingly, recorded during the fourth quarter of each year or upon any interim remeasurement of the plans.

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 4.0% at December 31, 2015, up from 3.7% at December 31, 2014. We estimate that in 2016 we will recognize approximately $0.5 million of pension income for the U.S. Plan. The U.S. Plan pension income estimate for 2016 is based on a 4.0% discount rate and a 4.8% 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, 2015, our pension plans had unrecognized pension prior service cost of $0.2 million.

We performed a sensitivity analysis, which expresses the potential U.S. Plan (income) expense for the year ending December 31, 2016, 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 2016 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.

	Discount Rate		
Return on Plan Assets	**3.5%**	**4.0%**	**4.5%**
		(in millions)	
4.25%	$ 0.3	$ 0.9	$ 1.5
4.75%	(1.2)	(0.5)	0.0
5.25%	(2.6)	(2.0)	(1.4)

The assets of the U.S. Plan consist substantially of fixed income securities. U.S. Plan assets have decreased from $316.1 million at December 31, 2014 to $298.4 million at December 31, 2015 while the U.S. Plan s liability decreased from $313.0 million at December 31, 2014 to $297.8 million at December 31, 2015.

Table of Contents

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 2015, we made contributions of $8.0 million to the U.S. Plan, $2.5 million to the U.S. supplemental executive defined benefit pension plan and $0.8 million to certain qualified plans for non-U.S. subsidiaries. We expect to contribute approximately $2.6 million to the U.S. supplemental executive defined benefit pension plan in 2016. Contributions to be made in 2016 to certain qualified plans for non-U.S. subsidiaries are based on local statutory requirements and are estimated at approximately $0.8 million. We do not expect to make any contributions to the U.S. Plan in 2016.

Equity Compensation Plans

In addition to our 1996 Employee Stock Purchase Plan discussed in Note N: Stock Based Compensation in Notes to Consolidated Financial Statements, we have 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 21, 2013, 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 32.0 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 30.4 million shares issuable thereunder.

The following table presents information about these plans as of December 31, 2015 (share numbers in thousands):

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column one)
Equity plans approved by shareholders	4,635(1)	$ 17.39	15,790(2)
Equity plans not approved by shareholders (3,4,5)	556	$ 2.92	
Total	5,191	$ 10.21	15,790

(1) Includes 4,070,124 shares of restricted stock units that are not included in the calculation of the weighted average exercise price.

(2) Consists of 10,913,160 securities available for issuance under the 2006 Equity Plan and 4,876,424 of securities available for issuance under the Employee Stock Purchase Plan.

(3) In connection with the 2008 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, 2015, there were outstanding options exercisable for an aggregate of 4,528 shares of our common stock pursuant to the Nextest Plans, with a weighted average exercise price of $5.72 per share.

(4) In connection with the 2008 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

Table of Contents

December 31, 2015, there were outstanding options exercisable for an aggregate of 94,980 shares of our common stock pursuant to the Eagle Plans, with a weighted average exercise price of $3.87 per share.

(5) In connection with the 2011 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, 2015, there were outstanding options exercisable for an aggregate of 457,192 shares of our common stock pursuant to the LitePoint Plan, with a weighted average exercise price of $2.70 per share.

The purpose of the 2006 Equity Plan is to motivate employees, officers and directors by providing equity ownership and compensation opportunities in Teradyne. The aggregate number of shares available under the 2006 Equity Plan as of December 31, 2015 was 10,913,160 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 12, 2025.

As of December 31, 2015, total unrecognized compensation expense related to non-vested restricted stock units and options was $44.9 million, and is expected to be recognized over a weighted average period of 2.3 years.

Performance Graph

The following graph compares the change in our cumulative total shareholder return in our common stock with the Standard & Poor s 500 Index, the Philadelphia Semiconductor Index, the NYSE Composite Index and the Morningstar Semiconductor Equipment & Materials Index. The comparison assumes $100.00 was invested on December 31, 2010 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. Historic stock price performance is not necessarily indicative of future price performance. This is the last year that we will compare ourselves to the Standard & Poor s 500 Index and the Philadelphia Semiconductor Index. Going forward, we will compare ourselves to (1) the NYSE Composite Index, as we are no

Table of Contents

longer included in the Standard & Poor s 500 Index, and (2) the Morningstar Semiconductor Equipment & Materials Industry Group (compiled by Morningstar, Inc.) as this better aligns us with companies in the broader semiconductor equipment industry.

Recently Issued Accounting Pronouncements

In November 2015, the FASB issued Accounting Standards Update (ASU) 2015-17, *Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 is aimed at reducing complexity in accounting standards. Currently GAAP requires the deferred taxes for each jurisdiction to be presented as a net current asset or liability and net noncurrent asset or liability. This requires a jurisdiction-by-jurisdiction analysis based on the classification of the assets and liabilities to which the underlying temporary differences relate, or, in the case of loss or credit carryforwards, based on the period in which the attribute is expected to be realized. Any valuation allowance is then required to be allocated on a pro rata basis, by jurisdiction, between current and noncurrent deferred tax assets. To simplify presentation, the new guidance requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. As a result, each jurisdiction will now only have one net noncurrent deferred tax asset or liability. The guidance does not change the existing requirement that only permits offsetting within a jurisdiction; companies are still prohibited from offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. The new guidance is effective in fiscal years beginning after December 15, 2016, including interim periods within those years. Early adoption is permitted as of the beginning of an interim or annual reporting period. The guidance may be applied either prospectively, for all deferred tax assets and liabilities, or retrospectively by reclassifying the comparative balance sheet. We will early adopt this ASU prospectively in January 2016. This ASU is expected to have no impact on our results of operations.

In September 2015, the FASB issued ASU 2015-16, *Business Combinations (Topic 805) Simplifying the Accounting for Measurement-Period Adjustments.* ASU 2015-16 requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustments are identified, including the cumulative effect of the change in provisional amount as if the accounting had been completed at the acquisition date. ASU 2015-16 is effective for reporting periods beginning after December 15, 2015 and is applied prospectively. Early adoption is permitted. We early adopted this ASU in the three months ended October 4, 2015. Adoption of this ASU did not have a material impact on our financial position and results of operations.

Table of Contents

In April 2015, the FASB issued ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs,* which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation for debt discount. ASU 2015-03 does not specifically address requirements for the presentation or subsequent measurement of debt issuance costs related to line-of-credit arrangements. On August 8, 2015, the FASB issued ASU 2015-15, *Interest Imputation of Interest (Subtopic 835-30)* clarifying that debt issuance costs related to line-of-credit arrangements could be presented as an asset and amortized over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. For Teradyne, the standard is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those years. This ASU is expected to have no impact on our financial position and results of operations.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606),* which will replace numerous requirements in U.S. GAAP, including industry-specific requirements, and provide companies with a single revenue recognition model for recognizing revenue from contracts with customers. The core principle of the new standard is that a company should recognize revenue to show the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled to in exchange for those goods or services. In August 2015, FASB issued ASU 2015-14, which deferred the effective date of the new revenue standard by 1 year. For Teradyne, the standard will be effective in the first quarter of 2018. Early adoption is permitted but not before the original effective date (that is, annual periods beginning after December 15, 2016). The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. We have not yet selected a transition method. We are currently evaluating the impact of this ASU on our financial position and results of operations.

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

Concentration of Credit Risk

Financial instruments which potentially subject us to concentrations of credit risk consist principally of cash equivalents, marketable securities, forward currency contracts and accounts receivable. Our cash equivalents consist primarily of money market funds invested in U.S. Treasuries and government agencies. Our fixed income available-for-sale marketable securities have a minimum rating of AA by one or more of the major credit rating agencies. We place forward currency contracts with high credit-quality financial institutions in order to minimize credit risk exposure. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of geographically dispersed customers. We perform ongoing credit evaluations of our customers financial condition and from time to time may require customers to provide a letter of credit from a bank to secure accounts receivable. One customer accounted for more than 10% of our accounts receivable balance as of December 31, 2015. A different customer accounted for more than 10% of our accounts receivable balance as of December 31, 2014.

Exchange Rate Risk Management

We regularly enter into foreign currency forward contracts to hedge the value of our monetary assets and liabilities in Japanese Yen, British Pound, Korean Won, Taiwan Dollar, Singapore Dollar and Euro. These foreign currency forward contracts have maturities of approximately one month. These contracts are used to minimize the effect of exchange rate fluctuations associated with the remeasurement of monetary assets and liabilities. 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, 2015, 2014 and 2013, 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.

Table of Contents

Interest Rate Risk Management

We are exposed to potential losses due to changes in interest rates. Our interest rate exposure is primarily in the Netherlands, United States and Singapore related to 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 the fair value from changes in interest rates is immaterial as of December 31, 2015 and 2014.

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 (the Company) at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control Integrated Framework (2013)* 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.

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.

As described in Management s Annual Report on Internal Controls over Financial Reporting appearing under Item 9A, management has excluded Universal Robots A/S from its assessment of internal control over financial reporting as of December 31, 2015 because it was acquired by the Company in a purchase business combination on June 11, 2015. We have also excluded Universal Robots A/S from our audit of internal control over financial reporting. Universal Robots A/S is a wholly-owned subsidiary whose total assets and total revenues represent 14% and 3%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

February 29, 2016

Table of Contents

TERADYNE, INC.

CONSOLIDATED BALANCE SHEETS

December 31, 2015 and 2014

	2015	2014
	(in thousands, except per share information)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 264,705	$ 294,256
Marketable securities	477,696	533,787
Accounts receivable, less allowance for doubtful accounts of $2,407 and $2,491 in 2015 and 2014, respectively	211,293	151,034
Inventories:		
Parts	73,117	70,821
Assemblies in process	32,825	10,347
Finished goods	47,646	23,961
	153,588	105,129
Deferred tax assets	54,973	57,239
Prepayments	91,519	95,819
Other current assets	6,194	6,582
Total current assets	1,259,968	1,243,846
Property, plant and equipment, net	273,414	329,038
Marketable securities	265,928	470,789
Deferred tax assets	7,404	7,494
Other assets	13,080	10,419
Retirement plans assets	636	12,896
Intangible assets, net	239,831	190,600
Goodwill	488,413	273,438
Total assets	$ 2,548,674	$ 2,538,520
LIABILITIES		
Current liabilities:		
Accounts payable	$ 92,358	$ 47,763
Accrued employees compensation and withholdings	113,994	100,994
Deferred revenue and customer advances	85,527	71,603
Other accrued liabilities	43,727	50,247
Contingent consideration	15,500	895
Accrued income taxes	21,751	20,049
Total current liabilities	372,857	291,551
Long-term deferred revenue and customer advances	25,745	19,929
Retirement plans liabilities	103,531	108,460
Deferred tax liabilities	26,663	23,315
Long-term other accrued liabilities	32,156	13,830
Long-term contingent consideration	21,936	2,455

Total liabilities	582,888	459,540
Commitments and contingencies (Note J)		
SHAREHOLDERS EQUITY		
Common stock, $0.125 par value, 1,000,000 shares authorized, 203,641 and 216,613 shares issued and outstanding at December 31, 2015 and 2014, respectively	25,455	27,077
Additional paid-in capital	1,480,647	1,437,135
Accumulated other comprehensive (loss) income	(8,144)	4,689
Retained earnings	467,828	610,079
Total shareholders equity	1,965,786	2,078,980
Total liabilities and shareholders equity	$ 2,548,674	$ 2,538,520

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,		
	2015	2014	2013
	(in thousands, except per share amounts)		
Revenues:			
Products	$ 1,340,566	$ 1,364,024	$ 1,154,922
Services	299,012	283,800	273,011
Total revenues	1,639,578	1,647,824	1,427,933
Cost of revenues:			
Cost of products	591,772	640,787	499,030
Cost of services	132,163	128,229	120,102
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	723,935	769,016	619,132
Gross profit	915,643	878,808	808,801
Operating expenses:			
Engineering and development	292,250	291,639	264,055
Selling and administrative	306,313	319,713	279,560
Goodwill impairment		98,897	
Acquired intangible assets amortization	69,031	70,771	72,447
Restructuring and other	5,080	1,365	2,080
Total operating expenses	672,674	782,385	618,142
Income from operations	242,969	96,423	190,659
Non-operating (income) expenses:			
Interest income	(7,214)	(6,259)	(4,129)
Interest expense	1,876	6,934	26,097
Other (income) expense, net	(4,817)	372	(33,231)
Income before income taxes	253,124	95,376	201,922
Income tax provision	46,647	14,104	36,975
Net income	$ 206,477	$ 81,272	$ 164,947
Net income per common share:			
Basic	$ 0.98	$ 0.40	$ 0.86
Diluted	$ 0.97	$ 0.37	$ 0.70
Weighted average common shares basic	211,544	202,908	190,772
Weighted average common shares diluted	213,321	222,550	235,599
Cash dividend declared per common share	$ 0.24	$ 0.18	$

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

Table of Contents

TERADYNE, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2015	2014	2013
		(in thousands)	
Net income	$ 206,477	$ 81,272	$ 164,947
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment, net of tax of $0	(8,759)		
Available-for-sale marketable securities:			
Unrealized (losses) gains on marketable securities:			
Unrealized (losses) gains on marketable securities arising during period, net of tax of $(1,667), $1,449, $216, respectively	(3,075)	2,417	(1,097)
Less: Reclassification adjustment for gains included in net income, net of tax of $(390), $(645), $(257), respectively	(704)	(1,433)	(447)
	(3,779)	984	(1,544)
Defined benefit pension and post-retirement plans:			
Amortization of prior service (credit) cost included in net periodic pension and post-retirement expense/income, net of tax $(169), $(169), $(159), respectively	(295)	(295)	(276)
Other comprehensive (loss) income	(12,833)	689	(1,820)
Comprehensive income	$ 193,644	$ 81,961	$ 163,127

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, 2015, 2014 and 2013

	Common Stock Shares Issued	Common Stock Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders Equity
			(in thousands)			
Balance, December 31, 2012	187,908	$ 23,488	$ 1,347,762	$ 5,820	$ 401,285	$ 1,778,355
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of $12,192	3,823	478	4,926			5,404
Stock-based compensation expense			35,612			35,612
Tax benefit related to stock options and restricted stock units			2,596			2,596
Net income					164,947	164,947
Unrealized losses on marketable securities:						
Unrealized losses on marketable securities, net of tax of $216				(1,097)		(1,097)
Less: reclassification adjustment for gains included in net income, net of tax $(257)				(447)		(447)
Amortization of prior service (credit) cost, net of tax of $(159)				(276)		(276)
Balance, December 31, 2013	191,731	23,966	1,390,896	4,000	566,232	1,985,094
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of $12,018	3,661	458	8,815			9,273
Warrant settlement	21,221	2,653	(2,653)			
Stock-based compensation expense			39,868			39,868
Tax benefit related to stock options and restricted stock units			209			209
Cash dividends					(37,425)	(37,425)
Net income					81,272	81,272
Unrealized gains on marketable securities:						
Unrealized gains on marketable securities, net of tax of $1,449				2,417		2,417
Less: reclassification adjustment for gains included in net income, net of tax $(645)				(1,433)		(1,433)
Amortization of prior service (credit) cost, net of tax of $(169)				(295)		(295)
Balance, December 31, 2014	216,613	27,077	1,437,135	4,689	610,079	2,078,980
Issuance of stock to employees under benefit plans, net of shares withheld for payroll tax of $10,597	2,649	331	8,602			8,933
Stock-based compensation expense			30,285			30,285
Repurchase of common stock	(15,621)	(1,953)			(297,996)	(299,949)
Tax benefit related to stock options and restricted stock units			4,625			4,625
Cash dividends					(50,732)	(50,732)
Net income					206,477	206,477
Foreign currency translation adjustment				(8,759)		(8,759)
Unrealized losses on marketable securities:						
Unrealized losses on marketable securities, net of tax of $(1,667)				(3,075)		(3,075)
Less: reclassification adjustment for gains included in net income, net of tax $(390)				(704)		(704)
Amortization of prior service (credit) cost, net of tax of $(169)				(295)		(295)
Balance, December 31, 2015	203,641	$ 25,455	$ 1,480,647	$ (8,144)	$ 467,828	$ 1,965,786

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

45

Table of Contents

TERADYNE, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2015	2014	2013
	(in thousands)		
Cash flows from operating activities:			
Net income	$ 206,477	$ 81,272	$ 164,947
Adjustments to reconcile net income from operations to net cash provided by operating activities:			
Depreciation	68,181	73,390	57,317
Amortization	72,592	79,154	93,370
Stock-based compensation	30,451	40,307	36,612
Goodwill impairment		98,897	
Provision for excess and obsolete inventory	21,332	22,193	16,592
Deferred taxes	(7,124)	(19,928)	(3,316)
Gain from the sale of an equity investment	(5,406)		(34,212)
Tax benefit related to employee stock compensation awards	(4,715)	(535)	(2,675)
Non-cash charge for the sale of inventories revalued at the date of acquisition	1,567		
Retirement plans actuarial losses (gains)	17,732	46,564	(10,340)
Contingent consideration adjustment	2,489	(630)	
Other	(34)	2,874	(5)
Changes in operating assets and liabilities, net of businesses acquired:			
Accounts receivable	(57,267)	8,060	(3,656)
Inventories	15,559	51,803	22,282
Prepayments and other assets	3,034	41,537	(49,572)
Accounts payable and other accrued expenses	48,213	(45,430)	15,205
Deferred revenue and customer advances	17,011	22,033	(28,979)
Retirement plan contributions	(12,095)	(33,916)	(5,540)
Income taxes	(5,156)	24,417	680
Net cash provided by operating activities	412,841	492,062	268,710
Cash flows from investing activities:			
Purchases of property, plant and equipment	(89,878)	(168,982)	(106,731)
Purchases of available-for-sale marketable securities	(1,424,002)	(1,578,743)	(1,170,506)
Acquisition of businesses, net of cash acquired	(282,741)	(19,419)	(14,999)
Proceeds from maturities of available-for-sale marketable securities	360,264	570,358	516,499
Proceeds from sales of available-for-sale marketable securities	1,316,131	859,729	458,491
Proceeds from (purchases of) life insurance	1,098	4,184	(307)
Proceeds from the sale of an equity investment	5,406		34,212
Net cash used for investing activities	(113,722)	(332,873)	(283,341)
Cash flows from financing activities:			
Issuance of common stock under stock option and stock purchase plans	19,530	21,291	17,596
Repurchase of common stock	(299,949)		
Tax benefit related to employee stock compensation awards	4,715	535	2,675
Dividend payments	(50,713)	(37,425)	
Payment of revolving credit facility costs	(2,253)		
Payments of long-term debt		(190,972)	(2,534)
Payments of contingent consideration			(388)
Net cash (used for) provided by financing activities	(328,670)	(206,571)	17,349
(Decrease) increase in cash and cash equivalents	(29,551)	(47,382)	2,718
Cash and cash equivalents at beginning of year	294,256	341,638	338,920
Cash and cash equivalents at end of year	$ 264,705	$ 294,256	$ 341,638

Supplementary disclosure of cash flow information:			
Cash paid for:			
Interest	$ 301	$ 4,294	$ 8,590
Income taxes	$ 35,218	$ 25,893	$ 38,156

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. (Teradyne) is a leading global supplier of automation equipment for test and industrial applications. Teradyne designs, develops, manufactures and sells automatic test systems used to test semiconductors, wireless products, data storage and complex electronics systems in the consumer electronics, wireless, automotive, industrial, computing, communications, and aerospace and defense industries. Teradyne s industrial automation products include collaborative robots used by global manufacturing and light industrial customers to improve quality, increase manufacturing efficiency and decrease manufacturing costs. Teradyne s automatic test equipment and industrial automation products and services include:

- semiconductor test (Semiconductor Test) systems;
- defense/aerospace (Defense/Aerospace) test instrumentation and systems, storage test (Storage Test) systems, and circuit-board test and inspection (Production Board Test) systems (collectively these products represent System Test);
- wireless test (Wireless Test) systems; and
- industrial automation (Industrial Automation) products.

On June 11, 2015, Teradyne acquired Universal Robots A/S (Universal Robots) for approximately $284 million of cash plus up to an additional $65 million of cash if certain performance targets are met extending through 2018. Universal Robots is the leading supplier of collaborative robots which are low-cost, easy-to-deploy and simple-to-program robots that work side by side with production workers. Universal Robots is a separate operating and reportable segment, Industrial Automation.

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, accounts receivable, 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 Teradyne s customers upon shipment or at delivery destination point. In circumstances where either title or risk of loss pass upon destination, acceptance or cash payment, Teradyne defers revenue recognition until such events occur except when title transfer is tied to cash payment outside the United States. Outside the United States, Teradyne

47

Table of Contents

recognizes revenue upon shipment or at delivery destination point, even if Teradyne retains a form of title to products delivered to customers, provided the sole purpose is to enable Teradyne to recover the products in the event of customer payment default and the arrangement does not prohibit the customer s use or resale of the product in the ordinary course of business.

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

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

Teradyne s post-shipment obligations include installation, training services, one-year standard warranties, and extended warranties. Installation does not alter the product capabilities, does not require specialized skills or tools and can be performed by the customers or other vendors. Installation is typically provided within five days of product shipment and is completed within one to two days thereafter. Training services are optional and do not affect the customers ability to use the product. Teradyne defers revenue for the selling price of installation and training. Extended warranties constitute warranty obligations beyond one year and Teradyne defers revenue in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 605-20, *Separately Priced Extended Warranty and Product Maintenance Contracts* 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 revenues when product revenue is recognized. Teradyne classifies shipping and handling costs in cost of revenue. Teradyne does not provide its customers with contractual rights of return for any of its products.

As of December 31, 2015 and 2014, deferred revenue and customer advances consisted of the following and are included in the short and long-term deferred revenue and customer advances:

	2015	2014
	(in thousands)	
Extended warranty	$ 46,499	$ 43,300
Equipment maintenance and training	30,616	30,500
Customer advances	17,456	8,875
Undelivered elements and other	16,701	8,857
Total deferred revenue and customer advances	$ 111,272	$ 91,532

Product Warranty

Teradyne generally provides a one-year warranty on its products, commencing upon installation, acceptance or shipment. A provision is recorded upon revenue recognition to cost of revenues for estimated warranty

Table of Contents

expense based on historical experience. Related costs are charged to the warranty accrual as incurred. The balance below is included in other accrued liabilities:

	Amount (in thousands)
Balance at December 31, 2012	$ 9,786
Accruals for warranties issued during the period	10,574
Accruals related to pre-existing warranties	(3,534)
Settlements made during the period	(10,166)
Balance at December 31, 2013	6,660
Accruals for warranties issued during the period	15,406
Accruals related to pre-existing warranties	(2,008)
Settlements made during the period	(11,116)
Balance at December 31, 2014	8,942
Acquisition	409
Accruals for warranties issued during the period	11,539
Accruals related to pre-existing warranties	(3,159)
Settlements made during the period	(10,806)
Balance at December 31, 2015	$ 6,925

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

	Amount (in thousands)
Balance at December 31, 2012	$ 28,044
Deferral of new extended warranty revenue	20,630
Recognition of extended warranty deferred revenue	(13,765)
Balance at December 31, 2013	34,909
Deferral of new extended warranty revenue	29,519
Recognition of extended warranty deferred revenue	(21,128)
Balance at December 31, 2014	43,300
Acquisition	870
Deferral of new extended warranty revenue	28,549
Recognition of extended warranty deferred revenue	(26,220)
Balance at December 31, 2015	$ 46,499

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 written off against the allowance when it is determined the receivable will not be recovered.

49

Table of Contents

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

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.

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, 2015, 2014 and 2013. 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. Acquisition-related contingent consideration is classified within Level 3. Teradyne determines the fair value of acquisition-related contingent consideration based on an assessment of the probability that it would be required to make such payment.

Prepayments

Prepayments consist of the following and are included in prepayments on the balance sheet:

	2015	2014
	(in thousands)	
Contract manufacturer prepayments	$ 66,283	$ 65,972
Prepaid maintenance and other services	8,481	7,343
Prepaid taxes	3,781	11,462
Other prepayments	12,974	11,042

Total prepayments	$ 91,519	$ 95,819

Table of Contents

Retirement and Postretirement Plans

Teradyne recognizes 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. Teradyne calculates the expected return on plan assets using the fair value of the plan assets. Actuarial gains and losses are generally measured annually as of December 31 and, accordingly, recorded during the fourth quarter of each year or upon any interim remeasurement of the plans.

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, as of December 31, on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. In accordance with ASC 350-10, Teradyne has 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 Teradyne determines this is the case, Teradyne 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 Teradyne 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.

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. There were no events or circumstances indicating that the carrying value of intangible and long-lived assets may not be recoverable in 2015 or 2013. In 2014, as a result of the Wireless Test segment goodwill impairment charge in the fourth quarter of 2014, Teradyne performed an impairment test of the Wireless Test segment s intangible and long-lived assets based on a comparison of the estimated undiscounted cash flows to the recorded value of the assets and there was no indication of impairment.

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 accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in the statement of operations.

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

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

Table of Contents

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, 2015, 2014 and 2013 was $50.7 million, $9.7 million and $9.0 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, allocated facility costs, depreciation, and tooling costs.

Stock Compensation 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, restricted stock units and performance-based restricted stock units, and employees are eligible to purchase Teradyne s common stock through its Employee Stock Purchase Plan (ESPP).

Income Taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis 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 it is more likely than not that some or all of the deferred tax assets will not be realized. Teradyne performed the required assessment of positive and negative evidence regarding the realization of the net deferred tax assets in accordance with ASC 740, Accounting for Income Taxes. This assessment included the evaluation of scheduled reversals of deferred tax liabilities, estimates of projected future taxable income and tax-planning strategies. Although realization is not assured, based on its assessment, Teradyne concluded that it is more likely than not that such assets, net of the existing valuation allowance, will be realized. U.S. income taxes are not provided for on the earnings of non-U.S. subsidiaries which are expected to be reinvested indefinitely in operations outside the U.S. For intra-period tax allocations, Teradyne first utilizes non-equity related tax attributes, such as net operating losses and credit carryforwards and then equity-related tax attributes. 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.

Advertising Costs

Teradyne expenses all advertising costs as incurred. Advertising costs were $3.3 million, $1.9 million and $1.7 million in 2015, 2014 and 2013, respectively.

Table of Contents

Translation of Non-U.S. Currencies

The functional currency for all subsidiaries is the U.S. dollar, except for the Industrial Automation segment for which the local currency is its functional currency. All foreign currency denominated monetary assets and liabilities are remeasured 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 remeasured into the functional currency using historical exchange rates. Net foreign exchange gains and losses resulting from remeasurement are included in other (income) expense, net. For Industrial Automation, assets and liabilities are translated into U.S. dollars using exchange rates in effect at the end of the period. Revenue and expense amounts are translated using an average of exchange rates in effect during the period. Translation adjustments are recorded within accumulated other comprehensive income (loss).

Net foreign exchange gains and losses resulting from remeasurement are included in other (income) expense, net and were a gain of $2.5 million, a loss of $0.9 million and a loss of $6.9 million, respectively, for the years ended December 31, 2015, 2014 and 2013. These amounts do not reflect the corresponding gains (losses) from foreign exchange contracts. See Note F: Financial Instruments regarding foreign exchange contracts.

Net Income per Common Share

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

Dilutive potential common shares included incremental shares from the assumed conversion of the convertible notes and the convertible notes hedge warrant shares, during the periods the convertible notes and warrants were outstanding. Incremental shares from the assumed conversion of the convertible notes were calculated using the difference between the average Teradyne stock price for the period and the conversion price of $5.48, multiplied by 34.7 million shares. The result of this calculation, representing the total intrinsic value of the convertible debt, was divided by the average Teradyne stock price for the period. Convertible notes hedge warrant shares were calculated using the difference between the average Teradyne stock price for the period and the warrant price of $7.67, multiplied by 34.7 million shares. The result of this calculation, representing the total intrinsic value of the warrant, was 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 was not used in the GAAP earnings per share calculation as its effect was anti-dilutive.

Teradyne settled its conversion spread (i.e., the intrinsic value of the embedded option feature contained in the convertible debt) in shares. Teradyne accounted for its conversion spread using the treasury stock method. Teradyne determined that it had the ability and intent to settle the principal amount of the convertible debt in cash; accordingly, the principal amount was excluded from the determination of diluted earnings per share.

Comprehensive Income (Loss)

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

C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In November 2015, the FASB issued Accounting Standards Update (ASU) 2015-17, *Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 is aimed at reducing complexity in accounting standards.

Table of Contents

Currently, GAAP requires the deferred taxes for each jurisdiction to be presented as a net current asset or liability and net noncurrent asset or liability. This requires a jurisdiction-by-jurisdiction analysis based on the classification of the assets and liabilities to which the underlying temporary differences relate, or, in the case of loss or credit carryforwards, based on the period in which the attribute is expected to be realized. Any valuation allowance is then required to be allocated on a pro rata basis, by jurisdiction, between current and noncurrent deferred tax assets. To simplify presentation, the new guidance requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. As a result, each jurisdiction will now only have one net noncurrent deferred tax asset or liability. The guidance does not change the existing requirement that only permits offsetting within a jurisdiction, companies are still prohibited from offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. The new guidance is effective in fiscal years beginning after December 15, 2016, including interim periods within those years. Early adoption is permitted as of the beginning of an interim or annual reporting period. The guidance may be applied either prospectively, for all deferred tax assets and liabilities, or retrospectively by reclassifying the comparative balance sheet. Teradyne will early adopt this ASU prospectively in January 2016. This ASU is expected to have no impact on Teradyne s results of operations.

In September 2015, the FASB issued ASU 2015-16, *Business Combinations (Topic 805) Simplifying the Accounting for Measurement-Period Adjustments*. ASU 2015-16 requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustments are identified, including the cumulative effect of the change in provisional amount as if the accounting had been completed at the acquisition date. ASU 2015-16 is effective for reporting periods beginning after December 15, 2015 and is applied prospectively. Early adoption is permitted. Teradyne early adopted this ASU in 2015. Adoption of this ASU did not have a material impact on Teradyne s financial position and results of operations.

On April 7, 2015, the FASB issued ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs,* which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation for debt discount. ASU 2015-03 does not specifically address requirements for the presentation or subsequent measurement of debt issuance costs related to line-of-credit arrangements. On August 8, 2015, the FASB issued ASU 2015-15, *Interest Imputation of Interest (Subtopic 835-30)* clarifying that debt issuance costs related to line-of-credit arrangements could be presented as an asset and amortized over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. For Teradyne, the standard is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those years. This ASU is expected to have no impact on Teradyne s financial position and results of operations.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606),* which will replace numerous requirements in U.S. GAAP, including industry-specific requirements, and provide companies with a single revenue recognition model for recognizing revenue from contracts with customers. The core principle of the new standard is that a company should recognize revenue to show the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled to in exchange for those goods or services. In August 2015, FASB issued ASU 2015-14, which deferred the effective date of the new revenue standard by one year. For Teradyne, the standard will be effective in the first quarter of 2018. Early adoption is permitted but not before the original effective date (that is, annual periods beginning after December 15, 2016). The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. Teradyne has not yet selected a transition method. Teradyne is currently evaluating the impact of this ASU on its financial position and results of operations.

Table of Contents

D. ACQUISITIONS

Business

Universal Robots

On June 11, 2015, Teradyne acquired all of the outstanding equity of Universal Robots located in Odense, Denmark. Universal Robots is the leading supplier of collaborative robots which are low-cost, easy-to-deploy and simple-to-program robots that work side by side with production workers to improve quality, increase manufacturing efficiency and decrease manufacturing costs. Universal Robots is a separate operating and reportable segment, Industrial Automation. The total purchase price of $315.4 million consisted of $283.8 million of cash paid and $31.6 million of contingent consideration, measured at fair value. The contingent consideration was valued using a Monte Carlo simulation based on the following key inputs: (1) forecasted revenue (2) forecasted EBITDA (3) revenue volatility (4) EBITDA volatility; and (5) discount rate. The contingent consideration is payable upon the achievement of certain thresholds and targets for earnings before income taxes, depreciation and amortization (EBITDA) for calendar year 2015, revenue for the period from July 1, 2015 to December 31, 2017 and revenue for the period from July 1, 2015 to December 31, 2018. The maximum amount of contingent consideration that could be paid is $65 million. Based on Universal Robots calendar 2015 EBITDA results, Teradyne will pay, in the first quarter of 2016, $15 million or 100% of the eligible EBITDA contingent consideration amount.

In the fourth quarter of 2015, Teradyne finalized the valuation and purchase price allocation for the acquisition which resulted in a $5.4 million decrease in goodwill as a result of a $2.2 million decrease in the fair value of contingent consideration, a $1.6 million increase in intangible assets and a $1.6 million decrease in acquired liabilities.

The Universal Robots acquisition was accounted for as a business combination and, accordingly, the results have been included in Teradyne s consolidated results of operations from the date of acquisition. The allocation of the total purchase price to Universal Robots net tangible liabilities and identifiable intangible assets was based on their estimated fair values as of the acquisition date. The excess of the purchase price over the identifiable intangible assets and net tangible liabilities in the amount of $221.1 million was allocated to goodwill, which is not deductible for tax purposes.

The following table represents the final allocation of the purchase price:

	Purchase Price Allocation (in thousands)
Goodwill	$ 221,128
Intangible assets	121,590
Tangible assets acquired and liabilities assumed:	
Current assets	10,853
Non-current assets	3,415
Accounts payable and current liabilities	(11,976)
Long-term deferred tax liabilities	(26,653)
Long-term other liabilities	(2,920)
Total purchase price	$ 315,437

Table of Contents

Teradyne estimated the fair value of intangible assets using the income and cost approaches. Acquired intangible assets are amortized on a straight-line basis over their estimated useful lives. Components of these intangible assets and their estimated useful lives at the acquisition date are as follows:

	Fair Value (in thousands)	Estimated Useful Life (in years)
Developed technology	$ 89,240	4.9
Trademarks and tradenames	22,920	10.0
Customer relationships	9,430	2.0
Total intangible assets	$ 121,590	5.6

For the period from June 12, 2015 to December 31, 2015, Universal Robots contributed $41.9 million of revenues and had a $7.6 million loss before income taxes.

The following unaudited pro forma information gives effect to the acquisition of Universal Robots as if the acquisition occurred on January 1, 2014. 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:

	For the Years Ended December 31, 2015	December 31, 2014
	(in thousands, except per share amounts)	
Revenue	$ 1,657,626	$ 1,686,689
Net income	199,784	61,078
Net income per common share:		
Basic	$ 0.94	$ 0.30
Diluted	$ 0.94	$ 0.27

Pro forma results for the year ended December 31, 2015 were adjusted to exclude $1.6 million of non-recurring expense related to the fair value adjustment to acquisition-date inventory and $1.0 million of acquisition related costs incurred in 2015.

Pro forma results for the year ended December 31, 2014, were adjusted to include $1.6 million of non-recurring expense related to the fair value adjustment to acquisition-date inventory and $1.0 million of acquisition related costs.

Avionics Interface Technologies, LLC.

On October 31, 2014, Teradyne acquired all of the assets and liabilities of Avionics Interface Technologies, LLC (AIT) located in Omaha, Nebraska and Dayton, Ohio. AIT is a supplier of equipment for testing state-of-the-art data communication buses. The acquisition of AIT complements Teradyne s Defense/Aerospace line of bus test instrumentation for commercial and defense avionics systems. AIT is included in Teradyne s System Test segment.

The total purchase price of $21.2 million consisted of $19.4 million of cash paid to acquire AIT s assets and liabilities and $1.8 million in fair value of contingent consideration payable upon the achievement of certain revenue and gross margin targets in 2015 and 2016. No contingent consideration was paid for 2015. The maximum remaining contingent consideration that could be paid is $1.1 million.

The valuation of the contingent consideration utilized the following assumptions: (1) probability of meeting each target; (2) expected timing of meeting each target; and (3) discount rate reflecting the risk associated with

56

Table of Contents

the expected payments. The probabilities and timing for each target were estimated based on a review of the historical and projected results. A discount rate of 4.7 percent was selected based on the cost of debt for the business. A significant portion of the risk in achieving the contingent consideration was captured in the probabilities assigned to meeting each target.

The AIT acquisition was accounted for as a business combination and, accordingly, the results have been included in Teradyne s consolidated results of operations from the date of acquisition. The allocation of the total purchase price of AIT s net tangible and identifiable intangible assets was based on their estimated fair values as of the acquisition date. The excess of the purchase price over the identifiable intangible and net tangible assets in the amount of $10.5 million was allocated to goodwill, which is deductible for tax purposes.

The following represents the final allocation of the purchase price:

	Purchase Price Allocation (in thousands)
Goodwill	$ 10,516
Intangible assets	9,080
Tangible assets acquired and liabilities assumed:	
Current assets	2,452
Non-current assets	359
Accounts payable and current liabilities	(1,164)
Total purchase price	$ 21,243

Teradyne estimated the fair value of intangible assets using the income approach. Acquired intangible assets are amortized on a straight-line basis over their estimated useful lives. Components of these intangible assets and their estimated useful lives at the acquisition date are as follows:

	Fair Value (in thousands)	Estimated Useful Life (in years)
Customer relationships	$ 5,630	5.0
Developed technology	2,580	4.8
Trademarks and tradenames	380	5.0
Non-compete agreement	320	4.0
Customer order backlog	170	0.3
Total intangible assets	$ 9,080	4.8

For the period from October 31, 2014 to December 31, 2014, AIT contributed $0.6 million of revenues and had a $0.8 million loss before income taxes.

The following unaudited pro forma information gives effect to the acquisition of AIT as if the acquisition occurred on January 1, 2013. 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:

	For the Year Ended December 31, 2014	December 31, 2013
	(in thousands, except per share amounts)	
Revenues	$ 1,655,038	$ 1,434,699

Net income	$ 82,169	$ 164,087
Income per common share:		
Basic	$ 0.40	$ 0.86
Diluted	$ 0.37	$ 0.70

Table of Contents

ZTEC Instruments, Inc.

On October 25, 2013, Teradyne acquired all of the outstanding equity of ZTEC Instruments, Inc. (ZTEC) located in Albuquerque, New Mexico. ZTEC is a supplier of modular wireless test instruments. The acquisition of ZTEC expands Teradyne s Wireless Test segment into the design verification test of wireless components and chipsets.

The total purchase price of $17.3 million consisted of $15.1 million of cash paid to acquire the outstanding common and preferred stock of ZTEC and $2.2 million in fair value of contingent consideration payable upon achievement of certain customer order and revenue targets through 2015. The maximum amount of contingent consideration that could have been paid was $5.0 million. None of the contingent consideration was paid.

The ZTEC acquisition was accounted for as a 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 ZTEC s net tangible and identifiable intangible assets was based on their estimated fair values as of the acquisition date. The excess of the purchase price over the identifiable intangible and net tangible assets in the amount of $12.5 million was allocated to goodwill, which is not deductible for tax purposes.

The following represents the final allocation of the purchase price:

	Purchase Price Allocation (in thousands)
Goodwill	$ 12,520
Intangible assets	4,870
Tangible assets acquired and liabilities assumed:	
Cash	79
Other current assets	1,612
Non-current assets	1,757
Accounts payable and current liabilities	(1,811)
Long-term deferred tax liabilities	(1,719)
Total purchase price	$ 17,308

Teradyne estimated the fair value of intangible assets using the income approach. Acquired intangible assets are amortized on a straight-line basis over their estimated useful lives. Components of these intangible assets and their estimated useful lives at the acquisition date are as follows:

	Fair Value (in thousands)	Estimated Useful Life (in years)
Developed technology	$ 3,500	5.0
Customer relationships	1,370	6.0
Total intangible assets	$ 4,870	5.3

For the period from October 25, 2013 to December 31, 2013, ZTEC contributed $0.4 million of revenues and had a $0.8 million loss before income taxes.

Table of Contents

The following unaudited pro forma information gives effect to the acquisition of ZTEC as if the acquisition occurred on January 1, 2013. 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:

	For the Year Ended December 31, 2013 (in thousands, except per share amounts)
Revenues	$ 1,431,270
Net income	$ 163,394
Income per common share:	
Basic	$ 0.86
Diluted	$ 0.69

E. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consist of the following:

	2015	2014
	(in thousands)	
Land	$ 16,561	$ 16,561
Buildings	108,797	108,671
Machinery and equipment	595,445	659,743
Furniture and fixtures, and software	82,612	77,566
Leasehold improvements	43,328	31,981
Construction in progress	2,630	2,508
	849,373	897,030
Less: accumulated depreciation	575,959	567,992
	$ 273,414	$ 329,038

Depreciation of property, plant and equipment for the years ended December 31, 2015, 2014 and 2013 was $68.2 million, $73.4 million and $57.3 million, respectively. As of December 31, 2015 and 2014, the gross book value included in machinery and equipment for internally manufactured test systems being leased by customers was $20.4 million and $89.6 million, respectively. As of December 31, 2015 and 2014, the accumulated depreciation on these test systems was $8.5 million and $19.9 million, respectively.

F. FINANCIAL INSTRUMENTS

Cash Equivalents

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

Marketable Securities

Teradyne s available-for-sale securities are classified as Level 1 and Level 2. Contingent consideration is classified as Level 3. The vast majority of Level 2 securities are fixed income securities 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.

Realized losses recorded in 2015 were $0.4 million. There were no realized losses recorded in 2014 and 2013. Realized gains recorded in 2015, 2014 and 2013 were $1.7 million, $2.4 million and $1.0 million,

Table of Contents

respectively. Realized gains are included in interest income, and realized losses are included in interest expense. 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, 2015 and 2014, there were no transfers in or out of Level 1, Level 2 or Level 3 financial instruments.

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, 2015 and 2014:

	December 31, 2015			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
Assets				
Cash	$ 213,336	$	$	$ 213,336
Cash equivalents	49,241	2,128		51,369
Available for sale securities:				
U.S. Treasury securities		419,958		419,958
Corporate debt securities		161,634		161,634
U.S. government agency securities		83,952		83,952
Certificates of deposit and time deposits		43,394		43,394
Commercial paper		20,308		20,308
Equity and debt mutual funds	13,954			13,954
Non-U.S. government securities		424		424
Total	$ 276,531	$ 731,798	$	$ 1,008,329
Derivative assets		109		109
Total	$ 276,531	$ 731,907	$	$ 1,008,438
Liabilities				
Contingent consideration	$	$	$ 37,436	$ 37,436
Derivative liabilities		146		146
Total	$	$ 146	$ 37,436	$ 37,582

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
		(in thousands)		
Assets				
Cash and cash equivalents	$ 262,577	$ 2,128	$	$ 264,705
Marketable securities		477,696		477,696
Long-term marketable securities	13,954	251,974		265,928
Prepayments		109		109
	$ 276,531	$ 731,907	$	$ 1,008,438

Liabilities				
Other current liabilities	$	$ 146	$	$ 146
Contingent consideration			15,500	15,500
Long-term contingent consideration			21,936	21,936
	$	$ 146	$ 37,436	$ 37,582

Table of Contents

	December 31, 2014			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
Assets				
Cash	$ 111,471	$	$	$ 111,471
Cash equivalents	160,218	22,567		182,785
Available for sale securities:				
U.S. Treasury securities		402,154		402,154
U.S. government agency securities		258,502		258,502
Corporate debt securities		141,467		141,467
Commercial paper		140,638		140,638
Certificates of deposit and time deposits		49,036		49,036
Equity and debt mutual funds	12,333			12,333
Non-U.S. government securities		446		446
Total	$ 284,022	$ 1,014,810	$	$ 1,298,832
Derivative assets		220		220
Total	$ 284,022	$ 1,015,030	$	$ 1,299,052
Liabilities				
Contingent consideration	$	$	$ 3,350	$ 3,350
Derivative liabilities		369		369
Total	$	$ 369	$ 3,350	$ 3,719

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
		(in thousands)		
Assets				
Cash and cash equivalents	$ 271,689	$ 22,567	$	$ 294,256
Marketable securities		533,787		533,787
Long-term marketable securities	12,333	458,456		470,789
Prepayments		220		220
	$ 284,022	$ 1,015,030	$	$ 1,299,052
Liabilities				
Other current liabilities	$	$ 369	$	$ 369
Contingent consideration			895	895
Long-term other accrued liabilities			2,455	2,455
	$	$ 369	$ 3,350	$ 3,719

Table of Contents

Changes in the fair value of Level 3 contingent consideration for the years ended December 31, 2015 and 2014 were as follows:

	Contingent Consideration (in thousands)
Balance at December 31, 2013	$ 2,230
Acquisition of AIT	1,750
Fair value adjustment of ZTEC	(630)
Balance at December 31, 2014	3,350
Acquisition of Universal Robots	31,597
Fair value adjustment of ZTEC	(1,600)
Fair value adjustment of AIT	(1,250)
Fair value adjustment of Universal Robots	5,339
Balance at December 31, 2015	$ 37,436

The following table provides quantitative information associated with the fair value measurement of Teradyne s Level 3 financial instrument:

Liability	December 31, 2015 Fair Value (in thousands)	Valuation Technique	Unobservable Inputs	Weighted Average
Contingent consideration (Universal Robots)	$ 21,936	Monte Carlo simulation	Revenue for the period July 1, 2015 December 31, 2017 volatility	15%
			Discount Rate	5.5%
			Revenue for the period July 1, 2015 December 31, 2018 volatility	15%
			Discount Rate	5.5%
Contingent consideration (AIT)	$ 500	Income approach-discounted cash flow	Revenue for calendar year 2016 probability	48%
			Discount rate	4.7%

Based on Universal Robots calendar 2015 EBITDA results, Teradyne will pay, in first quarter of 2016, $15 million or 100% of the eligible EBITDA contingent consideration amount.

As of December 31, 2015, the significant unobservable inputs used in the Monte Carlo simulation to fair value the Universal Robots contingent consideration include forecasted revenue, revenue volatility and discount rate. Increases or decreases in the inputs would result in a higher or lower fair value measurement.

The significant unobservable inputs used in the AIT fair value measurement of contingent consideration are the probabilities of successful achievement of calendar year 2016 revenue threshold and target, and a discount rate. Increases or decreases in the revenue probabilities would result in a higher or lower fair value measurement.

Table of Contents

The carrying amounts and fair values of financial instruments at December 31, 2015 and 2014 were as follows:

	December 31, 2015		December 31, 2014	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(in thousands)			
Assets				
Cash and cash equivalents	$ 264,705	$ 264,705	$ 294,256	$ 294,256
Marketable securities	743,624	743,624	1,004,576	1,004,576
Derivative assets	109	109	220	220
Liabilities				
Contingent consideration	37,436	37,436	3,350	3,350
Derivative liabilities	146	146	369	369

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

The following tables summarize the composition of available for sale marketable securities at December 31, 2015 and 2014:

	December 31, 2015				
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
U.S. Treasury securities	$ 421,060	$ 65	$ (1,167)	$ 419,958	$ 379,434
Corporate debt securities	163,297	902	(2,565)	161,634	145,373
U.S. government agency securities	84,032	42	(122)	83,952	55,120
Certificates of deposit and time deposits	43,391	6	(3)	43,394	10,527
Commercial paper	20,298	11	(1)	20,308	8,646
Equity and debt mutual funds	12,996	1,119	(161)	13,954	2,560
Non-U.S. government securities	424			424	
	$ 745,498	$ 2,145	$ (4,019)	$ 743,624	$ 601,660

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Marketable securities	$ 478,306	$ 38	$ (648)	$ 477,696	$ 374,785
Long-term marketable securities	267,192	2,107	(3,371)	265,928	226,875
	$ 745,498	$ 2,145	$ (4,019)	$ 743,624	$ 601,660

Table of Contents

	December 31, 2014				
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
U.S. Treasury securities	$ 402,197	$ 362	$ (405)	$ 402,154	$ 317,771
U.S. government agency securities	258,452	135	(85)	258,502	104,642
Corporate debt securities	139,374	2,414	(321)	141,467	96,998
Commercial paper	140,616	26	(4)	140,638	41,747
Certificates of deposit and time deposits	49,048	11	(23)	49,036	20,684
Equity and debt mutual funds	10,492	1,870	(29)	12,333	1,234
Non-U.S. government securities	446			446	
	$ 1,000,625	$ 4,818	$ (867)	$ 1,004,576	$ 583,076

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Marketable securities	$ 533,833	$ 99	$ (145)	$ 533,787	$ 240,234
Long-term marketable securities	466,792	4,719	(722)	470,789	342,842
	$ 1,000,625	$ 4,818	$ (867)	$ 1,004,576	$ 583,076

As of December 31, 2015, the fair market value of investments with unrealized losses totaled $601.7 million. Of this value, $0.9 million had unrealized losses of $0.5 million greater than one year and $600.8 million had unrealized losses of $3.6 million for less than one year.

As of December 31, 2014, the fair market value of investments with unrealized losses totaled $583.1 million. Of this value, $2.3 million had unrealized losses of $0.1 million greater than one year and $580.8 million had unrealized losses of $0.8 million 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, 2015 and 2014, were temporary.

The contractual maturities of investments held at December 31, 2015 were as follows:

	Cost	Fair Value
	(in thousands)	
Due within one year	$ 478,306	$ 477,696
Due after 1 year through 5 years	209,822	209,314
Due after 5 years through 10 years	5,183	5,179
Due after 10 years	39,191	37,481
Total	$ 732,502	$ 729,670

Contractual maturities of investments held at December 31, 2015, exclude $14 million of equity and debt mutual funds as they do not have a contractual maturity date.

64

Table of Contents

Assets measured at fair value on a non-recurring basis as of December 31, 2014 are summarized as follows:

	December 31, 2014	Fair Value Measurements at Reporting Period			
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total Losses
			(in thousands)		
Assets					
Goodwill	$ 273,438	$	$	$ 273,438	$ 98,897
Definite lived intangible assets	158,237			158,237	
Long-lived assets held and used	10,189		10,189		
	$ 441,864	$	$ 10,189	$ 431,675	$ 98,897

In accordance with the provisions of ASC 350-10, *Intangibles- Goodwill and Other*, goodwill with a carrying amount of $372.3 million was written down in 2014 to its implied fair value of $273.4 million, resulting in an impairment charge of $98.9 million. See Note I: Goodwill and Intangible Assets regarding goodwill impairment.

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 monetary assets and liabilities. Teradyne does not use derivative financial instruments for trading or speculative purposes.

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

At December 31, 2015 and 2014, 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, 2015			December 31, 2014		
	Buy Position	Sell Position	Net Total	Buy Position	Sell Position	Net Total
			(in millions)			
Japanese Yen	$ (51.9)	$	$ (51.9)	$	$ 19.7	$ 19.7
British Pound Sterling	(9.5)		(9.5)		11.7	11.7
Korean Won	(5.5)		(5.5)		4.4	4.4
Taiwan Dollar	(5.0)		(5.0)	(0.9)	5.7	4.8
Euro		27.2	27.2	(30.6)		(30.6)
Singapore Dollar		15.0	15.0			
Total	$ (71.9)	$ 42.2	$ (29.7)	$ (31.5)	$ 41.5	$ 10.0

The fair value of the outstanding contracts was $0.0 million at December 31, 2015 and a loss of $0.1 million at December 31, 2014.

In 2015 and 2014, Teradyne recorded net realized losses related to foreign currency forward contracts hedging net monetary assets and liabilities of $3.0 million and $0.2 million, respectively.

Table of Contents

In 2013, Teradyne recorded net realized gains related to foreign currency forward contracts hedging net monetary assets and liabilities of $5.9 million. Gains and losses on foreign currency forward contracts and foreign currency remeasurement gains and losses on monetary assets and liabilities are included in other (income) expense, net.

The following table summarizes the fair value of derivative instruments as of December 31, 2015 and 2014:

	Balance Sheet Location	December 31, 2015	December 31, 2014
		(in thousands)	
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Prepayments	$ 109	$ 220
Foreign exchange contracts	Other current liabilities	(146)	(369)
Total derivatives		$ (37)	$ (149)

The following table summarizes the effect of derivative instruments in the statement of operations recognized for the years ended December 31, 2015, 2014 and 2013. The table does not reflect the corresponding gains and losses from the remeasurement of the monetary assets and liabilities denominated in foreign currencies. For the years ended December 31, 2015, 2014, and 2013, gains (losses) from the remeasurement of the monetary assets and liabilities denominated in foreign currencies were $2.5 million, $(0.9) million, and $(6.9) million, respectively.

	Location of Losses (Gains) Recognized in Statement of Operations	December 31, 2015	December 31, 2014	December 31, 2013
			(in thousands)	
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	Other (income) expense, net	$ 3,047	$ 237	$ (5,933)
Total derivatives		$ 3,047	$ 237	$ (5,933)

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

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. One customer comprised 10% or more of Teradyne s accounts receivable balance as of December 31, 2015. A different customer comprised 10% or more of Teradyne s accounts receivable balance as of December 31, 2014.

Equity Interest

On November 1, 2013, in connection with the acquisition of Empirix, Inc. by Thoma Bravo LLC, Teradyne sold its equity interest in Empirix, Inc., a private company, and received cash proceeds of $34.2 million which was recorded as a gain in other (income) expense, net. An additional $5.4 million of cash proceeds that was held in escrow for 15 months, for potential indemnifications to the buyer, was paid to Teradyne in February 2015 and it was recorded as a gain in other (income) expense, net in the first quarter of 2015.

66

Table of Contents

G. DEBT

Revolving Credit Facility

On April 27, 2015, Teradyne entered into a Credit Agreement (the Credit Agreement) with Barclays Bank PLC, as administrative agent and collateral agent, and the lenders party thereto. The Credit Agreement provides for a five-year, senior secured revolving credit facility of up to $350 million (the Credit Facility). The Credit Agreement further provides that, subject to customary conditions, Teradyne may seek to obtain from existing or new lenders incremental commitments under the Credit Facility in an aggregate principal amount not to exceed $150 million.

Proceeds from the Credit Facility may be used for general corporate purposes and working capital. Teradyne incurred $2.3 million in costs related to the revolving credit facility. These costs are being amortized over the five year term of the revolving credit facility and are included in interest expense in the statement of operations. As of February 29, 2016, Teradyne has not borrowed any funds under the Credit Facility.

The interest rates applicable to loans under the Credit Facility are, at Teradyne s option, equal to either a base rate plus a margin ranging from 0.00% to 1.00% per annum or LIBOR plus a margin ranging from 1.00% to 2.00% per annum, based on the Consolidated Leverage Ratio of Teradyne and its Restricted Subsidiaries. In addition, Teradyne will pay a commitment fee on the unused portion of the commitments under the Credit Facility ranging from 0.125% to 0.350% per annum, based on the then applicable Consolidated Leverage Ratio.

Teradyne is not required to repay any loans under the Credit Facility prior to maturity, subject to certain customary exceptions. Teradyne is permitted to prepay all or any portion of the loans under the Credit Facility prior to maturity without premium or penalty, other than customary LIBOR breakage costs.

The Credit Agreement contains customary events of default, representations, warranties and affirmative and negative covenants that, among other things, limit Teradyne s and its Restricted Subsidiaries ability to sell assets, grant liens on assets, incur other secured indebtedness and make certain investments and restricted payments, all subject to exceptions set forth in the Credit Agreement. The Credit Agreement also requires Teradyne to satisfy two financial ratios measured as of the end of each fiscal quarter: a consolidated leverage ratio and an interest coverage ratio. As of December 31, 2015, Teradyne was in compliance with all covenants.

The Credit Facility is guaranteed by certain of Teradyne s domestic subsidiaries and collateralized by assets of Teradyne and such subsidiaries, including a pledge of 65% of the capital stock of certain foreign subsidiaries.

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 was denominated in Japanese Yen). The loan had a term of 5 years and a fixed interest rate of 0.8%. Approximately $6.0 million of the loan was collateralized by a real estate mortgage on Teradyne K.K. s building and land in Kumamoto, Japan and approximately $4.0 million was unsecured. Teradyne, Inc. had guaranteed payment of the loan obligation. The principal was 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. The final principal and interest payments were made in March 2014.

Convertible Senior Notes

On March 31, 2009, Teradyne entered into an underwriting agreement regarding a public offering of $175.0 million aggregate principal amount of 4.50% convertible senior notes due March 15, 2014 (the Notes). On April 1, 2009, the underwriters exercised their option to purchase an additional $15.0 million aggregate principal amount of the Notes for a total aggregate principal amount of $190.0 million. The Notes bore 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 had a maturity date of March 15, 2014. Substantially all of the Notes were converted prior to March 15, 2014 and were net share settled, meaning that the holders received,

Table of Contents

for each $1,000 in principal amount of Notes, $1,000 in cash and approximately 131.95 shares of Teradyne common stock (calculated by taking 182.65 shares, being the fixed number specified in the Notes purchase agreement, less 50.7 shares). The 50.7 shares were determined, as specified in the Notes purchase agreement, by dividing the $1,000 principal amount by the $19.74 average trading price of Teradyne s common stock over the 25 day trading period from February 5, 2014 to March 12, 2014.

Teradyne satisfied the Notes net share settlement by paying the aggregate principal amount of $190 million in cash and issuing 25.1 million shares of common stock. On March 13, 2014, Teradyne exercised its call option agreement entered into with Goldman, Sachs & Co. (the hedge counterparty) at the time of issuance of the Notes and received 25.1 million shares of Teradyne s common stock, which Teradyne retired.

From June 17, 2014 to September 17, 2014, the hedge counterparty exercised its warrant agreement entered into with Teradyne at the time of issuance of the Notes. The warrants were net share settled. In 2014, Teradyne issued 21.2 million shares of its common stock for warrants exercised at a weighted average strike price of $7.6348 per share.

	For the year ended	
	December 31, 2015	December 31, 2014
	(in thousands)	
Contractual interest expense on the coupon	$	$ 1,757
Amortization of the discount component and debt issue fees recognized as interest expense		4,493
Total interest expense on the convertible debt	$	$ 6,250

H. ACCUMULATED OTHER COMPREHENSIVE INCOME

Changes in accumulated other comprehensive income, which is presented net of tax, consists of the following:

	Foreign Currency Translation Adjustment	Unrealized Gains (Losses) on Marketable Securities	Retirement Plans Prior Service Credit	Total
		(in thousands)		
Balance at December 31, 2013, net of tax of $794, $(284)	$	$ 1,381	$ 2,619	$ 4,000
Other comprehensive income before reclassifications, net of tax of $1,449		2,417		2,417
Amounts reclassified from accumulated other comprehensive income, net of tax of $(645), $(169)		(1,433)	(295)	(1,728)
Net current period other comprehensive income, net of tax of $804, $(169)		984	(295)	689
Balance at December 31, 2014, net of tax of $1,598, $(453)	$	$ 2,365	$ 2,324	$ 4,689
Other comprehensive loss before reclassifications, net of tax of $0, $(1,667)	(8,759)	(3,075)		(11,834)
Amounts reclassified from accumulated other comprehensive income, net of tax of $(390), $(169)		(704)	(295)	(999)
Net current period other comprehensive loss, net of tax of $0, $(2,057), $(169)	(8,759)	(3,779)	(295)	(12,833)
Balance at December 31, 2015, net of tax of $0, $(459), $(622)	$ (8,759)	$ (1,414)	$ 2,029	$ (8,144)

Table of Contents

Reclassifications out of accumulated other comprehensive income to the statement of operations for the years ended December 31, 2015, 2014 and 2013, were as follows:

Details about Accumulated Other Comprehensive Income Components	For the year ended December 31, 2015	December 31, 2014	December 31, 2013	Affected Line Item in the Statements of Operations
		(in thousands)		
Available-for-sale marketable securities				
Unrealized gains, net of tax of $390, $645, $257	$ 704	$ 1,433	$ 447	Interest income
Amortization of defined benefit pension and postretirement plans				
Prior service benefit, net of tax of $169, $169, $159	$ 295	$ 295	$ 276	(a)
Total reclassifications, net of tax of $559, $814, $416	$ 999	$ 1,728	$ 723	Net income

(a) The amortization of prior service benefit is included in the computation of net periodic pension cost and postretirement benefit; see Note M: Retirement Plans.

I. GOODWILL AND INTANGIBLE ASSETS

Goodwill

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

Teradyne has the option to perform a qualitative assessment (Step zero) to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If Teradyne determines this is the case, Teradyne 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 Teradyne 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. When performing the two-step process, the first step involves a comparison of the estimated fair value of a reporting unit to its carrying amount, including goodwill. In performing the first step, Teradyne determines the fair value of a reporting unit using the results derived from an income approach and a market approach. The income approach is estimated through the discounted cash flow (DCF) analysis. Determining fair value requires the exercise of significant judgment, including judgments about appropriate discount rates, perpetual growth rates, and the amount and timing of expected future cash flows. Discount rates are based on a weighted average cost of capital (WACC), which represents the average rate a business must pay its providers of debt and equity, plus a risk premium. The WACC used to test goodwill is derived from a group of comparable companies. The cash flows employed in the DCF analysis are derived from internal forecasts and external market forecasts. The market approach estimates the fair value of the reporting unit by utilizing the market comparable method which is based on revenue and earnings multiples from comparable companies. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired and the second step of the impairment test is not necessary. If the carrying amount of a reporting unit exceeds its estimated fair value, then the second step of the goodwill impairment test must be performed. The second step of the goodwill impairment test compares the implied fair value of the reporting unit s goodwill with its carrying amount of goodwill to measure the amount of impairment loss, if any. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination, whereby the estimated fair value of the reporting unit is allocated to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the purchase price paid. If the carrying amount of the reporting unit s goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess.

69

Table of Contents

In 2015, Teradyne performed step one of the two step impairment test for the Wireless Test and Defense/Aerospace reporting units and the Step zero assessment for the Industrial Automation reporting unit. In 2015, there was no impairment.

In 2014, as a result of decreased projected demand attributable to an estimated smaller future wireless test market due to reuse of wireless test equipment, price competition and different testing techniques, Teradyne determined that for its Wireless Test reporting unit, the carrying amount of its net assets exceeded its respective fair value, indicating that a potential impairment existed. After completing the second step of the goodwill impairment test, Teradyne recorded a $98.9 million goodwill impairment charge in the fourth quarter of 2014.

The fourth quarter 2014 goodwill impairment test of Teradyne s Defense/Aerospace reporting unit, which is included in Teradyne s System Test reportable segment, did not identify any goodwill impairment.

The fourth quarter 2013 goodwill impairment test of Teradyne s Wireless Test reporting unit did not identify any goodwill impairment.

The changes in the carrying amount of goodwill by reportable segments for the years ended December 31, 2015 and 2014 are as follows:

	Wireless Test	Industrial Automation	System Test	Semiconductor Test	Total
			(in thousands)		
Balance at December 31, 2013:					
Goodwill	$ 361,792	$	$ 148,183	$ 260,540	$ 770,515
Accumulated impairment losses			(148,183)	(260,540)	(408,723)
ZTEC adjustment	27				27
AIT acquisition			10,516		10,516
Balance at December 31, 2014:					
Goodwill	361,819		158,699	260,540	781,058
Accumulated impairment losses	(98,897)		(148,183)	(260,540)	(507,620)
Universal Robots acquisition		221,128			221,128
Foreign currency translation adjustment		(6,153)			(6,153)
Balance at December 31, 2015:					
Goodwill	361,819	214,975	158,699	260,540	996,033
Accumulated impairment losses	(98,897)		(148,183)	(260,540)	(507,620)
	$ 262,922	$ 214,975	$ 10,516	$	$ 488,413

Intangible Assets

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

	December 31, 2015			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
		(in thousands)		
Developed technology	$ 379,778	$ 220,306	$ 159,472	6.0 years
Customer relationships	110,340	63,718	46,622	7.9 years
Tradenames and trademarks	52,396	18,879	33,517	9.5 years
Non-compete agreement	320	100	220	4.0 years

Customer backlog	170	170		0.3 years
Total intangible assets	$ 543,004	$ 303,173	$ 239,831	6.7 years

Table of Contents

	December 31, 2014			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
		(in thousands)		
Developed technology	$ 345,513	$ 224,059	$ 121,454	6.2 years
Customer relationships	146,635	93,998	52,637	7.7 years
Tradenames and trademarks	30,414	14,205	16,209	9.0 years
Non-compete agreement	320	20	300	4.0 years
Customer backlog	170	170		0.3 years
Total intangible assets	$ 523,052	$ 332,452	$ 190,600	6.8 years

During the year ended December 31, 2015, Teradyne recorded intangible assets in the amount of $121.6 million related to its Universal Robots acquisition and Teradyne wrote off $98.2 million of fully amortized intangible assets.

During the year ended December 31, 2014, Teradyne recorded intangible assets in the amount of $9.1 million related to its AIT acquisition.

Aggregate intangible assets amortization expense for the years ended December 31, 2015, 2014 and 2013 was $69.0 million, $70.8 million, and $72.4 million, respectively. Estimated intangible assets amortization expense for each of the five succeeding fiscal years is as follows:

Year	Amortization Expense (in thousands)
2016	$ 79,874
2017	71,133
2018	44,464
2019	23,611
2020	9,990
Thereafter	10,759

J. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

As of December 31, 2015, Teradyne had entered into non-cancelable purchase commitments for certain components and materials. The purchase commitments covered by the agreements aggregate to approximately $237.0 million, of which $230.3 million is for less than one year.

Commitments

Teradyne leases certain of its office buildings and other facilities under various operating lease arrangements that include renewal options and escalation clauses for adjusting rent payments to reflect changes in price indices. Rental expense for leases with fixed escalation clauses is recognized on a straight line basis over the lease term.

Rental expense for the years ended December 31, 2015, 2014 and 2013 was $15.9 million, $16.0 million and $16.5 million, respectively.

Table of Contents

The following table reflects Teradyne s non-cancelable operating lease commitments:

	Non-cancelable Lease Commitments (in thousands)
2016	$ 15,665
2017	11,778
2018	9,559
2019	8,487
2020	7,222
Beyond 2021	16,009
Total	$ 68,720

Legal Claims

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

Guarantees and Indemnification Obligations

Teradyne provides indemnification, to the extent permitted by law, to its officers, directors, employees and agents for liabilities arising from certain events or occurrences while the officer, director, employee, or agent, is or was serving, at Teradyne s request in such capacity. Teradyne has entered into indemnification agreements with certain of its officers and directors. With respect to acquisitions, Teradyne provides indemnifications to or assumes indemnification obligations for the current and former directors, officers and employees of the acquired companies in accordance with the acquired companies by-laws 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 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, 2015 and 2014, Teradyne had a product warranty accrual of $6.9 million and $8.9 million, respectively, included in other accrued liabilities, and revenue deferrals related to extended warranties of $46.5 million and $43.3 million, respectively, included in short and long-term deferred revenue and customer advances.

Table of Contents

In addition, and in the ordinary course of business, Teradyne provides minimum purchase guarantees to certain 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, 2015 and 2014, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations because the amount would be immaterial.

K. NET INCOME PER COMMON SHARE

The following table sets forth the computation of basic and diluted net income per common share:

	2015	2014	2013
	(in thousands, except per share amounts)		
Net income for basic and diluted net income per share	$ 206,477	$ 81,272	$ 164,947
Weighted average common shares-basic	211,544	202,908	190,772
Effect of dilutive potential common shares:			
Incremental shares from assumed conversion of convertible notes (1)		5,013	23,341
Convertible note hedge warrant shares (2)		12,562	18,795
Restricted stock units	1,130	1,092	1,127
Stock options	606	944	1,528
Employee stock purchase rights	41	31	36
Dilutive potential common shares	1,777	19,642	44,827
Weighted average common shares-diluted	213,321	222,550	235,599
Net income per common share-basic	$ 0.98	$ 0.40	$ 0.86
Net income per common share-diluted	$ 0.97	$ 0.37	$ 0.70

(1) Incremental shares from the assumed conversion of the convertible notes was calculated using the difference between the average Teradyne stock price for the period and the conversion price of $5.48, multiplied by 34.7 million shares. The result of this calculation, representing the total intrinsic value of the convertible debt, was divided by the average Teradyne stock price for the period.

(2) Convertible notes hedge warrant shares were calculated using the difference between the average Teradyne stock price for the period and the warrant price of $7.67, multiplied by 34.7 million shares. The result of this calculation, representing the total intrinsic value of the warrant, was divided by the average Teradyne stock price for the period. Teradyne s call option on its common stock (convertible note hedge transaction) was excluded from the calculation of diluted shares because the effect was anti-dilutive. See Note G: Debt regarding the convertible note hedge transaction.

73

Table of Contents

The computation of diluted net income per common share for 2015 excludes the effect of the potential exercise of stock options to purchase approximately 0.2 million shares because the effect would have been anti-dilutive.

The computation of diluted net income per common share for 2014 excludes the effect of the potential exercise of stock options to purchase approximately 0.3 million shares because the effect would have been anti-dilutive.

The computation of diluted net income per common share for 2013 excludes the effect of the potential exercise of stock options to purchase approximately 0.4 million shares because the effect would have been anti-dilutive.

L. RESTRUCTURING AND OTHER

Other

During the year ended December 31, 2015, Teradyne recorded $3.6 million of other charges of which $5.3 million was an expense for the increase in the fair value of the Universal Robots contingent consideration liability and $1.0 million for acquisition costs related to Universal Robots, partially offset by a $2.9 million gain from fair value adjustments to decrease the acquisition contingent consideration liability related to ZTEC, $1.6 million, and AIT, $1.3 million.

During the year ended December 31, 2014, Teradyne recorded a $0.6 million gain from the fair value adjustment to decrease the ZTEC acquisition contingent consideration, partially offset by $0.4 million of acquisition costs related to AIT.

Restructuring

During the year ended December 31, 2015, Teradyne recorded $1.5 million of severance charges related to headcount reductions of 23 people, primarily in System Test and Semiconductor Test.

During the year ended December 31, 2014, Teradyne recorded $1.6 million of severance charges related to headcount reductions of approximately 43 people, primarily in Semiconductor Test and Wireless Test.

During the year ended December 31, 2013, Teradyne recorded $1.9 million of severance charges related to headcount reductions of 48 people primarily in System Test and Semiconductor Test and a $(0.4) million credit in Corporate related to a change in the estimated exit costs related to a leased facility.

The remaining accrual for severance of $0.4 million is reflected in the accrued employees compensation and withholdings on the balance sheet and is expected to be paid by March 2016.

M. 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. Teradyne uses a December 31 measurement date for all of its plans.

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

Table of Contents

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.

The December 31 balances of these defined benefit pension plans assets and obligations are shown below:

	2015		2014	
	United States	Foreign	United States	Foreign
	(in thousands)			
Assets and Obligations				
Change in benefit obligation:				
Projected benefit obligation:				
Beginning of year	$ 367,619	$ 58,210	$ 293,912	$ 52,182
Service cost	2,462	1,006	2,218	897
Interest cost	13,142	1,444	12,875	1,837
Actuarial (gain) loss	(13,221)	7,498	72,596	8,975
Benefits paid	(18,885)	(859)	(13,982)	(1,265)
Curtailment		(634)		
Plan participants contributions		64		88
Non-U.S. currency movement		(4,439)		(4,504)
End of year	351,117	62,290	367,619	58,210
Change in plan assets:				
Fair value of plan assets:				
Beginning of year	316,072	29,511	256,373	25,756
Company contributions	10,517	808	31,753	1,168
Plan participants contributions		64		88
Actual return on plan assets	(9,300)	(136)	41,928	5,192
Benefits paid	(18,885)	(859)	(13,982)	(1,265)
Admin expenses paid		(43)		
Non-U.S. currency movement		(1,204)		(1,428)
End of year	298,404	28,141	316,072	29,511
Funded status	$ (52,713)	$ (34,149)	$ (51,547)	$ (28,699)

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

	2015		2014	
	United States	Foreign	United States	Foreign
	(in thousands)			
Retirement plans assets	$ 636	$	$ 3,090	$ 9,806
Accrued employees compensation and withholdings	(2,564)	(695)	(2,492)	(906)
Retirement plans liabilities	(50,785)	(33,454)	(52,145)	(37,599)
Funded status	$ (52,713)	$ (34,149)	$ (51,547)	$ (28,699)

75

Table of Contents

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

	2015		2014	
	United States	Foreign	United States	Foreign
	(in thousands)			
Prior service cost, before tax	$ 224	$	$ 358	$
Deferred taxes	479		429	
Total recognized in other comprehensive income, net of tax	$ 703	$	$ 787	$

The estimated portion of prior service cost remaining in accumulated other comprehensive income that is expected to be recognized as a component of net periodic pension cost in 2016 is $0.1 million.

The accumulated benefit obligation for the United States defined benefit pension plans was $340.1 million and $357.0 million at December 31, 2015 and 2014, respectively. The accumulated benefit obligation for foreign defined benefit pension plans was $56.6 million and $49.8 million at December 31, 2015 and 2014, respectively.

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

	2015		2014	
	United States	Foreign	United States	Foreign
	(in millions)			
Projected benefit obligation	$ 53.3	$ 35.2	$ 54.6	$ 39.5
Accumulated benefit obligation	47.3	29.5	48.5	32.7
Fair value of plan assets		1.0		1.0

Expense

For the years ended December 31, 2015, 2014 and 2013, Teradyne s net periodic pension cost (income) was comprised of the following:

	2015		2014		2013	
	United States	Foreign	United States	Foreign	United States	Foreign
	(in thousands)					
Components of Net Periodic Pension Cost (Income):						
Service cost	$ 2,462	$ 1,006	$ 2,218	$ 897	$ 2,393	$ 1,034
Interest cost	13,142	1,444	12,875	1,837	11,318	1,948
Expected return on plan assets	(14,517)	(781)	(12,500)	(868)	(13,632)	(959)
Amortization of prior service cost	134		135		164	
Net actuarial loss (gain)	10,596	8,415	43,168	4,651	(7,063)	(1,252)
Curtailment		(634)				
Total net periodic pension cost (income)	$ 11,817	$ 9,450	$ 45,896	$ 6,517	$ (6,820)	$ 771
Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income:						
Reversal of amortization items:						
Prior service cost	(134)		(135)		(164)	
Total recognized in other comprehensive income	(134)		(135)		(164)	

Total recognized in net periodic pension cost (income) and other comprehensive income	$ 11,683	$ 9,450	$ 45,761	$ 6,517	$ (6,984)	$ 771

Table of Contents

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

	2015		2014		2013	
	United States	Foreign	United States	Foreign	United States	Foreign
Discount rate	3.7%	2.6%	4.5%	3.8%	3.6%	3.7%
Expected return on plan assets	4.8	2.6	5.0	3.4	5.0	3.7
Salary progression rate	2.9	3.2	3.0	3.5	3.0	3.5

Weighted Average Assumptions to Determine Pension Obligations at December 31:

	2015		2014	
	United States	Foreign	United States	Foreign
Discount rate	4.0%	2.3%	3.7%	2.6%
Salary progression rate	2.7	3.2	2.9	3.2

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 4.8% was an appropriate rate to use for fiscal 2015 for the U.S. Qualified Pension Plan (U.S. Plan).

Teradyne recognizes 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. Teradyne calculates the expected return on plan assets using the fair value of the plan assets. Actuarial gains and losses are generally measured annually as of December 31 and, accordingly, recorded during the fourth quarter of each year or upon any interim remeasurement of the plans.

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 4.0% at December 31, 2015, up from 3.7% at December 31, 2014.

Plan Assets

As of December 31, 2015, the fair value of Teradyne s pension plans assets totaled $326.6 million of which $298.4 million was related to the U.S. Plan, $27.1 million was related to the U.K. defined benefit pension plan, and $1.0 million was related to the Taiwan defined benefit pension plan. Substantially all Teradyne s pension plans assets are held in individual trusts, which were established for the investment of assets of Teradyne s sponsored retirement plans.

Teradyne s weighted average pension asset allocation at December 31, 2015 and 2014, by asset category is as follows:

	2015		2014	
	United States	Foreign	United States	Foreign
Fixed income securities	88.6%	%	83.3%	77.3%
Equity securities	9.8		15.4	19.0
Other	1.6	100.0	1.3	3.7
	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 and the Policy Index.

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

Asset Category:	Policy Index:	Target Allocation
U.S. corporate fixed income	Barclays U.S. Corporate A or Better Index	76%
Global equity	MSCI World Minimum Volatility Index	10
U.S. government fixed income	Barclays U.S. Long Government Bond Index	8
High yield fixed income	Barclays U.S. Corporate High Yield 2% Issuer Cap Index	5
Cash	Citigroup Three Month U.S. Treasury Bill Index	1

Teradyne s U.S. Plan invests primarily in common trust funds. Units held in the common trust funds are valued at the unit price as reported by the investment manager 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.

In the fourth quarter of 2015, the Trustees of the U.K. defined benefit pension plan purchased group annuity insurance contracts. The cash flows from the contracts are intended to match the plan s obligations.

During the years ended December 31, 2015 and 2014, 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, 2015 and December 31, 2014 were as follows:

	December 31, 2015							
	United States				Foreign			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	(in thousands)							
Fixed income securities:								
Corporate debt securities	$	$ 240,695	$	$ 240,695	$	$	$	$
U.S. government securities		23,761		23,761				
Global equity		29,193		29,193				
Group annuity insurance contracts			2,982	2,982			26,410	26,410
Other						1,029		1,029
Cash and cash equivalents	1,773			1,773	702			702
Total	$ 1,773	$ 293,649	$ 2,982	$ 298,404	$ 702	$ 1,029	$ 26,410	$ 28,141

	December 31, 2014							
	United States				Foreign			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	(in thousands)							
Fixed income securities:								
Corporate debt securities	$	$ 193,741	$	$ 193,741	$	$	$	$
U.S. government securities		65,830		65,830				
U.K. government securities						22,811		22,811
Asset backed securities		3,747		3,747				
U.S. equity (large cap)		33,970		33,970				
International equity		14,631		14,631		5,610		5,610
Group annuity insurance contracts			2,990	2,990				
Other		65		65		957		957
Cash and cash equivalents	1,098			1,098	133			133
Total	$ 1,098	$ 311,984	$ 2,990	$ 316,072	$ 133	$ 29,378	$	$ 29,511

The pension plan assets identified as level 3 above are related to group annuity insurance contracts held by the U.K. defined benefit pension plan and the U.S. Plan. The fair value of these assets was calculated using the present value of future pension payments due under the group annuity insurance contracts. The table below indicates the change in value related to these level 3 assets during 2015 and 2014:

	Group Annuity Insurance Contracts (in thousands)
Balance at December 31, 2013	$ 2,985
Interest and market value adjustments	152
Benefits paid	(125)
Other	(22)
Balance at December 31, 2014	$ 2,990
Purchases of group annuity insurance contracts	27,313
Interest and market value adjustments	(825)
Benefits paid	(67)
Other	(19)
Balance at December 31, 2015	$ 29,392

79

Table of Contents

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 2015, Teradyne contributed $8.0 million to the U.S Plan, $2.5 million to the U.S. supplemental executive defined benefit pension plan and $0.8 million to certain qualified plans for non-U.S. subsidiaries. During 2014, Teradyne contributed $30.0 million to the U.S Plan, $1.8 million to the U.S. supplemental executive defined benefit pension plan and $1.2 million to certain qualified plans for non-U.S. subsidiaries. In 2016, contributions to the U.S. supplemental executive defined benefit pension plan and non U.S. plans will be approximately $2.6 million and $0.8 million, respectively. Teradyne does not expect to make any contributions to the U.S. Plan in 2016.

Expected Future Pension Benefit Payments

Future benefit payments are expected to be paid as follows:

	United States	Foreign
	(in thousands)	
2016	$ 19,696	$ 1,062
2017	18,346	1,032
2018	18,836	1,021
2019	19,453	1,477
2020	20,129	1,266
2021-2025	109,860	8,561

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 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.

The December 31 balances of the postretirement assets and obligations are shown below:

	2015	2014
	(in thousands)	
Assets and Obligations		
Change in benefit obligation:		
Projected benefit obligation:		
Beginning of year	$ 7,162	$ 9,019
Service cost	48	59
Interest cost	237	335
Actuarial (gain) loss	(648)	(1,255)
Benefits paid	(769)	(996)
End of year	6,030	7,162
Change in plan assets:		
Fair value of plan assets:		
Beginning of year		
Company contributions	769	996
Benefits paid	(769)	(996)
End of year		

Funded status	$ (6,030)	$ (7,162)

Table of Contents

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

	2015	2014
	(in thousands)	
Accrued employees compensation and withholdings	$ (692)	$ (780)
Retirement plans liability	(5,338)	(6,382)
Funded status	$ (6,030)	$ (7,162)

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

	2015	2014
	(in thousands)	
Prior service credit, before tax	$ (1,632)	$ (2,230)
Deferred taxes	(1,100)	(882)
Total recognized in other comprehensive income, net of tax	$ (2,732)	$ (3,112)

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 (income) expense in 2016 is $(0.6) million.

Expense

For the years ended December 31, 2015, 2014 and 2013, Teradyne s net periodic postretirement benefit income was comprised of the following:

	2015	2014	2013
		(in thousands)	
Components of Net Periodic Postretirement Benefit Income:			
Service cost	$ 48	$ 59	$ 75
Interest cost	237	335	342
Amortization of prior service credit	(598)	(598)	(598)
Net actuarial gain	(648)	(1,255)	(2,025)
Total net periodic postretirement benefit income	(961)	(1,459)	(2,206)
Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income:			
Reversal of amortization items:			
Prior service credit	598	598	598
Total recognized in other comprehensive income	598	598	598
Total recognized in net periodic postretirement benefit income and other comprehensive income	$ (363)	$ (861)	$ (1,608)

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

	2015	2014	2013

Discount rate	3.5%	4.1%	3.1%
Initial health care cost trend rate	7.5	8.0	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	2022	2020	2020

Table of Contents

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

	2015	2014	2013
Discount rate	3.9%	3.5%	4.1%
Initial medical trend	7.5	7.5	8.0
Ultimate health care trend	5.0	5.0	5.0
Medical cost trend rate decrease to ultimate rate in year	2023	2022	2020

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, 2015, would have the following effects:

	1 Percentage Point Increase	1 Percentage Point Decrease
	(in thousands)	
Effect on total service and interest cost components	$ 3	$ (2)
Effect on postretirement benefit obligations	59	(56)

Expected Future Benefit Payments

Future benefit payments are expected to be paid as follows:

	Benefit Payments (in thousands)
2016	$ 692
2017	587
2018	553
2019	492
2020	410
2021-2025	1,654

N. STOCK-BASED COMPENSATION

Stock Compensation Plans

At Teradyne s annual meeting of stockholders held May 21, 2013, 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 32.0 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 30.4 million shares issuable thereunder.

Under its stock compensation plans, Teradyne has granted stock options, restricted stock units and performance-based 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 vest in equal annual installments over four years from the grant date and have a maximum term of seven years.

Time-based 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. 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.

82

Table of Contents

For grants prior to January 2014, performance-based restricted stock units (PRSUs) granted to executive officers were subject to time-based vesting and performance-based vesting. The percentage level of performance satisfied for performance-based grants was assessed on or near the anniversary of the grant date and, in turn, that percentage level determined the number of performance-based restricted stock units available for vesting over a four-year vesting period; portions of the performance-based grants not available for vesting were forfeited.

Commencing in January 2014, Teradyne granted PRSUs to its executive officers with a performance metric based on relative total shareholder return (TSR). Teradyne s three-year TSR performance will be measured against the Philadelphia Semiconductor Index, which consists of thirty companies in the semiconductor device and capital equipment industries. The final number of TSR PRSUs that vest will vary based upon the level of performance achieved from 200% of the target shares to 0% of the target shares. The TSR PRSUs will vest upon the three-year anniversary of the grant date. No TSR PRSUs will vest if the executive officer is no longer an employee at the end of the three-year period. Beginning with PRSUs granted in January 2014, if the recipient s employment ends prior to the determination of the performance percentage due to (1) permanent disability or death or (2) retirement or termination other than for cause, after attaining both at least age sixty and at least ten years of service, then the recipient s PRSUs (based on the actual performance percentage achieved on the determination date) will vest on the date the performance percentage is determined.

The TSR PRSUs are valued using a Monte Carlo simulation model. The number of units expected to be earned, based upon the achievement of the TSR market condition, is factored into the grant date Monte Carlo valuation. Compensation expense is recognized on a straight-line basis over the three-year service period. Compensation expense is recognized regardless of the eventual number of units that are earned based upon the market condition, provided the executive officer remains an employee at the end of the three-year period. Compensation expense is reversed if at any time during the three-year service period the executive officer is no longer an employee, subject to the retirement and termination eligibility provisions noted above. During 2015 and 2014, Teradyne granted 0.2 million and 0.1 million TSR PRSUs, respectively, with a grant date fair value of $18.21 and $22.06, respectively. The fair value was estimated using the Monte Carlo simulation model with the following assumptions:

	2015	2014
Risk-free interest rate	0.77%	0.75%
Teradyne volatility-historical	28.2%	36.1%
Philadelphia Semiconductor Index volatility-historical	19.7%	24.6%
Dividend yield	1.33%	1.25%

Expected volatility was based on the historical volatility of Teradyne s stock and the Philadelphia Semiconductor Index over the most recent three year period. The risk-free interest rate was determined using the U.S. Treasury yield curve in effect at the time of grant. Dividend yield for 2015 and 2014 was based upon an estimated annual dividend amount of $0.24 per share divided by Teradyne s stock price on the grant date of $18.10 for 2015 grants and $19.16 for 2014 grants.

Stock Options Valuation Assumptions:

The total number of stock options granted in 2015, 2014 and 2013 were 0.1 million, 0.1 million and 0.2 million, respectively, at the weighted average grant date fair value of $4.43, $5.49 and $6.09 per share, respectively. The fair value of the stock options at grant date was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2015	2014	2013
Expected life (years)	4.0	4.0	4.0
Risk-free interest rate	1.1%	1.2%	0.6%
Volatility-historical	33.4%	38.8%	46.8%
Dividend yield	1.33%	1.25%	0.0%

Table of Contents

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

Stock compensation plan activity for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
		(in thousands)	
Restricted Stock Units:			
Non-vested at January 1	4,352	4,636	4,970
Awarded	1,681	1,870	2,110
Vested	(1,679)	(1,965)	(2,322)
Forfeited	(284)	(189)	(122)
Non-vested at December 31	4,070	4,352	4,636
Stock Options:			
Outstanding at January 1	1,507	2,706	3,841
Granted	132	89	213
Exercised	(518)	(1,248)	(1,220)
Forfeited		(38)	(104)
Expired		(2)	(24)
Outstanding at December 31	1,121	1,507	2,706
Vested and expected to vest at December 31	1,121	1,507	2,694
Exercisable at December 31	779	1,089	1,814

Total shares available for the years 2015, 2014 and 2013:

	2015	2014	2013
		(in thousands)	
Shares available:			
Available for grant at January 1	12,443	14,213	6,414
Options granted	(132)	(89)	(213)
Restricted stock units awarded	(1,681)	(1,870)	(2,110)
Restricted stock units forfeited	284	189	122
Additional shares reserved			10,000
Available for grant at December 31	10,914	12,443	14,213

Weighted average restricted stock unit award date fair value information for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
Non-vested at January 1	$ 17.24	$ 15.60	$ 12.72
Awarded	17.36	18.41	16.62
Vested	16.85	14.38	10.40
Forfeited	17.08	16.97	15.48

Non-vested at December 31	$ 17.46	$ 17.24	$ 15.60

Table of Contents

Restricted stock unit awards aggregate intrinsic value information at December 31 for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
		(in thousands)	
Outstanding	$ 84,129	$ 86,113	$ 81,680
Expected to vest	79,611	81,582	77,388

Restricted stock units weighted average remaining contractual terms (in years) information at December 31, for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
Outstanding	1.09	1.11	1.14
Expected to vest	1.08	1.10	1.13

Weighted average stock options exercise price information for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
Outstanding at January 1	$ 7.89	$ 6.29	$ 4.64
Options granted	18.10	19.16	16.56
Options exercised	5.49	5.34	3.28
Options forfeited	8.67	3.59	2.57
Options cancelled	3.28	2.21	8.05
Outstanding at December 31	10.21	7.89	6.29
Exercisable at December 31	6.92	5.00	4.55

Stock option aggregate intrinsic value information for the years ended December 31, 2015, 2014 and 2013 follows:

	2015	2014	2013
		(in thousands)	
Exercised	$ 7,255	$ 17,847	$ 16,848
Outstanding	11,729	17,936	30,673
Vested and expected to vest	11,729	17,936	30,512
Exercisable	10,716	16,101	23,707

Stock options weighted average remaining contractual terms (in years) information at December 31, for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
Outstanding	4.2	4.5	4.9
Vested and expected to vest	4.2	4.5	4.9
Exercisable	3.9	4.2	4.3

Table of Contents

Significant option groups outstanding at December 31, 2015 and related weighted average price and remaining contractual life information follow:

	Options Outstanding			Options Exercisable	
Range Of Exercise Prices	Weighted-Average Remaining Contractual Life (Years)	Shares	Weighted-Average Exercise Price (shares in thousands)	Shares	Weighted-Average Exercise Price
$1.48 $2.67	4.58	416	$ 2.33	416	$ 2.33
$3.23 $7.71	2.71	139	4.60	139	4.60
$11.37 $16.95	3.54	345	16.63	202	16.62
$18.10 $19.16	5.68	221	18.53	22	19.16
		1,121	$ 10.21	779	$ 6.92

As of December 31, 2015, total unrecognized expense related to non-vested restricted stock unit awards and stock options was $44.9 million, and is expected to be recognized over a weighted average period of 2.3 years.

Effective January 31, 2014, Michael Bradley retired as Chief Executive Officer of Teradyne. On January 22, 2014, Teradyne entered into an agreement (the Retirement Agreement) with Mr. Bradley. Under the Retirement Agreement, Mr. Bradley s unvested restricted stock units and stock options granted prior to his retirement date will continue to vest in accordance with their terms through January 31, 2017; and any vested options or options that vest during that period may be exercised for the remainder of the applicable option term. In the Retirement Agreement, Mr. Bradley agreed to be bound by non-competition and non-solicitation restrictions through January 31, 2017. In January 2014, Teradyne recorded a one-time charge to stock-based compensation expense of $6.6 million related to the Retirement Agreement.

Employee Stock Purchase Plan

Under the Teradyne 1996 Employee Stock Purchase Plan (ESPP), eligible employees 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 stock price on the last business day of the six month purchase period.

In July 2015, 0.5 million shares of common stock were issued to employees who participated in the plan during the first half of 2015, at the price of $16.40 per share. In January 2016, Teradyne issued 0.5 million shares of common stock to employees who participated in the plan during the second half of 2015, at the price of $17.57 per share.

In July 2014, 0.5 million shares of common stock were issued to employees who participated in the plan during the first half of 2014, at the price of $16.66 per share. In January 2015, Teradyne issued 0.5 million shares of common stock to employees who participated in the plan during the second half of 2014, at the price of $16.82 per share.

In July 2013, 0.4 million shares of common stock were issued to employees who participated in the plan during the first half of 2013, at the price of $14.94 per share. In January 2014, Teradyne issued 0.4 million shares of common stock to employees who participated in the plan during the second half of 2013, at the price of $14.98 per share.

As of December 31, 2015, there were 4.9 million shares available for grant under the ESPP.

Table of Contents

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

	2015	2014	2013
		(in thousands)	
Cost of revenues	$ 3,065	$ 3,675	$ 4,338
Engineering and development	9,362	10,146	12,452
Selling and administrative	18,024	26,486	19,822
Stock-based compensation	30,451	40,307	36,612
Income tax benefit	(8,528)	(11,537)	(9,762)
Total stock-based compensation expense after income taxes	$ 21,923	$ 28,770	$ 26,850

O. SAVINGS PLAN

Teradyne sponsors a defined contribution employee retirement savings plan (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). The Savings Plan provides for a discretionary employer match that is determined each year. In 2015, 2014 and 2013, 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.

In addition, Teradyne established an unfunded U.S. Supplemental Savings Plan to provide savings benefits in excess of those allowed by Employee Retirement Income Security Act of 1974 and the Internal Revenue Code. The provisions of this plan are the same as the Savings Plan. Teradyne also established defined contribution savings plans for its foreign employees. Under Teradyne s savings plans, amounts charged to the statement of operations for the years ended December 31, 2015, 2014 and 2013 were $13.5 million, $12.8 million and $12.0 million, respectively.

P. INCOME TAXES

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

	2015	2014	2013
		(in thousands)	
Income (loss) before income taxes:			
U.S.	$ 56,270	$ (151,889)	$ 79,229
Non-U.S.	196,854	247,265	122,693
	$ 253,124	$ 95,376	$ 201,922
Provision (benefit) for income taxes:			
Current:			
U.S. Federal	$ 16,635	$ 5,197	$ 18,051
Non-U.S.	35,707	28,157	22,509
State	1,429	678	(269)
	53,771	34,032	40,291
Deferred:			
U.S. Federal	(574)	(20,449)	(1,692)

Non-U.S.	(7,761)	(404)	(1,386)
State	1,211	925	(238)
	(7,124)	(19,928)	(3,316)
Total provision for income taxes:	$ 46,647	$ 14,104	$ 36,975

Table of Contents

Income tax expense for 2015, 2014 and 2013 totaled $46.6 million, $14.1 million and $37.0 million, respectively. The effective tax rate for 2015, 2014 and 2013 was 18.4%, 14.8% and 18.3%, respectively. The increase in the effective tax rate from 2014 to 2015 resulted from a shift in the geographic distribution of income which increased income subject to taxation in the United States relative to lower tax rate jurisdictions and a reduction in the benefit from U.S. research and development tax credits. These increases in the effective tax rate were partially offset by decreases associated with uncertain tax positions and a non-deductible goodwill impairment charge. The decrease in the effective tax rate from 2013 to 2014 was primarily attributable to a shift in the geographic distribution of income which decreased income subject to taxation in the United States relative to lower tax rate jurisdictions, partially offset by increases in the effective tax rate associated with uncertain tax positions and a non-deductible goodwill impairment charge.

A reconciliation of the effective tax rate for the years 2015, 2014 and 2013 follows:

	2015	2014	2013
U.S. statutory federal tax rate	35.0%	35.0%	35.0%
Foreign taxes	(16.5)	(58.1)	(11.4)
Goodwill impairment		36.3	
U.S. research and development credit	(3.0)	(7.9)	(7.2)
Uncertain tax positions	2.1	7.9	4.2
Valuation allowance			0.4
State income taxes, net of federal tax benefit	0.4	(0.1)	0.1
Other, net	0.4	1.7	(2.8)
	18.4%	14.8%	18.3%

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 attributable to the tax holiday for the years ended December 31, 2015, 2014 and 2013 were $11.5 million or $0.05 per diluted share, $13.2 million or $0.06 per diluted share and $4.7 million or $0.02 per diluted share, respectively. In December 2015, Teradyne entered into an agreement with the Singapore Economic Development Board which extended the tax holiday under substantially similar terms to the agreement which expired on December 31, 2015. The new tax holiday is scheduled to expire on December 31, 2020.

Table of Contents

Significant components of Teradyne s deferred tax assets (liabilities) as of December 31, 2015 and 2014 were as follows:

	2015	2014
	(in thousands)	
Deferred tax assets:		
Tax credits	$ 44,684	$ 50,554
Pension liabilities	31,742	30,036
Inventory valuations	29,445	29,105
Accruals	26,563	23,323
Deferred revenue	10,232	10,242
Equity compensation	9,674	11,131
Net operating loss carryforwards	7,989	10,989
Vacation accrual	7,354	7,425
Other	502	1,725
Gross deferred tax assets	168,185	174,530
Less: valuation allowance	(43,039)	(41,737)
Total deferred tax assets	$ 125,146	$ 132,793
Deferred tax liabilities:		
Intangible assets	$ (68,433)	$ (64,871)
Depreciation	(20,541)	(24,905)
Marketable securities	(458)	(1,599)
Total deferred tax liabilities	$ (89,432)	$ (91,375)
Net deferred assets	$ 35,714	$ 41,418

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, 2015 and 2014 amounted to $0.5 million and $0.6 million respectively. For the years ended December 31, 2015, 2014 and 2013, benefit of $0.2 million, expense of $0.2 million and expense of $0.2 million respectively, was recorded for interest and penalties related to income tax items.

During 2015, Teradyne s valuation allowance increased by $1.3 million primarily due to the increase in the deferred tax assets related to state tax credits generated in 2015.

As of December 31, 2015 and 2014, 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. At December 31, 2015 and 2014, Teradyne maintained a valuation allowance for certain deferred tax assets of $43.0 million and $41.7 million, respectively, primarily related to 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

At December 31, 2015, Teradyne had operating loss carryforwards that expire in the following years:

	U.S. Federal Operating Loss Carryforwards	State Operating Loss Carryforwards	Foreign Operating Loss Carryforwards
		(in thousands)	
2016	$	$ 925	$
2017		10,649	
2018		8,563	
2019		1,203	
2020		269	
2021-2025	4,870	35,777	
2026-2030		39,411	
Beyond 2030		6,359	143
Non-expiring			8,202
Total	$ 4,870	$ 103,156	$ 8,345

Of the U.S. federal operating loss carryforwards, $4.9 million relates to the acquisition of GenRad, Inc. (GenRad) in 2001. GenRad losses are limited in the annual amount that can be used as a result of change in ownership rules as defined in the Internal Revenue Code of 1986. The operating loss carryforward does not include any excess tax deduction related to stock based compensation which has not been recognized for financial statement purposes.

Teradyne has approximately $121.2 million of tax credit carryforwards. Federal business tax credits of approximately $43.2 million expire in the years 2017 through 2035. Teradyne has alternative minimum tax credits of approximately $6.6 million, which do not expire. In addition, there are state tax credits of $71.4 million of which $42.4 million do not expire and the remainder of which expires in the years 2016 through 2030. Teradyne has federal tax credits of $42.9 million, that are attributable to stock based compensation deductions which will be recorded as an increase in additional paid in capital on the consolidated balance sheet if and when they are realized in accordance with ASC 718-10, *Compensation Stock Compensation.*

Teradyne s gross unrecognized tax benefits for the years ended December 31, 2015, 2014 and 2013 were as follows:

	2015	2014	2013
		(in thousands)	
Beginning balance, as of January 1	$ 30,418	$ 21,203	$ 18,666
Additions:			
Tax positions for current year	6,626	8,414	4,586
Tax positions for prior years	792	3,781	2,112
Reductions:			
Tax positions for prior years	(708)	(2,480)	(4,161)
Settlements with tax authorities	(336)	(500)	
Ending balance as of December 31	$ 36,792	$ 30,418	$ 21,203

Current year and prior year additions include assessment of potential transfer pricing issues worldwide, federal and state tax credits and incentives, capitalization rules, and domestic production activities deductions. Reductions for tax positions for prior years primarily relate to statute expiration and the settlement of a foreign tax audit. Of the $36.8 million of unrecognized tax benefits as of December 31, 2015, $29.2 million would impact the consolidated income tax rate if ultimately recognized. The remaining $7.6 million would impact the valuation allowance if recognized. Teradyne estimates that it is reasonably possible that the balance of unrecognized tax benefits as of December 31, 2015 may decrease approximately $7.6 million in the next twelve

90

Table of Contents

months, as a result of a lapse of statutes of limitation and the settlement of a tax audit. The estimated decrease is composed primarily of reserves relating to federal tax credits and transfer pricing.

Teradyne is subject to U.S. federal income tax, as well as income tax in multiple state, local and foreign jurisdictions. As of December 31, 2015, all material state and local income tax matters have been concluded through 2008, all material federal income tax matters have been concluded through 2011 and all material foreign income tax matters have been concluded through 2009. However, in some jurisdictions, including the United States, operating losses and tax credits may be subject to adjustment until such time as they are utilized and the year of utilization is closed to adjustment.

As of December 31, 2015, a deferred tax liability has not been established for approximately $783 million of cumulative undistributed earnings of non-U.S. subsidiaries, which are expected to be reinvested indefinitely in operations outside the U.S. except for instances where Teradyne can remit such earnings to the U.S. without an associated net tax cost. Determination of the unrecognized deferred tax liability on unremitted earnings is not practicable due to uncertainty regarding the remittance structure, the mix of earnings and earnings and profit pools in the year of remittance, and overall complexity of the calculation.

Q. OPERATING SEGMENT, GEOGRAPHIC AND SIGNIFICANT CUSTOMER INFORMATION

Teradyne has four operating segments (Semiconductor Test, System Test, Wireless Test and Industrial Automation), 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 System Test segment includes operations related to the design, manufacturing and marketing of products and services for defense/aerospace instrumentation test, storage test and circuit-board test. The Wireless Test segment includes operations related to the design, manufacturing and marketing of wireless test products and services. The Industrial Automation segment includes operations related to the design, manufacturing and marketing of collaborative robots. Each operating 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 (loss) from operations before taxes. The accounting policies of the business segments are the same as those described in Note B: Accounting Policies.

Table of Contents

Segment information for the years ended December 31, 2015, 2014 and 2013 is as follows:

	Semiconductor Test	Wireless Test	System Test	Industrial Automation	Corporate And Eliminations	Consolidated
			(in thousands)			
2015						
Revenues	$ 1,201,530	$ 184,572	$ 211,584	$ 41,892	$	$ 1,639,578
Income (loss) before taxes (1)(2)	260,154	(13,830)	25,101	(7,574)	(10,727)	253,124
Total assets (3)	610,869	427,880	102,547	344,260	1,063,118	2,548,674
Property additions	79,052	3,133	6,228	1,465		89,878
Depreciation and amortization expense	64,415	53,440	4,390	14,500	4,027	140,772
2014						
Revenues	$ 1,300,790	$ 184,535	$ 162,499	$	$	$ 1,647,824
Income (loss) before taxes (1)(2)	255,803	(116,196)	12,116		(56,347)	95,376
Total assets (3)	580,501	478,974	95,105		1,383,940	2,538,520
Property additions	159,783	3,730	5,469			168,982
Depreciation and amortization expense	84,990	53,308	5,399		8,847	152,544
2013						
Revenues	$ 1,023,041	$ 251,871	$ 153,021	$	$	$ 1,427,933
Income before taxes (1)(2)	153,797	23,153	3,115		21,857	201,922
Total assets (3)	632,840	645,001	79,983		1,272,000	2,629,824
Property additions	94,303	5,358	7,070			106,731
Depreciation and amortization expense	72,472	51,675	5,180		21,360	150,687

(1) Interest income, interest expense, other (income) expense, net, contingent consideration adjustments and pension and postretirement plans actuarial gains and losses are included in Corporate and Eliminations.

(2) Included in income (loss) before taxes are charges and credits related to restructuring and other, inventory charges and goodwill impairment charges.

(3) Total business assets are directly attributable to each business. Corporate assets consist of cash and cash equivalents, marketable securities and certain other assets.

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

	For the Year Ended December 31,		
	2015	2014	2013
		(in thousands)	
Cost of revenues inventory charge	$ 10,508	$ 14,389	$ 5,218
Restructuring and other	499	490	1,016

Included in the System Test segment are charges in the following accounts:

	For the Year Ended December 31,		
	2015	2014	2013
		(in thousands)	
Cost of revenues inventory charge	$ 8,324	$ 2,125	$ 4,168
Restructuring and other	1,037	742	1,431

Table of Contents

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

	For the Year Ended December 31,		
	2015	2014	2013
		(in thousands)	
Cost of revenues inventory charge	$ 2,500	$ 5,679	$ 7,206
Restructuring and other		565	82
Goodwill impairment charge		98,897	

Included in the Industrial Automation segment are charges in the following account:

	For the Year Ended December 31,		
	2015	2014	2013
		(in thousands)	
Cost of revenues inventory step-up (1)	$ 1,567	$	$

(1) Included in the cost of revenues for the years ended December 31, 2015 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,		
	2015	2014	2013
		(in thousands)	
Restructuring and other Universal Robots contingent consideration adjustment	$ 5,339	$	$
Restructuring and other ZTEC contingent consideration adjustment	(1,600)	(630)	
Restructuring and other AIT contingent consideration adjustment	(1,250)		
Restructuring and other acquisition costs	1,104	372	
Restructuring and other		198	(449)
Other (income) expense, net gain from the sale of an equity investment	(5,406)		(34,212)
Selling and administrative stock based compensation expense (1)		6,598	

(1) Expense related to the January 2014 retirement of Teradyne s former chief executive officer; see Note N: Stock-Based Compensation.

Information as to Teradyne s revenues by country is as follows:

	2015	2014	2013
		(in thousands)	
Revenues from customers (1):			
Taiwan	$ 436,389	$ 495,942	$ 265,472
China	264,898	292,145	323,564
United States	217,386	213,104	230,178
Japan	128,228	63,761	81,806
Korea	120,224	145,608	119,286
Europe	111,903	111,043	90,797
Singapore	105,216	119,421	114,765
Philippines	96,103	68,662	63,392
Malaysia	76,707	83,910	86,900
Thailand	59,104	44,117	32,209
Rest of the World	23,420	10,111	19,564

	$ 1,639,578	$ 1,647,824	$ 1,427,933

(1) Revenues attributable to a country are based on location of customer site.

Table of Contents

In 2015, one customer of Teradyne s Semiconductor Test segment accounted for 13% of total consolidated revenues. In 2014, no single customer accounted for more than 10% of total consolidated revenues. In 2013, one customer of Teradyne s Wireless Test and Semiconductor Test segments, accounted for 12% of total consolidated revenues.

Long-lived assets by geographic area:

	United States	Foreign(1)	Total
		(in thousands)	
December 31, 2015	$ 198,424	$ 74,990	$ 273,414
December 31, 2014	$ 206,334	$ 122,704	$ 329,038

(1) As of December 31, 2015 and 2014, long-lived assets attributable to Singapore were $39.9 million and $99.2 million, respectively.

R. STOCK REPURCHASE PROGRAM

In January 2015, the Board of Directors cancelled the November 2010 stock repurchase program and authorized a new stock repurchase program for up to $500 million of common stock. The cumulative repurchases as of December 31, 2015 totaled 15.6 million shares of common stock for a total purchase price of $300 million at an average price per share of $19.20. The total price includes commissions and is recorded as a reduction to retained earnings.

In November 2010, the Board authorized a stock repurchase program for up to $200 million. Under the November 2010 plan, Teradyne repurchased 2.6 million shares of common stock for $31.2 million at an average price of $11.84.

S. SUBSEQUENT EVENTS

In January 2016, Teradyne s Board of Directors declared a quarterly dividend of $0.06 per share to be paid on March 21, 2016 to shareholders of record as of February 26, 2016.

While Teradyne declared a quarterly cash dividend and authorized a share repurchase program, it may reduce or eliminate the cash dividend or share repurchase program in the future. Future cash dividends and stock repurchases are subject to the discretion of Teradyne s Board of Directors which will consider, among other things, Teradyne s earnings, capital requirements and financial condition.

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.

	2015			
	1st Quarter	2nd Quarter (3)	3rd Quarter (4)	4th Quarter (1)(2)
	(in thousands, except per share amounts)			
Revenues:				
Products	$ 272,325	$ 437,243	$ 386,488	$ 244,510
Services	70,076	75,496	79,506	73,934
Total revenues	342,401	512,739	465,994	318,444
Cost of revenues:				
Cost of products	118,996	181,491	170,963	120,322
Cost of services	30,982	32,680	36,405	32,096
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	149,978	214,171	207,368	152,418
Gross profit	192,423	298,568	258,626	166,026
Operating expenses:				
Engineering and development	71,450	75,832	74,027	70,941
Selling and administrative	72,041	77,073	77,481	79,718
Acquired intangible assets amortization	13,808	15,258	20,053	19,911
Restructuring and other		(385)	261	5,204
Total operating expenses	157,299	167,778	171,822	175,774
Income (loss) from operations	35,124	130,790	86,804	(9,748)
Non-operating (income) expense:				
Interest income	(1,816)	(1,674)	(1,708)	(2,017)
Interest expense	162	444	508	762
Other (income) expense, net	(5,660)	(116)	596	364
Income (loss) before income taxes	42,438	132,136	87,408	(8,857)
Income tax provision (benefit)	9,651	29,257	15,955	(8,216)
Net income (loss)	$ 32,787	$ 102,879	$ 71,453	$ (641)
Net income (loss) per common share basic	$ 0.15	$ 0.48	$ 0.34	$ (0.00)
Net income (loss) per common share diluted	$ 0.15	$ 0.48	$ 0.34	$ (0.00)
Cash dividend declared per common share	$ 0.06	$ 0.06	$ 0.06	$ 0.06

(1) Restructuring and other includes a $5.3 million fair value adjustment to increase the Universal Robots acquisition contingent consideration, and a $(0.3) million fair value adjustment to decrease the AIT acquisition contingent consideration.

(2) In the fourth quarter ended December 31, 2015, Teradyne recorded pension and post retirement net actuarial losses of $17.7 million. See Note B: Accounting Policies for a discussion of our accounting policy.

Table of Contents

(3) Restructuring and other includes a $(1.6) million fair value adjustment to decrease the ZTEC acquisition contingent consideration.
(4) Restructuring and other includes a $(1.0) million fair value adjustment to decrease the AIT acquisition contingent consideration.

Table of Contents

	2014			
	1st Quarter	2nd Quarter (1)	3rd Quarter (1)(2)	4th Quarter (1)(3)(4)
	(in thousands, except per share amounts)			
Revenues:				
Products	$ 255,386	$ 452,488	$ 402,987	$ 253,162
Services	65,624	73,079	75,023	70,074
Total revenues	321,010	525,567	478,010	323,236
Cost of revenues:				
Cost of products	124,448	202,411	182,591	131,337
Cost of services	29,515	32,743	34,298	31,673
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	153,963	235,154	216,889	163,010
Gross profit	167,047	290,413	261,121	160,226
Operating expenses:				
Engineering and development	67,085	73,414	71,953	79,188
Selling and administrative	78,003	77,489	73,064	91,157
Goodwill impairment				98,897
Acquired intangible assets amortization	18,271	18,271	18,271	15,957
Restructuring and other		572	(405)	1,198
Total operating expenses	163,359	169,746	162,883	286,397
Income (loss) from operations	3,688	120,667	98,238	(126,171)
Non-operating (income) expense:				
Interest income	(1,036)	(1,266)	(1,922)	(2,035)
Interest expense	6,417	159	144	214
Other (income) expense, net	180	382	(654)	463
(Loss) income before income taxes	(1,873)	121,392	100,670	(124,813)
Income tax (benefit) provision	(2,802)	20,187	17,721	(21,002)
Net income (loss)	$ 929	$ 101,205	$ 82,949	$ (103,811)
Net income (loss) per common share basic	$ 0.00	$ 0.52	$ 0.40	$ (0.48)
Net income (loss) per common share diluted	$ 0.00	$ 0.47	$ 0.38	$ (0.48)
Cash dividend declared per common share	$ 0.00	$ 0.06	$ 0.06	$ 0.06

(1) Dividends declared by Teradyne s Board of Directors were paid in the second, third and fourth quarters of 2014.
(2) Restructuring and other includes a $(0.6) million fair value adjustment to decrease the ZTEC acquisition contingent consideration.
(3) In the fourth quarter ended December 31, 2014, Teradyne recorded pension and post retirement net actuarial losses of $46.6 million. See Note B: Accounting Policies for a discussion of our accounting policy.
(4) In the fourth quarter ended December 31, 2014, Teradyne recorded a goodwill impairment charge of $98.9 million in its Wireless Test segment.

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, 2015 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

In accordance with SEC responses to frequently asked questions regarding the evaluation of internal control of entities subject to a business combination, we have excluded Universal Robots from our assessment of internal control over financial reporting as of December 31, 2015. As previously announced, we acquired Universal Robots A/S on June 11, 2015 pursuant to a Share Sale and Purchase Agreement, dated as of May 13, 2015. The total assets and total revenues of Universal Robots represent 14% and 3%, respectively, of our consolidated financial statement amounts as of and for the year ended December 31, 2015.

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* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control Integrated Framework (2013)*, our management concluded that our internal control over financial reporting was effective as of December 31, 2015.

The effectiveness of our internal control over financial reporting as of December 31, 2015 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 10, 2016. 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 10, 2016. 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 10, 2016. 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 10, 2016. 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 10, 2016. 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:

	Page
Report of Independent Registered Public Accounting Firm	41
Consolidated Balance Sheets as of December 31, 2015 and 2014	42
Consolidated Statements of Operations for the years ended December 31, 2015, 2014 and 2013	43
Consolidated Statements of Comprehensive Income for the years ended December 31, 2015, 2014 and 2013	44
Consolidated Statements of Shareholders Equity for the years ended December 31, 2015, 2014 and 2013	45
Consolidated Statements of Cash Flows for the years ended December 31, 2015, 2014 and 2013	46

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

Column A Description	Column B Balance at Beginning of Period	Column C Additions Charged to Cost and Expenses	Column D Other (in thousands)	Column E Deductions	Column F Balance at End of Period
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Accounts receivable:					
2015 Allowance for doubtful accounts	$ 2,491	$	$	$ 84	$ 2,407
2014 Allowance for doubtful accounts	$ 2,912	$ 55	$	$ 476	$ 2,491
2013 Allowance for doubtful accounts	$ 4,118	$ 69	$	$ 1,275(1)	$ 2,912

(1) Based upon an improvement in the aging of accounts receivables in 2013, Teradyne reduced its allowance for doubtful accounts by approximately $1 million.

Column A Description	Column B Balance at Beginning of Period	Column C Additions Charged to Cost and Expenses	Column D Other (in thousands)	Column E Deductions	Column F Balance at End of Period
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Inventory:					
2015 Inventory reserve	$ 111,252	$ 21,332	$ 1,680	$ 14,888	$ 119,376
2014 Inventory reserve	$ 115,857	$ 22,193	$ 7,064	$ 33,862	$ 111,252
2013 Inventory reserve	$ 141,838	$ 16,592	$ 2,568	$ 45,141	$ 115,857

Column A Description	Column B Balance at Beginning of Period	Column C Additions Charged to Cost and Expenses	Column D Other (in thousands)	Column E Deductions	Column F Balance at End of Period
Valuation reserve deducted in the balance sheet from the asset to which it applies:					
Deferred taxes:					
2015 Valuation allowance	$ 41,737	$ 1,322	$	$ 20	$ 43,039
2014 Valuation allowance	$ 40,386	$ 1,380	$	$ 29	$ 41,737

2013 Valuation allowance	$ 55,446	$ 4,546	$	$ 19,606	$ 40,386

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

No.	Description	SEC Document Reference
2.1	Share Sale and Purchase Agreement by and among Teradyne Holdings Denmark ApS, Teradyne Inc. and the shareholders of Universal Robots A/S dated May 13, 2015.	Exhibit 2.1 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended July 5, 2015.
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.
10.1	Standard Manufacturing Agreement entered into as of November 24, 2003 by and between Teradyne and Solectron.	Exhibit 10.1 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
10.2	Amendment 1 to Standard Manufacturing Agreement, dated as of January 18, 2007, by and between Teradyne and Solectron.	Exhibit 10.2 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
10.3	Second Amendment to Standard Manufacturing Agreement, dated as of August 27, 2007, by and between Teradyne and Solectron.	Exhibit 10.3 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.
10.4	Fifth Amendment to Standard Manufacturing Agreement, dated as of July 17, 2009, by and between Teradyne and Flextronics Corporation.	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.
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.	Exhibit 10.7 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.
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.	Exhibit 10.8 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.

Table of Contents

Exhibit

No.	Description	SEC Document Reference
10.9	2006 Equity and Cash Compensation Incentive Plan, as amended.*	Appendix A to Teradyne s Notice and Proxy Statement on Schedule 14A filed April 2, 2015.
10.10	Form of Performance-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.
10.11	Form of Time-Based Restricted Stock Unit Agreement for Executive Officers under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.
10.12	Form of Restricted Stock Unit Agreement for Directors under 2006 Equity and Cash Compensation Incentive Plan.*	Filed herewith.
10.13	1996 Employee Stock Purchase Plan, as amended.*	Appendix B to Teradyne s Notice and Proxy Statement on Schedule 14A filed April 11, 2013.
10.14	Form of Executive Officer Stock Option Agreement under 2006 Equity and Cash Compensation Incentive Plan, as amended.*	Filed herewith.
10.15	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.
10.16	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.
10.17	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.
10.18	Agreement Regarding Termination Benefits dated January 22, 2014 between Teradyne and Mark Jagiela.*	Exhibit 10.24 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2013.
10.19	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.
10.20	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.
10.21	Amended and Restated Executive Officer Change in Control Agreement dated December 30, 2008 between Teradyne and Gregory R. Beecher, as amended.*	Exhibit 10.28 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.

Table of Contents

Exhibit

No.	Description	SEC Document Reference
10.22	Executive Officer Change in Control Agreement dated January 22, 2014 between Teradyne and Mark Jagiela, as amended.*	Exhibit 10.29 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2013.
10.23	Amended and Restated Executive Officer Change in Control Agreement dated May 26, 2009 between Teradyne and Charles J. Gray, as amended.*	Exhibit 10.30 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.
10.24	Employment Agreement dated July 24, 2009 between Teradyne and Charles J. Gray.*	Exhibit 10.1 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended April 4, 2010.
10.25	Amended and Restated Executive Officer Change in Control Agreement dated June 30, 2012 between Teradyne and Walter G. Vahey, as amended.*	Exhibit 10.32 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.
10.26	Employment Agreement dated February 6, 2013 between Teradyne and Walter G. Vahey.*	Exhibit 10.33 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2012.
10.27	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.
10.28	Executive Officer Change in Control Agreement dated September 1, 2014 between Teradyne, Inc. and Bradford Robbins.*	Exhibit 10.1 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended September 28, 2014.
10.29	Employment Agreement dated September 1, 2014 between Teradyne, Inc. and Bradford Robbins.*	Exhibit 10.2 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended September 28, 2014.
10.30	Form of Indemnification Agreement.*	Exhibit 10.24 to Teradyne s Annual Report on Form 10-K for the fiscal year ended December 31, 2006.
10.31	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.
10.32	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.
10.33	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.
10.34	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.

Table of Contents

Exhibit

No.	Description	SEC Document Reference
10.35	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.
10.36	Credit Agreement among Teradyne, Inc., Barclays Bank PLC, as the administrative agent and collateral agent, and the lenders party thereto dated April 27, 2015.	Exhibit 10.1 to Teradyne s Current Report on Form 8-K filed May 1, 2015.
10.37	Amendment No. 1 to Credit Agreement dated as of May 19, 2015 among Teradyne Inc., Barclays Bank PLC, as the administrative agent, and the lenders party thereto.	Exhibit 10.2 to Teradyne s Quarterly Report on Form 10-Q for the quarter ended July 5, 2015.
21.1	Subsidiaries of Teradyne.	Filed herewith.
23.1	Consent of PricewaterhouseCoopers LLP.	Filed herewith.
31.1	Rule 13a-14(a) Certification of Principal Executive Officer.	Filed herewith.
31.2	Rule 13a-14(a) Certification of Principal Financial Officer.	Filed herewith.
32.1	Section 1350 Certification of Principal Executive Officer.	Furnished herewith.
32.2	Section 1350 Certification of Principal Financial Officer.	Furnished herewith.
101.INS	XBRL Instance Document	
101.SCH	XBRL Taxonomy Extension Schema Document	
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	

-Confidential treatment granted.

* -Management contract or compensatory plan.

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 29th day of February, 2016.

TERADYNE, INC.

By: /s/ GREGORY R. BEECHER
Gregory R. Beecher,
Vice President, Chief Financial Officer and Treasurer

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

Signature	Title	Date
/s/ ROY A. VALLEE **Roy A. Vallee**	Chair of the Board	February 29, 2016
/s/ MARK E. JAGIELA **Mark E. Jagiela**	Chief Executive Officer (Principal Executive Officer)	February 29, 2016
/s/ GREGORY R. BEECHER **Gregory R. Beecher**	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 29, 2016
/s/ MICHAEL A. BRADLEY **Michael A. Bradley**	Director	February 29, 2016
/s/ DANIEL W. CHRISTMAN **Daniel W. Christman**	Director	February 29, 2016
/s/ EDWIN J. GILLIS **Edwin J. Gillis**	Director	February 29, 2016
/s/ TIMOTHY E. GUERTIN **Timothy E. Guertin**	Director	February 29, 2016
/s/ MERCEDES JOHNSON **Mercedes Johnson**	Director	February 29, 2016
/s/ PAUL J. TUFANO **Paul J. Tufano**	Director	February 29, 2016

106