

TERADYNE, INC  
Form 10-Q  
May 13, 2016  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM 10-Q**

(Mark One)

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

**For the quarterly period ended April 3, 2016**

**OR**

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

**For the transition period from                      to**

**Commission File No. 001-06462**

**TERADYNE, INC.**

**(Exact name of registrant as specified in its charter)**

**Massachusetts**  
**(State or Other Jurisdiction of**

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

**Incorporation or Organization)**

**Identification No.)**

**600 Riverpark Drive, North Reading,**

**Massachusetts**  
**(Address of Principal Executive Offices)**

**01864**  
**(Zip Code)**

**978-370-2700**

**(Registrant's Telephone Number, Including Area Code)**

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 the filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

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

The number of shares outstanding of the registrant's only class of Common Stock as of May 6, 2016 was 203,178,976 shares.

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**Table of Contents****PART I****Item 1: Financial Statements****TERADYNE, INC.****CONDENSED CONSOLIDATED BALANCE SHEETS****(Unaudited)**

	April 3, 2016	December 31, 2015
	(in thousands,	
	except per share amount)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 319,358	\$ 264,705
Marketable securities	410,003	477,696
Accounts receivable, less allowance for doubtful accounts of \$2,385 and \$2,407 at April 3, 2016 and December 31, 2015, respectively	253,976	211,293
Inventories, net:		
Parts	59,425	73,117
Assemblies in process	38,490	32,825
Finished goods	62,772	47,646
	160,687	153,588
Deferred tax assets		54,973
Prepayments	95,185	91,519
Other current assets	3,513	6,194
Total current assets	1,242,722	1,259,968
Property, plant and equipment, net	266,907	273,414
Marketable securities	246,072	265,928
Deferred tax assets	59,119	7,404
Other assets	13,041	13,080
Retirement plans assets	1,968	636
Intangible assets, net	223,274	239,831
Goodwill	495,871	488,413
Total assets	\$ 2,548,974	\$ 2,548,674

**LIABILITIES**

Current liabilities:

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Accounts payable	\$ 84,104	\$ 92,358
Accrued employees' compensation and withholdings	71,838	113,994
Deferred revenue and customer advances	72,095	85,527
Other accrued liabilities	92,617	43,727
Contingent consideration	500	15,500
Accrued income taxes	23,368	21,751
<b>Total current liabilities</b>	<b>344,522</b>	<b>372,857</b>
Long-term deferred revenue and customer advances	25,468	25,745
Retirement plans liabilities	106,921	103,531
Deferred tax liabilities	18,300	26,663
Long-term other accrued liabilities	34,753	32,156
Long-term contingent consideration	23,109	21,936
<b>Total liabilities</b>	<b>553,073</b>	<b>582,888</b>

Commitments and contingencies (See Note P)

**SHAREHOLDERS' EQUITY**

Common stock, \$0.125 par value, 1,000,000 shares authorized; 203,707 and 203,641 shares issued and outstanding at April 3, 2016 and December 31, 2015, respectively	25,462	25,455
Additional paid-in capital	1,489,011	1,480,647
Accumulated other comprehensive income (loss)	5,035	(8,144)
Retained earnings	476,393	467,828
<b>Total shareholders' equity</b>	<b>1,995,901</b>	<b>1,965,786</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 2,548,974</b>	<b>\$ 2,548,674</b>

The accompanying notes, together with the Notes to Consolidated Financial Statements included in Teradyne's Annual Report on Form 10-K for the year ended December 31, 2015, are an integral part of the condensed consolidated financial statements.

Table of Contents**TERADYNE, INC.****CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS****(Unaudited)**

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands,</b>	
	<b>except per share amount)</b>	
<b>Revenues:</b>		
Products	\$ 358,139	\$ 272,325
Services	72,855	70,076
Total revenues	430,994	342,401
<b>Cost of revenues:</b>		
Cost of products	167,555	118,996
Cost of services	33,107	30,982
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	200,662	149,978
Gross profit	230,332	192,423
<b>Operating expenses:</b>		
Engineering and development	73,464	71,450
Selling and administrative	79,174	72,041
Acquired intangible assets amortization	19,994	13,808
Restructuring and other	1,587	
Total operating expenses	174,219	157,299
Income from operations	56,113	35,124
<b>Non-operating (income) expenses:</b>		
Interest income	(1,642)	(1,816)
Interest expense	710	162
Other (income) expense, net	(147)	(5,660)
Income before income taxes	57,192	42,438
Income tax provision	7,206	9,651
Net income	\$ 49,986	\$ 32,787

Net income per common share:

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Basic	\$	0.24	\$	0.15
Diluted	\$	0.24	\$	0.15
Weighted average common shares basic		204,271		217,187
Weighted average common shares diluted		205,732		218,812
Cash dividend declared per common share	\$	0.06	\$	0.06

The accompanying notes, together with the Notes to Consolidated Financial Statements included in Teradyne's Annual Report on Form 10-K for the year ended December 31, 2015, are an integral part of the condensed consolidated financial statements.

Table of Contents**TERADYNE, INC.****CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME****(Unaudited)**

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Net income	\$ 49,986	\$ 32,787
Other comprehensive income, net of tax:		
Foreign currency translation adjustments	10,271	
Available-for-sale marketable securities:		
Unrealized gains on marketable securities arising during period, net of tax of \$1,253, \$704, respectively	3,071	1,799
Less: Reclassification adjustment for gains included in net income, net of tax of \$11, \$(169), respectively	(83)	(330)
	2,988	1,469
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 of \$(46), \$(42), respectively	(80)	(74)
Other comprehensive income	13,179	1,395
Comprehensive income	\$ 63,165	\$ 34,182

The accompanying notes, together with the Notes to Consolidated Financial Statements included in Teradyne's Annual Report on Form 10-K for the year ended December 31, 2015, are an integral part of the condensed consolidated financial statements.



**Table of Contents****TERADYNE, INC.****CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS****(Unaudited)**

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Cash flows from operating activities:		
Net income	\$ 49,986	\$ 32,787
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	16,192	19,345
Amortization	20,470	15,139
Stock-based compensation	7,925	7,963
Provision for excess and obsolete inventory	4,373	1,440
Contingent consideration adjustment	1,173	
Deferred taxes	(5,496)	(1,831)
Retirement plans actuarial gains	(1,193)	
Gain from the sale of an equity investment		(4,782)
Other	484	(1,417)
Changes in operating assets and liabilities:		
Accounts receivable	(42,552)	(24,749)
Inventories	(702)	5,960
Prepayments and other assets	(1,148)	3,146
Accounts payable and other accrued expenses	(7,626)	(20,150)
Deferred revenue and customer advances	(13,836)	1,038
Retirement plans contributions	(1,250)	(1,019)
Income taxes	(52)	4,662
Net cash provided by operating activities	26,748	37,532
Cash flows from investing activities:		
Purchases of property, plant and equipment	(20,334)	(21,149)
Purchases of available-for-sale marketable securities	(221,778)	(335,635)
Proceeds from sales of available-for-sale marketable securities	239,370	148,639
Proceeds from maturities of available-for-sale marketable securities	73,458	140,222
Proceeds from the sale of an equity investment		4,782
Proceeds from life insurance		1,098
Net cash provided by (used for) investing activities	70,716	(62,043)
Cash flows from financing activities:		
Issuance of common stock under employee stock purchase and stock option plans	9,140	8,899

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Repurchase of common stock	(28,001)	(46,650)
Dividend payments	(12,253)	(13,049)
Payments of contingent consideration	(11,697)	
Net cash used for financing activities	(42,811)	(50,800)
Increase (decrease) in cash and cash equivalents	54,653	(75,311)
Cash and cash equivalents at beginning of period	264,705	294,256
Cash and cash equivalents at end of period	\$ 319,358	\$ 218,945

The accompanying notes, together with the Notes to Consolidated Financial Statements included in Teradyne's

Annual Report on Form 10-K for the year ended December 31, 2015, are an integral part of the condensed consolidated financial statements.

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**TERADYNE, INC.**

**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**(Unaudited)**

**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.

**B. Accounting Policies**

*Basis of Presentation*

The consolidated interim financial statements include the accounts of Teradyne and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated. These interim financial statements are unaudited and reflect all normal recurring adjustments that are, in the opinion of management, necessary for the fair presentation of such interim financial statements. Certain prior year amounts were reclassified to conform to the current year presentation. The December 31, 2015 condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America.

The accompanying financial information should be read in conjunction with the consolidated financial statements and notes thereto contained in Teradyne's Annual Report on Form 10-K, filed with the U.S. Securities and Exchange Commission ( SEC ) on February 29, 2016, for the year ended December 31, 2015.

*Preparation of Financial Statements and Use of Estimates*

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the amounts reported in the financial statements. Actual results may differ significantly from these estimates.

### **C. Recently Issued Accounting Pronouncements**

In January 2016, the Financial Accounting Standards Board ( FASB ) issued Accounting Standards Update ( ASU ) 2016-01, *Financial Instruments Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU provides guidance for the recognition, measurement, presentation, and disclosure of financial instruments. The new pronouncement revises accounting related to equity investments and the presentation of certain fair value changes for financial liabilities measured at fair value. Among other things, it amends the presentation and disclosure requirements of equity securities that do not

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result in consolidation and are not accounted for under the equity method. Changes in the fair value of these equity securities will be recognized directly in net income. This pronouncement is effective for fiscal years and interim periods within those years beginning after December 15, 2017. Teradyne is currently evaluating the impact of this ASU on its financial position and results of operations.

On March 31, 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This ASU changes how companies account for certain aspects of share-based payment awards to employees, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. This pronouncement is effective for annual periods beginning after December 15, 2016. Early adoption is permitted. Teradyne is currently evaluating the impact of this ASU on its financial position and results of operations.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The guidance in this ASU supersedes the lease recognition requirements in Accounting Standards Codification (ASC) Topic 840, *Leases*. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than twelve months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for annual periods beginning after December 15, 2018, including interim periods within those years, with early adoption permitted. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. Teradyne is currently evaluating the impact of this ASU on its financial position and results of operations.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 simplifies the presentation of deferred income taxes by eliminating the separate classification of deferred income tax liabilities and assets into current and noncurrent amounts in the balance sheet. The amendments in the update require that all deferred tax liabilities and assets be classified as noncurrent in the balance sheet. This ASU is effective for annual periods beginning after December 15, 2016, and interim periods within those years and may be applied either prospectively or retrospectively to all periods presented. Early adoption is permitted. Teradyne early adopted this ASU prospectively in the first quarter of 2016.

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. Teradyne adopted this ASU in the first quarter of 2016. Adoption of this ASU did not have a material 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



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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.

**D. Acquisitions***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 year 2015 EBITDA results, in the first quarter of 2016, Teradyne paid \$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:

	<b>Purchase Price Allocation</b>
	<b>(in thousands)</b>
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)

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Long-term deferred tax liabilities	(26,653)
Long-term other liabilities	(2,920)
Total purchase price	\$ 315,437



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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:

	<b>Fair Value (in thousands)</b>	<b>Estimated Useful Life (in years)</b>
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

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:

	<b>For the Three Months Ended April 5, 2015</b>
Revenue	\$ 352,971
Net income	28,374
Net income per common share:	
Basic	\$ 0.13
Diluted	\$ 0.13

**E. Financial Instruments and Derivatives****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 accounts for its investments in debt and equity securities in accordance with the provisions of Accounting Standards Codification ( 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. As of April 3, 2016, Teradyne's investments in debt and equity securities were classified as available-for-sale and recorded at their fair market value.

On a quarterly basis, Teradyne reviews its investments to identify and evaluate those that have an indication of a potential other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary

include:

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

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

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

Teradyne uses the market and income approach techniques to value its financial instruments and there were no changes in valuation techniques during the three months ended April 3, 2016. As defined in ASC 820-10,

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*Fair Value Measurements and Disclosures*, fair value is the price that would be received from the sale of an asset or paid to transfer a liability in an orderly transaction between market participants. ASC 820-10 requires that assets and liabilities carried at fair value be classified and disclosed in one of the following three categories:

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

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

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.

Teradyne's available-for-sale debt and equity securities are classified as Level 1 and Level 2. Acquisition-related contingent consideration is classified as Level 3. Teradyne's contingent consideration is valued using a Monte Carlo simulation model or a probability weighted discounted cash flow model. The 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 gains recorded in the three months ended April 3, 2016 and April 5, 2015 were \$0.2 million and \$0.5 million, respectively. Realized losses recorded in the three months ended April 3, 2016 were \$0.2 million. There were no realized losses recorded in the three months ended April 5, 2015. 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 three months ended April 3, 2016 and April 5, 2015, 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 April 3, 2016 and December 31, 2015.

	April 3, 2016			
	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	\$ 227,046	\$	\$	\$ 227,046
Cash equivalents	92,010	302		92,312
Available-for-sale securities:				

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U.S. Treasury securities	399,277	399,277
Corporate debt securities	161,590	161,590
Commercial paper	36,592	36,592
U.S. government agency securities	26,160	26,160
Certificates of deposit and time deposits	15,653	15,653
Equity and debt mutual funds	16,369	16,369
Non-U.S. government securities	434	434

Total	\$ 335,425	\$ 640,008	\$	\$ 975,433
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Liabilities

Contingent consideration	\$	\$	\$ 23,609	\$ 23,609
Derivative liabilities		193		193

Total	\$	\$ 193	\$ 23,609	\$ 23,802
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Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
Assets				
Cash and cash equivalents	\$ 319,056	\$ 302	\$	\$ 319,358
Marketable securities		410,003		410,003
Long-term marketable securities	16,369	229,703		246,072
	\$ 335,425	\$ 640,008	\$	\$ 975,433
Liabilities				
Other current liabilities	\$	\$ 193	\$	\$ 193
Contingent consideration			500	500
Long-term contingent consideration			23,109	23,109
	\$	\$ 193	\$ 23,609	\$ 23,802

	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

<b>Liabilities</b>							
Contingent consideration	\$	\$		\$	37,436	\$	37,436
Derivative liabilities			146				146
Total	\$	\$	146	\$	37,436	\$	37,582

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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

Changes in the fair value of Level 3 contingent consideration for the three months ended April 3, 2016 and April 5, 2015 were as follows:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	(in thousands)	
Balance at beginning of period	\$ 37,436	\$ 3,350
Payments (a)	(15,000)	
Fair value adjustment (b)	1,173	
Balance at end of period	\$ 23,609	\$ 3,350

- (a) In the three months ended April 3, 2016, based on Universal Robots' calendar year 2015 EBITDA results, Teradyne paid \$15 million or 100% of the eligible EBITDA contingent consideration amount.
- (b) In the three months ended April 3, 2016, the fair value of contingent consideration for the earn-out in connection with the acquisition of Universal Robots was increased by \$1.2 million primarily due to a lower discount rate. The following table provides quantitative information associated with the fair value measurement of Teradyne's Level 3 financial instruments:

<b>Liability</b>	<b>April 3, 2016 Fair Value (in thousands)</b>	<b>Valuation Technique</b>	<b>Unobservable Inputs</b>	<b>Weighted Average</b>
Contingent consideration (Universal Robots)	\$16,349	Monte Carlo Simulation	Revenue for the period July 1, 2015 - December 31, 2017 volatility Discount Rate	15.4% 4.7%
	\$6,760	Monte Carlo Simulation	Revenue for the period July 1, 2015 - December 31, 2018 volatility Discount Rate	15.4% 4.7%
Contingent consideration (AIT)	\$500	Income approach-discounted cash flow	Revenue for calendar year 2016 probability Discount rate	48% 4.7%



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As of April 3, 2016, 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 maximum payment for each of the two Universal Robots revenue earn-outs is \$25.0 million.

The significant unobservable inputs used in the Avionics Interface Technology, LLC ( 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. The maximum payment for the AIT earn-out is \$1.1 million.

The carrying amounts and fair values of Teradyne's financial instruments at April 3, 2016 and December 31, 2015 were as follows:

	<b>April 3, 2016</b>		<b>December 31, 2015</b>	
	<b>Carrying Value</b>	<b>Fair Value</b>	<b>Carrying Value</b>	<b>Fair Value</b>
	<b>(in thousands)</b>			
<b>Assets</b>				
Cash and cash equivalents	\$ 319,358	\$ 319,358	\$ 264,705	\$ 264,705
Marketable securities	656,075	656,075	743,624	743,624
Derivative assets			109	109
<b>Liabilities</b>				
Contingent consideration	23,609	23,609	37,436	37,436
Derivative liabilities	193	193	146	146

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

The following tables summarize the composition of available-for-sale marketable securities at April 3, 2016 and December 31, 2015:

	<b>April 3, 2016</b>			
	<b>Cost</b>	<b>Available-for-Sale Unrealized Gain</b>	<b>Unrealized (Loss)</b>	<b>Fair Market Value</b>
	<b>(in thousands)</b>			
				<b>Fair Market Value of Investments with Unrealized Losses</b>
U.S. Treasury securities	\$ 398,832	\$ 620	\$ (175)	\$ 399,277
Corporate debt securities	161,005	1,861	(1,276)	161,590
Commercial paper	36,563	29		36,592
U.S. government agency securities	26,107	57	(4)	26,160
Equity and debt mutual funds	15,110	1,328	(69)	16,369
Certificates of deposit and time deposits	15,651	2		15,653

Non-U.S. government securities	434				434
	\$ 653,702	\$ 3,897	\$ (1,524)	\$ 656,075	\$ 294,269

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Reported as follows:

	<b>Cost</b>	<b>Unrealized Gain</b>	<b>Unrealized (Loss) (in thousands)</b>	<b>Fair Market Value</b>	<b>Fair Market Value of Investments with Unrealized Losses</b>
Marketable securities	\$ 409,971	\$ 146	\$ (114)	\$ 410,003	\$ 204,024
Long-term marketable securities	243,731	3,751	(1,410)	246,072	90,245
	\$ 653,702	\$ 3,897	\$ (1,524)	\$ 656,075	\$ 294,269

**December 31, 2015**

	<b>Cost</b>	<b>Available-for-Sale Unrealized Gain</b>	<b>Unrealized (Loss) (in thousands)</b>	<b>Fair Market Value</b>	<b>Fair Market Value of Investments with Unrealized Losses</b>
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:

	<b>Cost</b>	<b>Unrealized Gain</b>	<b>Unrealized (Loss) (in thousands)</b>	<b>Fair Market Value</b>	<b>Fair Market Value of Investments with Unrealized Losses</b>
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
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As of April 3, 2016, the fair market value of investments with unrealized losses totaled \$294.3 million. Of this value, \$2.8 million had unrealized losses of \$0.5 million greater than one year and \$291.5 million had unrealized losses of \$1.1 million for less than one year.

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.

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 April 3, 2016 and December 31, 2015, were temporary.

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The contractual maturities of investments held at April 3, 2016 were as follows:

	<b>April 3, 2016</b>	
	<b>Cost</b>	<b>Fair Market Value</b>
	<b>(in thousands)</b>	
Due within one year	\$ 409,971	\$ 410,003
Due after 1 year through 5 years	184,645	184,852
Due after 5 years through 10 years	4,432	4,546
Due after 10 years	39,544	40,305
<b>Total</b>	<b>\$ 638,592</b>	<b>\$ 639,706</b>

Contractual maturities of investments held at April 3, 2016 exclude equity and debt mutual funds as they do not have contractual maturity dates.

**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 monetary assets and liabilities denominated in foreign currencies.

The notional amount of foreign currency forward contracts was \$138.5 million and \$114.1 million at April 3, 2016 and December 31, 2015, respectively. The fair value of the outstanding contracts was a loss of \$0.2 million and \$0.0 million at April 3, 2016 and December 31, 2015, respectively.

For the three months ended April 3, 2016 and April 5, 2015, Teradyne recorded net realized losses of \$3.3 million and \$3.4 million, respectively, related to foreign currency forward contracts hedging net monetary positions. Gains and losses on foreign currency forward contracts and foreign currency remeasurement gains and losses on monetary assets and liabilities are included in other (income) expense, net.

The following table summarizes the fair value of derivative instruments at April 3, 2016 and December 31, 2015:

	Balance Sheet Location	April 3, 2016	December 31, 2015
(in thousands)			
Derivatives not designated as hedging instruments:			
Foreign exchange contracts assets	Prepayments	\$	\$ 109

Foreign exchange contracts liabilities	Other current liabilities	(193)	(146)
Total derivatives		\$ (193)	\$ (37)

Teradyne's foreign exchange contracts are subject to master netting agreements.

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The following table summarizes the effect of derivative instruments recognized in the statement of operations during the three months ended April 3, 2016 and April 5, 2015. The table does not reflect the corresponding gains and losses from the remeasurement of monetary assets and liabilities denominated in foreign currencies. For the three months ended April 3, 2016 and April 5, 2015, net gains from the remeasurement of monetary assets and liabilities denominated in foreign currencies were \$3.4 million and \$4.3 million, respectively.

	Location of (Gains) Losses Recognized in Statement of Operations	For the Three Months Ended	
		April 3, 2016	April 5, 2015
(in thousands)			
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Other (income) expense, net	\$ 3,298	\$ 3,425
Total Derivatives		\$ 3,298	\$ 3,425

**F. 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 May 13, 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

April 3, 2016, 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.



**Table of Contents****G. Prepayments**

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

	<b>April 3, 2016</b>	<b>December 31, 2015</b>
	<b>(in thousands)</b>	
Contract manufacturer prepayments	\$ 68,746	\$ 66,283
Prepaid maintenance and other services	7,061	8,481
Prepaid taxes	5,281	3,781
Other prepayments	14,097	12,974
<b>Total prepayments</b>	<b>\$ 95,185</b>	<b>\$ 91,519</b>

**H. Deferred Revenue and Customer Advances**

Deferred revenue and customer advances consist of the following and are included in short and long-term deferred revenue and customer advances on the balance sheet:

	<b>April 3, 2016</b>	<b>December 31, 2015</b>
	<b>(in thousands)</b>	
Extended warranty	\$ 46,115	\$ 46,499
Product maintenance and training	31,368	30,616
Customer advances	5,347	17,456
Undelivered elements and other	14,733	16,701
<b>Total deferred revenue and customer advances</b>	<b>\$ 97,563</b>	<b>\$ 111,272</b>

**I. Product Warranty**

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

**For the Three  
Months  
Ended  
April 3,      April 5,  
2016          2015  
(in thousands)**

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Balance at beginning of period	\$ 6,925	\$ 8,942
Accruals for warranties issued during the period	3,490	2,361
Adjustments related to pre-existing warranties	243	(1,031)
Settlements made during the period	(3,162)	(2,849)
Balance at end of period	\$ 7,496	\$ 7,423

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

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Balance at beginning of period	\$ 46,499	\$ 43,300
Deferral of new extended warranty revenue	6,827	4,204
Recognition of extended warranty deferred revenue	(7,211)	(6,800)
Balance at end of period	\$ 46,115	\$ 40,704

**J. Stock-Based Compensation**

Under Teradyne's stock compensation plans, Teradyne grants 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 ).

Teradyne grants performance-based restricted stock units ( PRSUs ) to its executive officers with a performance metric based on relative total shareholder return ( TSR ). For TSR grants issued in 2014 and 2015, Teradyne's three-year TSR performance is measured against the Philadelphia Semiconductor Index. For TSR grants issued in January 2016, Teradyne's three-year TSR performance will be measured against the New York Stock Exchange ( NYSE ) Composite Index. The final number of TSR PRSUs that vest will vary based upon the level of performance achieved from 200% to 0% of the target shares. The TSR PRSUs will vest upon the three-year anniversary of the grant date. 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 below.

In January 2016, Teradyne granted PRSUs to its executive officers with a performance metric based on three-year cumulative non-GAAP profit before interest and tax ( PBIT ). Non-GAAP PBIT is a financial measure equal to GAAP income from operations less restructuring and other, net; amortization of acquired intangible assets; acquisition and divestiture related charges or credits; pension actuarial gains and losses; and other non-recurring gains and charges. The final number of PBIT PRSUs that vest will vary based upon the level of performance achieved from 200% to 0% of the target shares. The PBIT PRSUs will vest upon the three-year anniversary of the grant date. Compensation expense is recognized on a straight-line basis over the three-year service period. Compensation expense is recognized based on the number of units that are earned based upon the three year Teradyne PBIT as a percent of Teradyne's revenue, provided the executive officer remains an employee at the end of the three-year period subject to the retirement and termination eligibility provisions noted below.

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 all or a portion of 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. Except as set forth in the preceding sentence, no PRSUs will vest if the executive officer is no longer an employee at the end of the three-year period.

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During the three months ended April 3, 2016 and April 5, 2015, Teradyne granted 0.1 million and 0.2 million TSR PRSUs, respectively, with a grant date fair value of \$20.29 and \$18.21, respectively. The fair value was estimated using the Monte Carlo simulation model with the following assumptions:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
Risk-free interest rate	0.97%	0.77%
Teradyne volatility-historical	27.0%	28.2%
NYSE Composite Index volatility-historical	13.1%	
Philadelphia Semiconductor Index volatility-historical		19.7%
Dividend yield	1.24%	1.33%

Expected volatility was based on the historical volatility of Teradyne's stock and the NYSE Composite Index for the 2016 grant and Philadelphia Semiconductor Index for the 2015 grant, 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 was based upon an estimated annual dividend amount of \$0.24 per share divided by Teradyne's stock price on the grant date of \$19.43 for the 2016 grant and \$18.10 for the 2015 grant.

During the three months ended April 3, 2016, Teradyne granted 0.1 million PBIT PRSUs with a grant date fair value of \$18.71.

During the three months ended April 3, 2016, Teradyne granted 1.2 million of service-based restricted stock unit awards to employees at a weighted average grant date fair value of \$18.47 and 0.1 million of service-based stock options to executive officers at a weighted average grant date fair value of \$5.30.

During the three months ended April 5, 2015, Teradyne granted 1.4 million of service-based restricted stock unit awards to employees at a weighted average grant date fair value of \$17.14 and 0.1 million of service-based stock options to executive officers at a weighted average grant date fair value of \$4.43.

Restricted stock unit awards granted to employees vest in equal annual installments over four years. Stock options vest in equal annual installments over four years and have a term of seven years from the date of grant.

The fair value of stock options was estimated using the Black-Scholes option-pricing model with the following assumptions:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
Expected life (years)	5.0	4.0
Risk-free interest rate	1.4%	1.1%
Volatility-historical	32.9%	33.4%
Dividend yield	1.24%	1.33%

Teradyne determined the stock options' expected life based upon historical exercise data for executive officers, the age of the executive officers and the terms of the stock option grant. Volatility was determined using historical volatility for a period equal to the expected life. The risk-free interest rate was determined using the U.S. Treasury yield curve in effect at the time of grant. Dividend yield was based upon an estimated annual dividend amount of \$0.24 per share divided by Teradyne's stock price on the grant date, of \$19.43 for the 2016 grant and \$18.10 for the 2015 grant.

**Table of Contents****K. Accumulated Other Comprehensive Income**

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

	<b>For the Three Months Ended April 3, 2016</b>			
	<b>Foreign Currency Translation Adjustment</b>	<b>Unrealized Gains (Losses) on Marketable Securities (in thousands)</b>	<b>Retirement Plans Prior Service Credit</b>	<b>Total</b>
Balance at December 31, 2015, net of tax of \$0, \$(459), \$(622)	\$ (8,759)	\$ (1,414)	\$ 2,029	\$ (8,144)
Other comprehensive income before reclassifications, net of tax of \$0, \$1,253	10,271	3,071		13,342
Amounts reclassified from accumulated other comprehensive income, net of tax of \$11, \$(46)		(83)	(80)	(163)
Net current period other comprehensive income, net of tax of \$0, \$1,264, \$(46)	10,271	2,988	(80)	13,179
Balance at April 3, 2016, net of tax of \$0, \$805, \$(668)	\$ 1,512	\$ 1,574	\$ 1,949	\$ 5,035

	<b>For the Three Months Ended April 5, 2015</b>			
	<b>Foreign Currency Translation Adjustment</b>	<b>Unrealized Gains (Losses) on Marketable Securities (in thousands)</b>	<b>Retirement Plans Prior Service Credit</b>	<b>Total</b>
Balance at December 31, 2014, net of tax of \$1,598, \$(453)	\$	\$ 2,365	\$ 2,324	\$ 4,689
Other comprehensive income before reclassifications, net of tax of \$704		1,799		1,799
Amounts reclassified from accumulated other comprehensive income, net of tax of \$(169), \$(42)		(330)	(74)	(404)
Net current period other comprehensive income, net of tax of \$535, \$(42)		1,469	(74)	1,395

Balance at April 5, 2015, net of tax of \$2,133, \$(495)	\$	\$	3,834	\$	2,250	\$ 6,084
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Reclassifications out of accumulated other comprehensive income to the statement of operations for the three months ended April 3, 2016 and April 5, 2015 were as follows:

Details about Accumulated Other Comprehensive Income Components	For the Three Months Ended		Affected Line Item in the Statements of Operations
	April 3, 2016 (in thousands)	April 5, 2015	
Available-for-sale marketable securities:			
Unrealized gains, net of tax of \$(11), \$169	\$ 83	\$ 330	Interest income
Amortization of defined benefit pension and postretirement plans:			
Prior service benefit, net of tax of \$46, \$42	80	74	(a)
Total reclassifications, net of tax of \$35, \$211	\$ 163	\$ 404	Net income

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



**Table of Contents****L. Goodwill and Intangible Assets**

The changes in the carrying amount of goodwill by reportable segments for the three months ended April 3, 2016, were as follows:

	Wireless Test	Industrial Automation	System Test (in thousands)	Semiconductor Test	Total
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
Foreign currency translation adjustment		7,458			7,458
Balance at April 3, 2016:					
Goodwill	361,819	222,433	158,699	260,540	1,003,491
Accumulated impairment losses	(98,897)		(148,183)	(260,540)	(507,620)
	\$ 262,922	\$ 222,433	\$ 10,516	\$	\$ 495,871

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

	April 3, 2016			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
	(in thousands)			
Developed technology	\$ 333,947	\$ 186,118	\$ 147,829	6.0 years
Customer relationships	110,658	68,114	42,544	7.9 years
Tradenames and trademarks	53,169	20,468	32,701	9.5 years
Non-compete agreement	320	120	200	4.0 years
Customer backlog	170	170		0.3 years
Total intangible assets	\$ 498,264	\$ 274,990	\$ 223,274	6.8 years

December 31, 2015			
Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
(in thousands)			

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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

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Aggregate intangible asset amortization expense was \$20.0 million and \$13.8 million, respectively, for the three months ended April 3, 2016 and April 5, 2015. Estimated intangible asset amortization expense for each of the five succeeding fiscal years is as follows:

<b>Year</b>	<b>Amortization Expense (in thousands)</b>
2016 (remainder)	\$ 60,547
2017	71,899
2018	45,160
2019	24,260
2020	10,304
Thereafter	11,104

**M. Net Income per Common Share**

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

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands, except per share amounts)</b>	
Net income for basic and diluted net income per share	\$ 49,986	\$ 32,787
Weighted average common shares-basic	204,271	217,187
Effect of dilutive potential common shares:		
Restricted stock units	965	901
Stock options	487	696
Employee stock purchase plan	9	28
Dilutive potential common shares	1,461	1,625
Weighted average common shares-diluted	205,732	218,812
Net income per common share-basic	\$ 0.24	\$ 0.15
Net income per common share-diluted	\$ 0.24	\$ 0.15

The computation of diluted net income per common share for the three months ended April 3, 2016 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 the three months ended April 5, 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.

## **N. Restructuring and Other**

### ***Other***

During the three months ended April 3, 2016, Teradyne recorded an expense of \$1.2 million for the increase in the fair value of the Universal Robots contingent consideration liability.

### ***Restructuring***

During the three months ended April 3, 2016, Teradyne recorded \$0.4 million of severance charges related to headcount reductions of 12 people, primarily in Semiconductor Test.

**Table of Contents****O. Retirement Plans**

ASC 715, *Compensation Retirement Benefits* requires an employer with defined benefit plans or other postretirement benefit plans to recognize an asset or a liability on its balance sheet for the overfunded or underfunded status of the plans. The pension asset or liability represents a difference between the fair value of the pension plan's assets and the projected benefit obligation.

***Defined Benefit Pension Plans***

Teradyne has defined benefit pension plans covering a portion of domestic employees and employees of certain non-U.S. subsidiaries. Benefits under these plans are based on employees' years of service and compensation. Teradyne's funding policy is to make contributions to these 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 ( IRC ), as well as unfunded foreign plans.

In the three months ended April 3, 2016, Teradyne contributed \$0.7 million to the U.S. supplemental executive defined benefit pension plan and \$0.6 million to certain qualified plans for non-U.S. subsidiaries.

For the three months ended April 3, 2016 and April 5, 2015, Teradyne's net periodic pension (income) cost was comprised of the following:

	<b>For the Three Months Ended</b>			
	<b>April 3, 2016</b>		<b>April 5, 2015</b>	
	<b>United States</b>	<b>Foreign</b>	<b>United States</b>	<b>Foreign</b>
	<b>(in thousands)</b>			
Service cost	\$ 576	\$ 207	\$ 616	\$ 247
Interest cost	3,414	206	3,282	358
Expected return on plan assets	(3,443)	(5)	(3,624)	(195)
Amortization of prior service cost	24		33	
Net actuarial gain	(1,193)			
Settlement		(239)		
<b>Total net periodic pension (income) cost</b>	<b>\$ (622)</b>	<b>\$ 169</b>	<b>\$ 307</b>	<b>\$ 410</b>

***Postretirement Benefit Plan***

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.



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For the three months ended April 3, 2016 and April 5, 2015, Teradyne's net periodic postretirement benefit income was comprised of the following:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Service cost	\$ 10	\$ 12
Interest cost	56	59
Amortization of prior service benefit	(150)	(149)
Total net periodic post-retirement benefit	\$ (84)	\$ (78)

**P. Commitments and Contingencies*****Purchase Commitments***

As of April 3, 2016, Teradyne had entered into purchase commitments for certain components and materials. The purchase commitments covered by the agreements aggregate to approximately \$235.3 million, of which \$233.7 million is for less than one year.

***Legal Claims***

Teradyne is subject to various legal proceedings and claims which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on Teradyne's results of operations, financial condition or cash flows.

**Q. Income Taxes**

The effective tax rate for the three months ended April 3, 2016 and April 5, 2015 was 12.6% and 22.7%, respectively. The effective tax rates for these periods were lower than the expected federal statutory rate of 35% primarily because of the favorable effect of statutory rates applicable to income earned outside the United States. The tax rate for the three months ended April 3, 2016 was also reduced by the benefit from U.S. research and development tax credits, partially offset by additions to the uncertain tax positions for transfer pricing, both of which are included in the projected annual effective tax rate. Discrete tax benefits recorded in the quarter amounted to \$2.5 million of which \$1.2 million resulted from non-taxable foreign exchange gains, \$0.9 million related to marketable securities and \$0.4 million from other discrete tax benefits.

The tax rate for the three months ended April 5, 2015 was reduced by a \$1.2 million discrete tax benefit related to non-taxable foreign exchange gains and a \$0.5 million discrete tax benefit related to disqualifying dispositions of incentive stock options and employee stock purchase plan shares.

On a quarterly basis, Teradyne evaluates the realizability of the deferred tax assets by jurisdiction and assesses the need for a valuation allowance. As of April 3, 2016, Teradyne believes that it will ultimately realize the deferred tax assets recorded on the condensed consolidated balance sheet. However, should Teradyne believe that it is more likely

than not that the deferred tax assets would not be realized, the tax provision would increase in the period in which Teradyne determined that the realizability was not likely. Teradyne considers the probability of future taxable income and historical profitability, among other factors, in assessing the realizability of the deferred tax assets.

As of April 3, 2016 and December 31, 2015, Teradyne had \$35.2 million and \$33.7 million, respectively, of reserves for uncertain tax positions. The \$1.5 million net increase in reserves for uncertain tax positions relates primarily to transfer pricing exposure.



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As of April 3, 2016, Teradyne estimates that it is reasonably possible that the balance of unrecognized tax benefits may decrease approximately \$9.1 million in the next twelve 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 recognizes interest and penalties related to income tax matters in income tax expense. As of April 3, 2016 and December 31, 2015, \$0.8 million and \$0.5 million, respectively, of interest and penalties were included in the reserve for uncertain tax positions. For the three months ended April 3, 2016, expense of \$0.3 million was recorded for interest and penalties related to income tax items. For the three months ended April 5, 2015, interest and penalties related to income tax items were not material.

Teradyne qualifies for a tax holiday in Singapore by fulfilling the requirements of an agreement with the Singapore Economic Development Board under which certain headcount and spending requirements must be met. The tax savings due to the tax holiday for the three months ended April 3, 2016 was \$2.6 million, or \$0.01 per diluted share. The tax savings due to the tax holiday for the three months ended April 5, 2015 was \$1.1 million and the impact of the tax holiday on earnings per share was not material. The tax holiday is scheduled to expire on December 31, 2020.

**R. Segment 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 based on several factors, of which the primary financial measure is business segment income before income taxes. The accounting policies of the business segments in effect are described in Note B:

Accounting Policies in Teradyne's Annual Report on Form 10-K for the year ended December 31, 2015.

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Segment information for the three months ended April 3, 2016 and April 5, 2015 is as follows:

	Semiconductor Test	System Test	Wireless Test	Industrial Automation	Corporate and Eliminations	Consolidated
	(in thousands)					
<b>Three months ended April 3, 2016:</b>						
Revenues	\$ 340,264	\$ 53,670	\$ 20,314	\$ 16,746	\$	\$ 430,994
Income (loss) before income taxes (1)(2)	73,254	9,492	(20,140)	(7,168)	1,754	57,192
Total assets (3)	664,555	90,695	408,466	350,589	1,034,669	2,548,974
<b>Three months ended April 5, 2015:</b>						
Revenues	\$ 270,917	\$ 37,436	\$ 34,048	\$	\$	\$ 342,401
Income (loss) before income taxes (1)(2)	43,125	1,005	(10,441)		8,749	42,438
Total assets (3)	596,477	94,133	465,465		1,356,107	2,512,182

- (1) Interest income, interest expense, and other (income) expense, net are included in Corporate and Eliminations.
- (2) Included in the income (loss) before income taxes for each of the segments are charges related to inventory and other.
- (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 line items in the statements of operations:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Cost of revenues inventory charge	\$ 3,685	\$ 531
Restructuring and other	414	
<b>Total</b>	<b>\$ 4,099</b>	<b>\$ 531</b>

Included in the Wireless Test segment are charges in the following line items in the statements of operations:

**For the Three Months Ended**

	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Cost of revenues inventory charge	\$ 605	\$ 846
Total	\$ 605	\$ 846

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Included in Corporate and Eliminations are charges and credits in the following line items in the statements of operations:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
	<b>(in thousands)</b>	
Restructuring and other Universal Robots contingent consideration adjustment	\$ 1,173	\$
Other (income) expense, net gain from the sale of an equity investment		(4,782)
<b>Total</b>	<b>\$ 1,173</b>	<b>\$ (4,782)</b>

**S. Shareholders Equity*****Stock Repurchase Program***

In January 2015, the Board of Directors authorized Teradyne to repurchase up to \$500 million of common stock, of which \$300 million was repurchased in 2015. In 2016, Teradyne intends to repurchase between \$100 million and \$200 million of common stock. During the three months ended April 3, 2016, Teradyne repurchased 1.5 million shares of common stock at an average price of \$18.81, for a total cost of \$28.0 million. The cumulative repurchases as of April 3, 2016 totaled 17.1 million shares of common stock for a total purchase price of \$328 million at an average price per share of \$19.17. The total price includes commissions and is recorded as a reduction to retained earnings.

***Dividend***

Holders of Teradyne's common stock are entitled to receive dividends when they are declared by Teradyne's Board of Directors.

In January 2016, Teradyne's Board of Directors declared a quarterly cash dividend of \$0.06 per share that was paid on March 21, 2016 to shareholders of record as of February 26, 2016. Dividend payments for the three months ended April 3, 2016 were \$12.3 million.

In January 2015, Teradyne's Board of Directors declared a quarterly cash dividend of \$0.06 per share that was paid on March 24, 2015 to shareholders of record as of February 27, 2015. Dividend payments for the three months ended April 5, 2015 were \$13.0 million.

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.

**T. Subsequent Events**

On April 16, 2016, an earthquake in Kumamoto, Japan damaged Teradyne's facility. The facility, which is used for engineering, production, and support operations, sustained heavy damage. Teradyne is still in the process of assessing the total impact of the damage. The net book value of the inventory and fixed assets at the Kumamoto location is approximately \$17 million. With respect to the location, Teradyne has \$10 million of earthquake insurance with a deductible of approximately \$2.5 million. Teradyne is temporarily transferring some operations to other facilities in Japan and elsewhere while Teradyne's Kumamoto operations are restored.

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### **Item 2: Management's Discussion and Analysis of Financial Condition and Results of Operations**

Statements in this Quarterly Report on Form 10-Q which are not historical facts, so called forward-looking statements, are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended. Investors are cautioned that all forward-looking statements involve risks and uncertainties, including those detailed in our filings with the Securities and Exchange Commission. See also Part II, Item 1A of this Quarterly Report on Form 10-Q and Part I, Item 1A Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015. Readers are cautioned not to place undue reliance on these forward-looking statements which reflect management's analysis only as of the date hereof. We assume no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting forward-looking statements, except as may be required by law.

### **Overview**

We are a leading global supplier of 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.

We believe our recent acquisitions have enhanced our opportunities for growth. We intend to 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 because 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 have generally affected the semiconductor and electronics test equipment and services industries more significantly than the overall capital equipment sector.

In recent years, this cyclical demand has become an even/odd year trend where demand has increased in even years and decreased in odd years due principally to demand swings in the mobility market of our Semiconductor Test business. In 2015, the even/odd year trend continued, but had less of an impact on our annual revenue due to the sale in 2015 of testers that were previously leased to customers in 2014. We expect the

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even/odd year demand trend in the mobility market to most likely lessen in the future due to slower smart phone unit growth, along with rising device complexity and the reduced impact of parallel test in our Semiconductor Test business.

On April 16, 2016, an earthquake in Kumamoto, Japan damaged our facility. The facility, which is used for engineering, production, and support operations, sustained heavy damage. We are still in the process of assessing the total impact of the damage. The net book value of the inventory and fixed assets at the Kumamoto location is approximately \$17 million. With respect to the location, we have \$10 million of earthquake insurance with a deductible of approximately \$2.5 million. We are temporarily transferring some operations to other facilities in Japan and elsewhere while our Kumamoto operations are restored.

## **Critical Accounting Policies and Estimates**

We have identified the policies which are critical to understanding our business and our results of operations. Except for below, there have been no significant changes during the three months ended April 3, 2016 to the items disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

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

We performed our last goodwill impairment test during the fourth quarter of 2015. We performed step one of the two step impairment test for our Wireless Test and Defense/Aerospace reporting units and the step zero assessment for our Industrial Automation reporting unit. The step one tests resulted in each of the reporting unit's fair value exceeding its carrying value by at least 20%.

We estimate the fair value of a reporting unit using the results derived from an income approach, a discounted cash flow analysis, and a market approach using the market comparable method which is based on revenue and earnings multiples from comparable companies. Estimating a reporting unit's fair value requires significant judgment and assumptions including projected future cash flows, revenue, market size, market growth, Teradyne's market share, market multiples, discount rates and consideration of market valuations of comparable companies. These judgments and assumptions reflect our best estimates, but these items involve inherent uncertainties based on market and customer conditions.

The fair value estimate for our Wireless Test reporting unit involves forecasting the size of the wireless test market in future years and our market share which are significant judgments and assumptions due to our significant customer concentration in our Wireless Test segment. Forecasting the size of the wireless test market in future years and our market share includes estimating end product shipment volumes, new wireless technology introductions and customer buying patterns. As of April 3, 2016 and December 31, 2015, our Wireless Test segment had \$262.9 million of goodwill.

In the fourth quarter of 2014, we recorded a goodwill impairment charge of \$98.9 million in our Wireless Test segment as a result of decreased demand attributable to an estimated smaller 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 or our share of the wireless test market may occur which may result in additional goodwill impairment charges.





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

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
Percentage of revenues:		
Revenues:		
Products	83%	80%
Services	17	20
Total revenues	100	100
Cost of revenues:		
Cost of products	39	35
Cost of services	8	9
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	47	44
Gross profit	53	56
Operating expenses:		
Engineering and development	17	21
Selling and administrative	18	21
Acquired intangible assets amortization	5	4
Restructuring and other		
Total operating expenses	40	46
Income from operations	13	10
Non-operating (income) expenses		
Interest income		(1)
Interest expense		
Other (income) expense, net		(2)
Income before income taxes	13	12
Income tax provision	2	3
Net income	12%	10%

**Results of Operations*****First Quarter 2016 Compared to First Quarter 2015******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:

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
Semiconductor Test	0.9	1.5
System Test	0.9	1.8
Wireless Test	1.0	0.8
Industrial Automation	1.1	
Total Company	0.9	1.4

**Table of Contents***Revenues*

Revenues by our four reportable segments were as follows:

	<b>For the Three Months Ended</b>		
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	<b>Dollar Change</b>
	<b>(in millions)</b>		
Semiconductor Test	\$ 340.3	\$ 270.9	\$ 69.4
System Test	53.7	37.4	16.3
Wireless Test	20.3	34.1	(13.8)
Industrial Automation	16.7		16.7
	\$ 431.0	\$ 342.4	\$ 88.6

The increase in Semiconductor Test revenues of \$69.4 million, or 25.6%, was primarily due to higher product volume in the application processor and image sensor markets. The increase in System Test revenue of \$16.3 million, or 43.6%, was primarily due to higher sales in Storage Test of 3.5 hard disk drive testers for cloud storage. The decrease in Wireless Test revenue of \$13.8 million, or 40.5%, was primarily driven by lower cellular test system sales due to lower sales to our largest Wireless Test segment customer. As a result of significant customer concentration in our Wireless Test segment, quarterly revenue is subject to fluctuations based on our largest customer's test capacity plans. The acquisition of Universal Robots, which is our Industrial Automation segment, completed in June 2015, added \$16.7 million of revenue in the three months ended April 3, 2016.

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

	<b>For the Three Months Ended</b>	
	<b>April 3, 2016</b>	<b>April 5, 2015</b>
Taiwan	42%	30%
United States	12	14
Japan	11	7
China	9	13
Europe	7	6
Korea	6	13
Singapore	4	5
Thailand	3	2
Malaysia	3	5
Philippines	2	3
Rest of World	1	2
	100%	100%

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

*Gross Profit*

Our gross profit was as follows:

	<b>For the Three Months Ended</b>		<b>Dollar/Point Change</b>
	<b>April 3, 2016</b>	<b>April 5, 2015 (in millions)</b>	
Gross Profit	\$ 230.3	\$ 192.4	\$ 37.9
Percent of Total Revenues	53.4%	56.2%	(2.8)

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Gross profit as a percent of revenue decreased by 2.8 points, of which 3.7 points decrease was related to unfavorable product mix in SOC Semiconductor Test, higher Storage Test sales and lower Wireless Test sales, partially offset by an increase of 1.6 points due to higher product volume.

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

During the three months ended April 3, 2016, we recorded an inventory provision of \$4.3 million included in cost of revenues primarily due to downward revisions to previously forecasted demand levels. Of the \$4.3 million of total excess and obsolete provisions, \$3.7 million was related to Semiconductor Test, \$0.6 million was related to Wireless Test, and \$0.1 million was related to System Test.

During the three months ended April 5, 2015, we recorded an inventory provision of \$1.4 million included in cost of revenues primarily due to downward revisions to previously forecasted demand levels. Of the \$1.4 million of total excess and obsolete provisions, \$0.8 million was related to Wireless Test, \$0.5 million was related to Semiconductor Test, and \$0.1 million was related to System Test.

During the three months ended April 3, 2016 and April 5, 2015, we scrapped \$0.7 million and \$0.6 million of inventory, respectively. During the three months ended April 3, 2016 and April 5, 2015, we sold \$1.1 million and \$1.9 million of previously written-down or written-off inventory, respectively. As of April 3, 2016, we had inventory related reserves for inventory which had been written-down or written-off totaling \$122.9 million. We have no pre-determined timeline to scrap the remaining inventory.

*Engineering and Development*

Engineering and development expenses were as follows:

	<b>For the Three Months Ended</b>		<b>Dollar Change</b>
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	
	<b>(in millions)</b>		
Engineering and Development	\$ 73.5	\$ 71.5	\$ 2.0
Percent of Total Revenues	17.0%	20.9%	

The increase of \$2.0 million in engineering and development expenses was primarily from the acquisition of Universal Robots completed in June 2015.

*Selling and Administrative*

Selling and administrative expenses were as follows:

	<b>For the Three Months Ended</b>		<b>Dollar Change</b>
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	
	<b>(in millions)</b>		
Selling and Administrative	\$ 79.2	\$ 72.0	\$ 7.2
Percent of Total Revenues	18.4%	21.0%	

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The increase of \$7.2 million in selling and administrative expenses was due primarily to additional costs as a result of the acquisition of Universal Robots in June 2015.

*Acquired Intangible Assets Amortization*

Acquired intangible assets amortization expense was as follows:

	<b>For the Three Months Ended</b>		<b>Dollar Change</b>
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	
	<b>(in millions)</b>		
Acquired Intangible Assets Amortization	\$ 20.0	\$ 13.8	\$ 6.2
Percent of Total Revenues	4.6%	4.0%	

Acquired intangible assets amortization expense increased due to the Universal Robots acquisition in June 2015.

*Restructuring and Other**Other*

During the three months ended April 3, 2016, we recorded an expense of \$1.2 million for the increase in the fair value of the Universal Robots contingent consideration liability.

*Restructuring*

During the three months ended April 3, 2016, we recorded \$0.4 million of severance charges related to headcount reductions of 12 people, primarily in Semiconductor Test.

*Interest and Other*

	<b>For the Three Months Ended</b>		<b>Dollar Change</b>
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	
	<b>(in millions)</b>		
Interest Income	\$ (1.6)	\$ (1.8)	\$ 0.2
Interest Expense	0.7	0.2	0.5
Other (income) expense, net	(0.1)	(5.7)	5.6

Interest income decreased by \$0.2 million due primarily to lower cash and marketable securities balances in 2016. Interest expense increased by \$0.5 million due primarily to costs related to the revolving credit facility and realized losses on sales of marketable securities in 2016. In 2015, other (income) expense, net included a \$4.8 million gain from the sale of an equity investment.





**Table of Contents***Income (Loss) Before Income Taxes*

	<b>For the Three Months Ended</b>		
	<b>April 3, 2016</b>	<b>April 5, 2015</b>	<b>Dollar Change</b>
	<b>(in millions)</b>		
Semiconductor Test	\$ 73.3	\$ 43.1	\$ 30.1
System Test	9.5	1.0	8.5
Wireless Test	(20.1)	(10.4)	(9.7)
Industrial Automation	(7.2)		(7.2)
Corporate(1)	1.8	8.7	(6.9)
	\$ 57.2	\$ 42.4	\$ 14.8

(1) Included in Corporate are pension actuarial gains, contingent consideration adjustment, gain from the sale of an equity investment, proceeds from life insurance, interest income and interest expense.

The increase in income before income taxes in Semiconductor Test was primarily due to higher revenues in the application processor and image sensor markets. The increase in income before income taxes in System Test was primarily due to higher sales in Storage Test of 3.5 hard disk drive testers for cloud storage. The decrease in income before income taxes in Wireless Test was primarily due to lower revenue driven by lower cellular test system sales. In June 2015, we completed the acquisition of Universal Robots, which is our Industrial Automation segment. The loss before income taxes in Industrial Automation in the three months ended April 3, 2016, was primarily due to intangible assets amortization.

*Income Taxes*

The effective tax rate for the three months ended April 3, 2016 and April 5, 2015 was 12.6% and 22.7%, respectively. The decrease in the effective tax rate is primarily attributable to a projected decrease in income subject to tax in the United States as compared to lower rate foreign jurisdictions as well as the benefit from U.S. research and development tax credits.

**Contractual Obligations**

The following table reflects our contractual obligations as of April 3, 2016:

	<b>Payments Due by Period</b>					
	<b>Total</b>	<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 years</b>	<b>Other</b>
	<b>(in thousands)</b>					
Purchase obligations	\$ 235,305	\$ 233,718	\$ 1,587	\$	\$	\$

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Retirement plans contributions	110,896	4,036	7,967	13,109	85,784	
Operating lease obligations	70,963	15,374	24,768	16,826	13,995	
Fair value of contingent consideration	23,609	500	23,109			
Other long-term liabilities reflected on the balance sheet under GAAP(1)	78,521		25,468			53,053
Total	\$ 519,294	\$ 253,628	\$ 82,899	\$ 29,935	\$ 99,779	\$ 53,053

- (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.

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### **Liquidity and Capital Resources**

Our cash, cash equivalents and marketable securities balances decreased by \$32.9 million in the three months ended April 3, 2016, to \$975.4 million.

In the three months ended April 3, 2016, changes in operating assets and liabilities used cash of \$67.2 million. This was due to a \$44.4 million increase in operating assets and a \$22.8 million decrease in operating liabilities.

The increase in operating assets was primarily due to a \$42.6 million increase in accounts receivable due to higher sales.

The decrease in operating liabilities was due to a \$51.1 million decrease in accrued employee compensation due primarily to variable compensation and employee stock compensation awards payroll tax payments, a \$13.8 million decrease in customer advance payments and deferred revenue, an \$8.3 million decrease in accounts payable and \$1.3 million of retirement plan contributions, partially offset by a \$51.8 million increase in other accrued liabilities.

Investing activities during the three months ended April 3, 2016 provided cash of \$70.7 million, due to \$239.4 million and \$73.5 million proceeds from sales and maturities of marketable securities, respectively, partially offset by \$221.8 million used for purchases of marketable securities and \$20.3 million used for purchases of property, plant and equipment.

Financing activities during the three months ended April 3, 2016 used cash of \$42.8 million, due to \$28.0 million used for the repurchase of 1.5 million shares of common stock at an average price of \$18.81 per share, \$12.3 million used for dividend payments and \$11.7 million used for payment related to Universal Robots acquisition contingent consideration, partially offset by \$9.1 million from the issuance of common stock under employee stock purchase and stock option plans.

In the three months ended April 5, 2015, changes in operating assets and liabilities used cash of \$31.1 million. This was due to a \$15.6 million increase in operating assets and a \$15.5 million decrease in operating liabilities.

The increase in operating assets was due to a \$24.7 million increase in accounts receivable due to higher sales, partially offset by a \$6.0 million decrease in inventories and a \$3.1 million increase in prepayments and other assets. The decrease in operating liabilities was due to a \$45.2 million decrease in accrued employee compensation due primarily to variable compensation and employee stock award payroll tax payments, and \$1.0 million of retirement plan contributions, partially offset by a \$13.9 million increase in other accrued liabilities, a \$11.1 million increase in accounts payable due to higher sales, a \$4.7 million increase in accrued income taxes and a \$1.0 million increase in customer advance payments and deferred revenue.

Investing activities during the three months ended April 5, 2015 used cash of \$62.0 million, due to \$335.6 million used for purchases of marketable securities and \$21.1 million used for purchases of property, plant and equipment, partially offset by proceeds from maturities and sales of marketable securities of \$140.2 million and \$148.6 million, respectively, proceeds from the sale of an equity investment of \$4.8 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 \$10.1 million was primarily due to higher purchases of testers for customer leasing in the three months ended March 30, 2014.

Financing activities during the three months ended April 5, 2015 used cash of \$50.8 million, due to the repurchase of 2.4 million shares of common stock for \$46.7 million at an average price of \$19.40 per share, and \$13.0 million used

for dividend payments, partially offset by \$8.9 million provided by the issuance of common stock under employee stock purchase and stock option plans.

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In January 2016, our Board of Directors declared a quarterly cash dividend of \$0.06 per share. In the three months ended April 3, 2016, dividend payments were \$12.3 million.

In January 2015, our Board of Directors authorized the repurchase of up to \$500 million of common stock of which \$300 million was repurchased in 2015. In 2016, we intend to repurchase between \$100 million and \$200 million. During the three months ended April 3, 2016, we repurchased 1.5 million shares of common stock at an average price of \$18.81, for a total cost of \$28.0 million. The cumulative repurchases under this program as of April 3, 2016 totaled 17.1 million shares of common stock for \$328.0 million at an average price of \$19.17 per share.

While we declared a quarterly cash dividend and authorized a share repurchase program, we 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 our Board of Directors which will consider, among other things, our earnings, capital requirements and financial condition.

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 \$514 million of cash, cash equivalents and marketable securities 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.

## **Equity Compensation Plans**

As discussed in Note N: Stock Based Compensation in our 2015 Form 10-K, we have a 1996 Employee Stock Purchase Plan and a 2006 Equity and Cash Compensation Incentive Plan (the 2006 Equity Plan ).

The purpose of the 1996 Employee Stock Purchase Plan is to encourage stock ownership by all eligible employees of Teradyne. The purpose of the 2006 Equity Plan is to provide equity ownership and compensation opportunities in Teradyne to our employees, officers, directors, consultants and/or advisors. Both plans were approved by our shareholders.

## **Recently Issued Accounting Pronouncements**

In January 2016, the Financial Accounting Standards Board ( FASB ) issued Accounting Standards Update ( ASU ) 2016-01, *Financial Instruments Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU provides guidance for the recognition, measurement, presentation, and disclosure of financial instruments. The new pronouncement revises accounting related to equity investments and the presentation of certain fair value changes for financial liabilities measured at fair value. Among other things, it amends the presentation and disclosure requirements of equity securities that do not result in consolidation and are not accounted for under the equity method. Changes in the fair value of these equity securities will be recognized directly in net income. This pronouncement is effective for fiscal years and interim periods within those years beginning after December 15, 2017. We are currently evaluating the impact of this ASU on our financial position and results of operations.

On March 31, 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This ASU changes how companies account for certain aspects of

share-based payment awards to employees, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. This pronouncement is effective for annual periods beginning after December 15, 2016. Early adoption is permitted. We are currently evaluating the impact of this ASU on our financial position and results of operations.

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In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The guidance in this ASU supersedes the lease recognition requirements in Accounting Standards Codification (ASC) Topic 840, *Leases*. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than twelve months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for annual periods beginning after December 15, 2018, including interim periods within those years, with early adoption permitted. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. We are currently evaluating the impact of this ASU on our financial position and results of operations.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. ASU 2015-17 simplifies the presentation of deferred income taxes by eliminating the separate classification of deferred income tax liabilities and assets into current and noncurrent amounts in the balance sheet. The amendments in the update require that all deferred tax liabilities and assets be classified as noncurrent in the balance sheet. This ASU is effective for annual periods beginning after December 15, 2016, and interim periods within those years and may be applied either prospectively or retrospectively to all periods presented. Early adoption is permitted. We early adopted this ASU prospectively in the first quarter of 2016.

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. We adopted this ASU in the first quarter of 2016. Adoption of this ASU did not have a material 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 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. 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 3: Quantitative and Qualitative Disclosures about Market Risk**

For Quantitative and Qualitative Disclosures about Market Risk affecting Teradyne, see Part 2 Item 7a, Quantitative and Qualitative Disclosures about Market Risks, in our Annual Report on Form 10-K filed with the SEC on February 29, 2016. There were no material changes in our exposure to market risk from those set forth in our Annual



Report for the fiscal year ended December 31, 2015.

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**Item 4: Controls and Procedures**

As of the end of the period covered by this report, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, 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 Chief Executive Officer and Chief Financial Officer 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 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 Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

During the period covered by this report, there have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

**Table of Contents****PART II. OTHER INFORMATION****Item 1: Legal Proceedings**

We are subject to various legal proceedings and claims which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on our results of operations, financial condition or cash flows.

**Item 1A: Risk Factors**

In addition to other information set forth in this Form 10-Q, you should carefully consider the factors discussed in Part I, Item 1A: Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2015, which could materially affect our business, financial condition or future results. The risk factors described in our Annual Report on Form 10-K remain applicable to our business.

The risks described in our Annual Report on Form 10-K 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.

*The recent natural disaster in Japan could disrupt our operations and adversely affect our results of operations.*

The recent earthquake in Japan has damaged our building and impacted our operations located in Kumamoto. We are temporarily transferring the manufacturing operations to other facilities so we do not expect the damage to have a significant impact on our ability to manufacture our products or sell products to our customers. However, the situation in Kumamoto remains uncertain so the events could have a short-term impact to our business in Japan. In addition, we may have to incur significant costs in order to repair our building which could have an adverse effect on our financial condition and results of operations.

**Item 2: Unregistered Sales of Equity Securities and Use of Proceeds**

In January 2015, our Board of Directors authorized a stock repurchase program for up to \$500 million of common stock, of which \$300 million was repurchased in 2015. In 2016, we intend to repurchase between \$100 million and \$200 million. The cumulative repurchases as of April 3, 2016 totaled 17.1 million shares of common stock for \$328 million at an average price per share of \$19.17.

The following table includes information with respect to repurchases we made of our common stock during the three months ended April 3, 2016 (in thousands except per share price):

Period	(a) Total Number of Shares (or	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares Purchased as Part of Publicly	(d) Maximum Number of Approximate Dollar Value) of Shares (or Units) that
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		<b>Units) Purchased</b>			<b>Announced Plans or Programs</b>	<b>may Yet Be Purchased Under the Plans or Programs</b>
January 1, 2016	January 31, 2016	452	\$	19.57		\$ 200,051
February 1, 2016	February 28, 2016	955	\$	18.08	951	\$ 182,851
February 29, 2016	April 3, 2016	540	\$	20.01	537	\$ 172,050
		1,947	(1)	\$ 18.96	(1)	1,488

(1) Includes approximately 0.5 million shares at an average price of \$19.57 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.

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**Item 4: Mine Safety Disclosures**

Not Applicable

**Item 6: Exhibits**

<b>Exhibit</b>	
<b>Number</b>	<b>Description</b>
10.1	Executive Officer Change in Control Agreement dated February 8, 2016 between Teradyne, Inc. and Greg Smith (filed herewith)
10.2	Employment Agreement dated February 8, 2016 between Teradyne, Inc. and Greg Smith (filed herewith)
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (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

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**SIGNATURES**

Pursuant to the requirements 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.

**TERADYNE, INC.**  
Registrant

/s/ GREGORY R. BEECHER  
**Gregory R. Beecher**

**Vice President,**  
**Chief Financial Officer and Treasurer**  
**(Duly Authorized Officer**  
**and Principal Financial Officer)**

**May 13, 2016**