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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 10-Q**

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(Mark One)

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

For the quarterly period ended March 29, 2020

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

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**TERADYNE, INC.**

(Exact name of registrant as specified in its charter)

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Massachusetts  
(State or Other Jurisdiction of  
Incorporation or Organization)

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.125 per share	TER	Nasdaq Stock Market LLC

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 every Interactive Data File required to be submitted 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 such files) Yes  No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Smaller reporting company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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 April 27, 2020 was 165,768,292 shares.

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TERADYNE, INC.

INDEX

	<u>Page No.</u>
<b><u>PART I. FINANCIAL INFORMATION</u></b>	
Item 1.	<a href="#">Financial Statements (Unaudited):</a>
	<a href="#">Condensed Consolidated Balance Sheets as of March 29, 2020 and December 31, 2019</a> 1
	<a href="#">Condensed Consolidated Statements of Operations for the Three Months Ended March 29, 2020 and March 31, 2019</a> 2
	<a href="#">Condensed Consolidated Statements of Comprehensive Income for the Three Months Ended March 29, 2020 and March 31, 2019</a> 3
	<a href="#">Condensed Consolidated Statements of Shareholders' Equity for the Three Months Ended March 29, 2020 and March 31, 2019</a> 4
	<a href="#">Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 29, 2020 and March 31, 2019</a> 5
	<a href="#">Notes to Condensed Consolidated Financial Statements</a> 6
Item 2.	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a> 27
Item 3.	<a href="#">Quantitative and Qualitative Disclosures about Market Risk</a> 36
Item 4.	<a href="#">Controls and Procedures</a> 37
<b><u>PART II. OTHER INFORMATION</u></b>	
Item 1.	<a href="#">Legal Proceedings</a> 38
Item 1A.	<a href="#">Risk Factors</a> 38
Item 2.	<a href="#">Unregistered Sales of Equity Securities and Use of Proceeds</a> 39
Item 4.	<a href="#">Mine Safety Disclosures</a> 40
Item 6.	<a href="#">Exhibits</a> 41

## PART I

## Item 1: Financial Statements

## TERADYNE, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS  
(Unaudited)

	March 29, 2020	December 31, 2019
	(in thousands, except per share information)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 593,494	\$ 773,924
Marketable securities	211,001	137,303
Accounts receivable, less allowance for doubtful accounts of \$1,813 and \$1,736 at March 29, 2020 and December 31, 2019, respectively	487,365	362,368
Inventories, net	182,978	196,691
Prepayments and other current assets	227,740	188,598
Total current assets	1,702,578	1,658,884
Property, plant and equipment, net	332,241	320,216
Operating lease right-of-use assets, net	58,808	57,539
Marketable securities	100,513	104,490
Deferred tax assets	74,493	75,185
Retirement plans assets	18,229	18,457
Other assets	9,272	10,332
Acquired intangible assets, net	114,321	125,480
Goodwill	409,933	416,431
Total assets	<u>\$2,820,388</u>	<u>\$2,787,014</u>
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable	\$ 129,633	\$ 126,617
Accrued employees' compensation and withholdings	119,226	163,883
Deferred revenue and customer advances	98,815	104,876
Other accrued liabilities	87,274	70,871
Operating lease liabilities	19,591	19,476
Contingent consideration	662	9,106
Income taxes payable	58,760	44,200
Total current liabilities	513,961	539,029
Retirement plans liabilities	125,970	134,471
Long-term deferred revenue and customer advances	50,791	45,974
Long-term other accrued liabilities	19,941	19,535
Long-term contingent consideration	19,810	30,599
Deferred tax liabilities	11,628	14,070
Long-term operating lease liabilities	46,328	45,849
Long-term incomes taxes payable	82,820	82,642
Debt	398,466	394,687
Total liabilities	1,269,715	1,306,856
Commitments and contingencies (See Note Q)		
<b>SHAREHOLDERS' EQUITY</b>		
Common stock, \$0.125 par value, 1,000,000 shares authorized, 165,938 and 166,410 shares issued and outstanding at March 29, 2020 and December 31, 2019, respectively	20,742	20,801
Additional paid-in capital	1,721,367	1,720,129
Accumulated other comprehensive loss	(27,113)	(18,854)
Accumulated deficit	(164,323)	(241,918)
Total shareholders' equity	1,550,673	1,480,158
Total liabilities and shareholders' equity	<u>\$2,820,388</u>	<u>\$2,787,014</u>

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, 2019, are an integral part of the condensed consolidated financial statements.

## TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS  
(Unaudited)

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands, except per share amounts)	
Revenues:		
Products	\$610,906	\$393,442
Services	93,449	100,657
Total revenues	<u>704,355</u>	<u>494,099</u>
Cost of revenues:		
Cost of products	259,996	165,368
Cost of services	38,809	41,096
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	<u>298,805</u>	<u>206,464</u>
Gross profit	405,550	287,635
Operating expenses:		
Selling and administrative	111,388	102,013
Engineering and development	85,159	76,791
Acquired intangible assets amortization	9,891	10,634
Restructuring and other	(7,606)	5,112
Total operating expenses	<u>198,832</u>	<u>194,550</u>
Income from operations	206,718	93,085
Non-operating (income) expense:		
Interest income	(2,751)	(4,989)
Interest expense	5,551	5,520
Other (income) expense, net	6,849	(1,425)
Income before income taxes	197,069	93,979
Income tax provision (benefit)	20,878	(15,159)
Net income	<u>\$176,191</u>	<u>\$109,138</u>
Net income per common share:		
Basic	<u>\$ 1.06</u>	<u>\$ 0.63</u>
Diluted	<u>\$ 0.97</u>	<u>\$ 0.62</u>
Weighted average common shares—basic	<u>166,589</u>	<u>173,532</u>
Weighted average common shares—diluted	<u>180,736</u>	<u>176,972</u>
Cash dividend declared per common share	<u>\$ 0.10</u>	<u>\$ 0.09</u>

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, 2019, are an integral part of the condensed consolidated financial statements.

## TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
(Unaudited)

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
Net income	\$176,191	\$109,138
Other comprehensive income, net of tax:		
Foreign currency translation adjustment, net of tax of \$0, \$0, respectively	(8,779)	(4,659)
Available-for-sale marketable securities:		
Unrealized gains on debt securities arising during period, net of tax of \$187, \$577, respectively	1,037	2,100
Less: Reclassification adjustment for gains included in net income, net of tax of \$(145), \$(20), respectively	(515)	(70)
	522	2,030
Defined benefit pension and post-retirement plans:		
Amortization of prior service benefit included in net periodic pension and post-retirement benefit, net of tax of \$0, \$(11), respectively	(2)	(37)
Other comprehensive loss	(8,259)	(2,666)
Comprehensive income	<u>\$167,932</u>	<u>\$106,472</u>

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, 2019, are an integral part of the condensed consolidated financial statements.

## TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY  
(Unaudited)

	Common Stock Shares	Common Stock Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity
	(in thousands)					
<b>For the Three Months Ended March 29, 2020</b>						
Balance, December 31, 2019	166,410	\$20,801	\$1,720,129	\$ (18,854)	\$ (241,918)	\$ 1,480,158
Net issuance of common stock under stock-based plans	872	109	(10,045)			(9,936)
Stock-based compensation expense			11,283			11,283
Repurchase of common stock	(1,344)	(168)			(81,897)	(82,065)
Cash dividends (\$0.10 per share)					(16,699)	(16,699)
Net income					176,191	176,191
Other comprehensive loss				(8,259)		(8,259)
Balance, March 29, 2020	<u>165,938</u>	<u>20,742</u>	<u>1,721,367</u>	<u>(27,113)</u>	<u>(164,323)</u>	<u>1,550,673</u>
<b>For the Three Months Ended March 31, 2019</b>						
Balance, December 31, 2018	175,522	\$21,940	\$1,671,645	\$ (13,040)	\$ (158,191)	\$ 1,522,354
Net issuance of common stock under stock-based plans	1,287	161	(210)			(49)
Stock-based compensation expense			8,562			8,562
Repurchase of common stock	(4,456)	(557)			(150,913)	(151,470)
Cash dividends (\$0.09 per share)					(15,641)	(15,641)
Net income					109,138	109,138
Other comprehensive loss				(2,666)		(2,666)
Balance, March 31, 2019	<u>172,353</u>	<u>\$21,544</u>	<u>\$1,679,997</u>	<u>\$ (15,706)</u>	<u>\$ (215,607)</u>	<u>\$ 1,470,228</u>

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, 2019, are an integral part of the condensed consolidated financial statements.

## TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
(Unaudited)

	<u>For the Three Months Ended</u>	
	<u>March 29,</u> <u>2020</u>	<u>March 31,</u> <u>2019</u>
	(in thousands)	
Cash flows from operating activities:		
Net income	\$ 176,191	\$ 109,138
Adjustments to reconcile net income from operations to net cash provided by operating activities:		
Depreciation	18,489	16,651
Amortization	13,391	12,942
Stock-based compensation	10,460	9,474
Provision for excess and obsolete inventory	4,057	2,397
Deferred taxes	(1,825)	1,206
Contingent consideration adjustment	(10,020)	2,970
Losses (gains) on investments	4,657	(2,828)
Other	503	219
Changes in operating assets and liabilities, net of businesses acquired:		
Accounts receivable	(126,779)	(41,706)
Inventories	15,818	(2,917)
Prepayments and other assets	(39,620)	(18,648)
Accounts payable and other liabilities	(35,323)	(53,323)
Deferred revenue and customer advances	(913)	6,455
Retirement plans contributions	(1,262)	(1,210)
Income taxes	15,278	(22,804)
Net cash provided by operating activities	<u>43,102</u>	<u>18,016</u>
Cash flows from investing activities:		
Purchases of property, plant and equipment	(36,700)	(25,711)
Purchases of marketable securities	(187,119)	(375,184)
Proceeds from maturities of marketable securities	98,457	141,201
Proceeds from sales of marketable securities	15,005	5,440
Acquisition of businesses, net of cash acquired	149	(6,970)
Proceeds from life insurance	—	273
Net cash used for investing activities	<u>(110,208)</u>	<u>(260,951)</u>
Cash flows from financing activities:		
Issuance of common stock under stock purchase and stock option plans	12,752	14,268
Repurchase of common stock	(79,039)	(156,468)
Dividend payments	(16,686)	(15,627)
Payments related to net settlement of employee stock compensation awards	(22,070)	(14,318)
Payments of contingent consideration	(8,852)	(27,615)
Net cash used for financing activities	<u>(113,895)</u>	<u>(199,760)</u>
Effects of exchange rate changes on cash and cash equivalents	571	(329)
Decrease in cash and cash equivalents	<u>(180,430)</u>	<u>(443,024)</u>
Cash and cash equivalents at beginning of period	773,924	926,752
Cash and cash equivalents at end of period	<u>\$ 593,494</u>	<u>\$ 483,728</u>

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, 2019, are an integral part of the condensed consolidated financial statements.



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 robotic arms, autonomous mobile robots, and advanced robotic control software used by global manufacturing and light industrial customers to improve quality, increase manufacturing and material handling 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”);
- industrial automation (“Industrial Automation”) products; and
- wireless test (“Wireless Test”) systems.

**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 statement of such interim financial statements. Certain prior year amounts were reclassified to conform to the current year presentation. The December 31, 2019 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 March 2, 2020, for the year ended December 31, 2019.

*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. Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and our markets. Teradyne is not aware of any specific event or circumstance that would require an update to its estimates or judgments or a revision of the carrying value of its assets or liabilities as of May 4, 2020, the date of issuance of this Quarterly Report on Form 10-Q. These estimates may change, as new events occur and additional information is obtained. Actual results could differ significantly from these estimates under different assumptions or conditions.

*Goodwill*

On January 26, 2017, the Financial Accounting Standards Board (“FASB”) issued ASU 2017-04, “Intangibles—Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment.” The new guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Teradyne adopted this standard on January 1, 2020, on a prospective basis. The adoption of ASU 2017-04 did not have a material impact on the consolidated statement of operations, cash flows, or earnings per share. Teradyne assesses goodwill for impairment at least annually in the fourth quarter, as of December 31, on a reporting unit basis, or more frequently, when events and circumstances occur indicating that the recorded goodwill may be impaired. Under ASU 2017-04, goodwill impairment will be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts.

*Credit Losses*

In June 2016, the FASB issued ASU 2016-13, “Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.” This standard introduced the expected credit losses methodology for the measurement of credit losses on financial assets that are not measured at fair value through net income and replaces the “incurred loss” model with an “expected credit loss” model that requires consideration of a broader range of information to estimate expected credit losses over the lifetime of the asset. Teradyne adopted this standard on January 1, 2020 on a modified retrospective basis. The adoption of ASU 2016-13 did not have a material impact on the consolidated statement of operations, balance sheets, cash flows, or earnings per share.

**C. ACQUISITIONS**

***AutoGuide LLC***

On November 13, 2019, Teradyne acquired 100% of the membership interests of AutoGuide, LLC (“AutoGuide”), a maker of high-payload autonomous mobile robots (“AMRs”), based in Chelmsford, MA, an emerging and fast growing segment of the global forklift market. The total purchase price was approximately \$81.6 million, which included cash paid of approximately \$57.6 million and \$24.0 million in fair value of contingent consideration payable upon achievement of certain performance targets, extending potentially through 2022. At March 29, 2020, the maximum contingent consideration that could be paid is \$106.9 million.

The contingent consideration is payable upon achievement of certain thresholds and targets for revenue and earnings before interest and taxes for periods from January 1, 2019 to December 31, 2020, January 1, 2019 to December 31, 2021, and January 1, 2019 to December 31, 2022.

The valuation of the contingent consideration is dependent on the following assumptions: forecasted revenues, revenue volatility, earnings before interest and taxes, and discount rate. These assumptions were estimated based on a review of the historical and projected results.

The AutoGuide 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. AutoGuide’s AMRs are used for material transport of payloads up to 4,500 kg in manufacturing, warehouse and logistics applications. These products complement MiR’s lower payload products and expand the Industrial Automation segment, which is a key component of Teradyne’s growth strategy.

The allocation of the total purchase price to AutoGuide’s net tangible assets 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 assets in the amount of \$41.2 million was allocated to goodwill, which is deductible for tax purposes. AutoGuide’s results have been included in Teradyne’s Industrial Automation segment from the date of acquisition.

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

	<b>Purchase Price Allocation (in thousands)</b>
Goodwill	\$ 41,223
Intangible assets	37,660
<b>Tangible assets acquired and liabilities assumed:</b>	
Other current assets	3,661
Non-current assets	1,227
Accounts payable and current liabilities	(1,223)
Long-term other liabilities	(949)
Total purchase price	<u>\$ 81,599</u>

Teradyne estimated the fair value of intangible assets using the income approach. Forecasted revenues is the key assumption for estimating the fair value. 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	\$ 24,590	6.0
Customer relationships	7,360	6.0
Trademarks and tradenames	5,450	7.0
Backlog	260	0.3
Total intangible assets	<u>\$ 37,660</u>	6.1

## [Table of Contents](#)

The following unaudited pro forma information gives effect to the acquisition of AutoGuide as if the acquisition occurred on January 1, 2018. 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:

	<u>For the Three Months</u> <u>Ended</u> <u>March 31, 2019</u> <u>(in thousands, except</u> <u>per share amounts)</u>
Revenues	\$ 495,599
Net income	\$ 107,289
Net income per common share:	
Basic	\$ 0.62
Diluted	\$ 0.61

### **Lemsys SA**

On January 30, 2019, Teradyne acquired all of the issued and outstanding shares of Lemsys SA (“Lemsys”) for a total purchase price of approximately \$9.1 million. Lemsys strengthens Teradyne’s position in the electrification trends of vehicles, solar and wind power, and industrial applications. The Lemsys acquisition was accounted for as a business combination and, accordingly, the results have been included in Teradyne’s Semiconductor Test segment from the date of acquisition. Teradyne’s final allocation of the purchase price was goodwill of \$1.4 million, which is not deductible for tax purposes, acquired intangible assets of \$4.6 million with an average estimated useful life of 5.2 years, and \$3.1 million of net tangible assets. The acquisition was not material to Teradyne’s consolidated financial statements.

[Table of Contents](#)

**D. REVENUE**

*Disaggregation of Revenue*

The following table provides information about disaggregated revenue by timing of revenue recognition, primary geographical market, and major product lines.

	Semiconductor Test			Industrial Automation			Wireless Test	Corporate and Other	Total
	System on a Chip	Memory	System Test	Universal Robots	Mobile Industrial Robots	AutoGuide			
<b>For the Three Months Ended March 29, 2020 (1)</b>									
<b>Timing of Revenue Recognition</b>									
Point in Time	\$348,044	\$79,398	\$100,712	\$47,502	\$ 9,097	\$ 1,124	\$41,056	\$ —	\$626,933
Over Time	52,095	4,952	15,364	2,195	41	346	2,429	—	77,422
<b>Total</b>	<b>\$400,139</b>	<b>\$84,350</b>	<b>\$116,076</b>	<b>\$49,697</b>	<b>\$ 9,138</b>	<b>\$ 1,470</b>	<b>\$43,485</b>	<b>\$ —</b>	<b>\$704,355</b>
<b>Geographical Market</b>									
Asia Pacific	\$362,732	\$76,110	\$ 80,017	\$10,917	\$ 1,593	\$ —	\$37,805	\$ —	\$569,174
Americas	17,386	6,896	28,291	14,743	3,465	1,470	4,688	—	76,939
Europe, Middle East and Africa	20,021	1,344	7,768	24,037	4,080	—	992	—	58,242
<b>Total</b>	<b>\$400,139</b>	<b>\$84,350</b>	<b>\$116,076</b>	<b>\$49,697</b>	<b>\$ 9,138</b>	<b>\$ 1,470</b>	<b>\$43,485</b>	<b>\$ —</b>	<b>\$704,355</b>
<b>For the Three Months Ended March 31, 2019 (1)</b>									
<b>Timing of Revenue Recognition</b>									
Point in Time	\$238,755	\$43,775	\$ 45,237	\$55,379	\$ 9,106	\$ —	\$27,454	\$ (151)	\$419,555
Over Time	54,051	4,272	12,983	1,651	—	—	1,587	—	74,544
<b>Total</b>	<b>\$292,806</b>	<b>\$48,047</b>	<b>\$ 58,220</b>	<b>\$57,030</b>	<b>\$ 9,106</b>	<b>\$ —</b>	<b>\$29,041</b>	<b>\$ (151)</b>	<b>\$494,099</b>
<b>Geographical Market</b>									
Asia Pacific	\$260,326	\$38,851	\$ 24,285	\$14,618	\$ 1,727	\$ —	\$26,019	\$ —	\$365,826
Americas	16,167	8,763	26,809	15,803	3,539	—	2,241	(151)	73,171
Europe, Middle East and Africa	16,313	433	7,126	26,609	3,840	—	781	—	55,102
<b>Total</b>	<b>\$292,806</b>	<b>\$48,047</b>	<b>\$ 58,220</b>	<b>\$57,030</b>	<b>\$ 9,106</b>	<b>\$ —</b>	<b>\$29,041</b>	<b>\$ (151)</b>	<b>\$494,099</b>

(1) Includes \$1.8 million and \$1.7 million in 2020 and 2019, for leases of Teradyne's systems recognized outside ASC 606 "Revenue from Contracts with Customers."

*Contract Balances*

For the three months ended March 29, 2020 and March 31, 2019, Teradyne recognized \$39.5 million and \$19.5 million, respectively, that was previously included within the deferred revenue and customer advances balances. This revenue primarily relates to undelivered hardware, extended warranties, training, application support, and post contract support. Each of these represents a distinct performance obligation. Teradyne expects to recognize 66% of the remaining performance obligation in the next 12 months, 26% in 1-3 years, and the remainder thereafter.

*Accounts Receivable*

Teradyne sells certain trade accounts receivables on a non-recourse basis to third-party financial institutions pursuant to factoring agreements. Teradyne accounts for these transactions as sales of receivables and presents cash proceeds as a cash provided by operating activities in the consolidated statements of cash flows. Total trade accounts receivable sold under the factoring agreements were \$46.8 million and \$41.7 million for the three months ended March 29, 2020 and March 31, 2019, respectively. Factoring fees for the sales of receivables were recorded in interest expense and were not material.

## [Table of Contents](#)

### E. INVENTORIES

Inventories, net consisted of the following at March 29, 2020 and December 31, 2019:

	<u>March 29, 2020</u>	<u>December 31, 2019</u>
	(in thousands)	
Raw material	\$102,109	\$ 118,595
Work-in-process	39,848	32,695
Finished goods	41,021	45,401
	<u>\$182,978</u>	<u>\$ 196,691</u>

Inventory reserves at March 29, 2020 and December 31, 2019 were \$105.3 million and \$103.6 million, respectively.

### F. FINANCIAL INSTRUMENTS

#### Cash Equivalents

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

#### Marketable Securities

Teradyne's available-for-sale debt securities are classified as Level 2 and equity and debt mutual funds are classified as Level 1. Contingent consideration is classified as Level 3. The vast majority of Level 2 securities are fixed income securities priced by third party pricing vendors. These pricing vendors utilize the most recent observable market information in pricing these securities or, if specific prices are not available, use other observable inputs like market transactions involving identical or comparable securities.

During the three months ended March 29, 2020 and March 31, 2019, there were no transfers in or out of Level 1, Level 2, or Level 3 financial instruments.

Realized gains recorded in the three months ended March 29, 2020 and March 31, 2019 were \$1.4 million and \$0.1 million, respectively. Realized losses recorded in the three months ended March 29, 2020 and March 31, 2019 were \$0.1 million. Realized gains and losses are included in other (income) expense, net.

Unrealized losses on equity securities recorded in the three months ended March 29, 2020 were \$6.0 million. Unrealized gains on equity securities recorded in the three months ended March 31, 2019 were \$2.8 million. Unrealized gains and losses on equity securities are included in other (income) expense, net. Unrealized gains and losses on available-for-sale debt securities are included in accumulated other comprehensive income (loss).

The cost of securities sold is based on the specific identification method.

## Table of Contents

The following table sets forth by fair value hierarchy Teradyne's financial assets and liabilities that were measured at fair value on a recurring basis as of March 29, 2020 and December 31, 2019.

	March 29, 2020			Total
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
(in thousands)				
<b>Assets</b>				
Cash	\$ 270,460	\$ —	\$ —	\$270,460
Cash equivalents	244,176	78,858	—	323,034
Available-for-sale securities:				
Commercial paper	—	101,947	—	101,947
U.S. Treasury securities	—	85,632	—	85,632
Corporate debt securities	—	67,467	—	67,467
Certificates of deposit and time deposits	—	25,776	—	25,776
Debt mutual funds	5,237	—	—	5,237
U.S. government agency securities	—	4,402	—	4,402
Non-U.S. government securities	—	589	—	589
Equity securities:				
Mutual funds	20,464	—	—	20,464
	<u>\$ 540,337</u>	<u>\$ 364,671</u>	<u>\$ —</u>	<u>\$905,008</u>
Derivative assets	—	344	—	344
Total	<u>\$ 540,337</u>	<u>\$ 365,015</u>	<u>\$ —</u>	<u>\$905,352</u>
<b>Liabilities</b>				
Contingent consideration	\$ —	\$ —	\$ 20,472	\$ 20,472
Derivative liabilities	—	254	—	254
Total	<u>\$ —</u>	<u>\$ 254</u>	<u>\$ 20,472</u>	<u>\$ 20,726</u>

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
<b>Assets</b>				
Cash and cash equivalents	\$ 514,636	\$ 78,858	\$ —	\$593,494
Marketable securities	—	211,001	—	211,001
Long-term marketable securities	25,701	74,812	—	100,513
Prepayments and other current assets	—	344	—	344
Total	<u>\$ 540,337</u>	<u>\$ 365,015</u>	<u>\$ —</u>	<u>\$905,352</u>
<b>Liabilities</b>				
Other current liabilities	\$ —	\$ 254	\$ —	\$ 254
Contingent consideration	—	—	662	662
Long-term contingent consideration	—	—	19,810	19,810
Total	<u>\$ —</u>	<u>\$ 254</u>	<u>\$ 20,472</u>	<u>\$ 20,726</u>

[Table of Contents](#)

December 31, 2019

	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
<b>Assets</b>				
Cash	\$ 311,975	\$ —	\$ —	311,975
Cash equivalents	410,285	51,664	—	461,949
Available-for-sale securities:				
Corporate debt securities	—	97,307	—	97,307
Commercial paper	—	54,149	—	54,149
U.S. Treasury securities	—	42,382	—	42,382
U.S. government agency securities	—	9,952	—	9,952
Debt mutual funds	6,888	—	—	6,888
Certificates of deposit and time deposits	—	4,751	—	4,751
Non-U.S. government securities	—	592	—	592
Equity securities:				
Equity mutual funds	25,772	—	—	25,772
	<u>\$ 754,920</u>	<u>\$ 260,797</u>	<u>\$ —</u>	<u>\$ 1,015,717</u>
Derivative assets	—	528	—	528
Total	<u>\$ 754,920</u>	<u>\$ 261,325</u>	<u>\$ —</u>	<u>\$ 1,016,245</u>
<b>Liabilities</b>				
Contingent consideration	\$ —	\$ —	\$ 39,705	\$ 39,705
Derivative liabilities	—	203	—	203
Total	<u>\$ —</u>	<u>\$ 203</u>	<u>\$ 39,705</u>	<u>\$ 39,908</u>

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
<b>Assets</b>				
Cash and cash equivalents	\$ 722,260	\$ 51,664	\$ —	\$ 773,924
Marketable securities	—	137,303	—	137,303
Long-term marketable securities	32,660	71,830	—	104,490
Prepayments and other current assets	—	528	—	528
Total	<u>\$ 754,920</u>	<u>\$ 261,325</u>	<u>\$ —</u>	<u>\$ 1,016,245</u>
<b>Liabilities</b>				
Other accrued liabilities	\$ —	\$ 203	\$ —	\$ 203
Contingent consideration	—	—	9,106	9,106
Long-term contingent consideration	—	—	30,599	30,599
Total	<u>\$ —</u>	<u>\$ 203</u>	<u>\$ 39,705</u>	<u>\$ 39,908</u>

## Table of Contents

Changes in the fair value of Level 3 contingent consideration for the three months ended March 29, 2020 and March 31, 2019 were as follows:

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands)	
Balance at beginning of period	\$ 39,705	\$ 70,543
Foreign currency impact	(361)	(610)
Payments (a)(b)	(8,852)	(34,590)
Fair value adjustment (c)(d)	(10,020)	2,970
Balance at end of period	<u>\$ 20,472</u>	<u>\$ 38,313</u>

- (a) In the three months ended March 29, 2020, Teradyne paid \$8.9 million of contingent consideration for the earn-out in connection with the acquisition of MiR.
- (b) In the three months ended March 31, 2019, Teradyne paid \$30.8 million and \$3.8 million of contingent consideration for the earn-outs in connection with the acquisitions of MiR and Universal Robots A/S (“Universal Robots”), respectively.
- (c) In the three months ended March 29, 2020, the fair value of contingent consideration for the earn-outs in connection with the acquisitions of MiR and AutoGuide decreased by \$2.9 million and \$7.1 million, respectively, due to lower forecasted results.
- (d) In the three months ended March 31, 2019, the fair value of contingent consideration for the earn-out in connection with the acquisition of MiR increased by \$3.0 million.

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

Liability	March 29, 2020 Fair Value (in thousands)	Valuation Technique	Unobservable Inputs	Weighted Average
Contingent consideration (AutoGuide)	\$ 19,810	Monte Carlo Simulation	Revenue volatility	14.0%
			Discount Rate	4.4%
Contingent consideration (MiR)	\$ 662	Monte Carlo Simulation	Revenue volatility	16.0%
			Discount Rate	2.2%

As of March 29, 2020, the significant unobservable inputs used in the Monte Carlo simulation to fair value the AutoGuide and MiR contingent consideration include forecasted revenues, revenue volatility, earnings before interest and taxes, and discount rate. Increases or decreases in the inputs would result in a higher or lower fair value measurement.

As of March 29, 2020, the maximum amount of contingent consideration that could be paid in connection with the acquisition of AutoGuide is \$106.9 million. The earn-out periods end on December 31, 2020, December 31, 2021 and December 31, 2022.

As of March 29, 2020, the maximum amount of contingent consideration that could be paid in connection with the acquisition of MiR is \$61.4 million. The remaining earn-out period ends on December 31, 2020.



## Table of Contents

The carrying amounts and fair values of Teradyne's financial instruments at March 29, 2020 and December 31, 2019 were as follows:

	March 29, 2020		December 31, 2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(in thousands)			
<b>Assets</b>				
Cash and cash equivalents	\$ 593,494	\$593,494	\$ 773,924	\$ 773,924
Marketable securities	311,514	311,514	241,793	241,793
Derivative assets	344	344	528	528
<b>Liabilities</b>				
Contingent consideration	20,472	20,472	39,705	39,705
Derivative liabilities	254	254	203	203
Convertible debt (1)	398,466	829,438	394,687	1,010,275

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

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 table summarizes the composition of available-for-sale marketable securities at March 29, 2020:

	March 29, 2020				Fair Market Value of Investments with Unrealized Losses
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss) (in thousands)	Fair Market Value	
Commercial paper	\$101,915	\$ 33	\$ (1)	\$ 101,947	\$ 1,296
U.S. Treasury securities	82,680	2,958	(6)	85,632	96
Corporate debt securities	65,696	2,951	(1,180)	67,467	40,891
Certificates of deposit and time deposits	25,769	7	—	25,776	—
Debt mutual funds	5,089	148	—	5,237	—
U.S. government agency securities	4,335	67	—	4,402	—
Non-U.S. government securities	589	—	—	589	—
	<u>\$286,073</u>	<u>\$ 6,164</u>	<u>\$ (1,187)</u>	<u>\$ 291,050</u>	<u>\$ 42,283</u>

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss) (in thousands)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
Marketable securities	\$210,722	\$ 430	\$ (151)	\$ 211,001	\$ 32,037
Long-term marketable securities	75,351	5,734	(1,036)	80,049	10,246
	<u>\$286,073</u>	<u>\$ 6,164</u>	<u>\$ (1,187)</u>	<u>\$ 291,050</u>	<u>\$ 42,283</u>

## [Table of Contents](#)

The following table summarizes the composition of available-for-sale marketable securities at December 31, 2019:

	December 31, 2019				Fair Market Value of Investments with Unrealized Losses
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss) (in thousands)	Fair Market Value	
Corporate debt securities	\$ 93,267	\$ 4,081	\$ (41)	\$ 97,307	\$ 2,009
Commercial paper	54,124	26	(1)	54,149	1,391
U.S. Treasury securities	42,167	431	(216)	42,382	17,556
U.S. government agency securities	9,942	14	(4)	9,952	3,043
Debt mutual funds	6,753	135	—	6,888	—
Certificates of deposit and time deposits	4,751	—	—	4,751	—
Non-U.S. government securities	592	—	—	592	—
	<u>\$211,596</u>	<u>\$ 4,687</u>	<u>\$ (262)</u>	<u>\$ 216,021</u>	<u>\$ 23,999</u>

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss) (in thousands)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
Marketable securities	\$137,144	\$ 160	\$ (1)	\$ 137,303	\$ 2,922
Long-term marketable securities	74,452	4,527	(261)	78,718	21,077
	<u>\$211,596</u>	<u>\$ 4,687</u>	<u>\$ (262)</u>	<u>\$ 216,021</u>	<u>\$ 23,999</u>

As of March 29, 2020 and December 31, 2019, the fair market value of investments with unrealized losses less than one year totaled \$42.3 million and \$23.6 million, respectively.

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 March 29, 2020 and December 31, 2019 were not other than temporary.

The contractual maturities of investments in available-for-sale securities held at March 29, 2020 were as follows:

	March 29, 2020	
	Cost	Fair Market Value
	(in thousands)	
Due within one year	\$210,722	\$ 211,001
Due after 1 year through 5 years	18,933	19,465
Due after 5 years through 10 years	12,440	13,160
Due after 10 years	38,889	42,187
Total	<u>\$280,984</u>	<u>\$ 285,813</u>

Contractual maturities of investments in available-for-sale securities held at March 29, 2020 exclude \$5.2 million of debt mutual funds as they do not have a contractual maturity date.

## 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.

## [Table of Contents](#)

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 at March 29, 2020 and December 31, 2019 was \$132.1 million and \$144.9 million, respectively.

Gains and losses on foreign currency forward contracts and foreign currency remeasurement gains and losses on monetary assets and liabilities are included in other (income) expense, net.

The following table summarizes the fair value of derivative instruments as of March 29, 2020 and December 31, 2019:

	<u>Balance Sheet Location</u>	<u>March 29, 2020</u>	<u>December 31, 2019</u>
(in thousands)			
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Prepayments	\$ 344	\$ 528
Foreign exchange contracts	Other current liabilities	(254)	(203)
Total derivatives		<u>\$ 90</u>	<u>\$ 325</u>

The following table summarizes the effect of derivative instruments recognized in the statement of operations for the three months ended March 29, 2020 and March 31, 2019:

	<u>Location of Losses Recognized in Statement of Operations</u>	<u>For the Three Months Ended</u>	
		<u>March 29, 2020</u>	<u>March 31, 2019</u>
(in thousands)			
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Other (income) expense, net	\$ 4,011	\$ 3,934

- (1) The table does not reflect the corresponding gains and losses from the remeasurement of the monetary assets and liabilities denominated in foreign currencies.
- (2) For the three months ended March 29, 2020 and March 31, 2019, net gains from the remeasurement of monetary assets and liabilities denominated in foreign currencies were \$2.0 million and \$3.2 million, respectively.

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

## G. DEBT

### Convertible Senior Notes

On December 12, 2016, Teradyne completed a private offering of \$460.0 million aggregate principal amount of 1.25% convertible senior unsecured notes (the "Notes") due December 15, 2023 and received net proceeds, after issuance costs, of approximately \$450.8 million, \$33.0 million of which was used to pay the net cost of the convertible note hedge transactions and \$50.1 million of which was used to repurchase 2.0 million shares of Teradyne's common stock under its existing stock repurchase program from purchasers of the Notes in privately negotiated transactions effected through one of the initial purchasers or its affiliates conducted concurrently with the pricing of the Note offering. The Notes will mature on December 15, 2023, unless earlier repurchased or converted. The Notes bear interest from December 12, 2016 at a rate of 1.25% per year payable semiannually in arrears on June 15 and December 15 of each year. The Notes will be convertible at the option of the noteholders at any time prior to the close of business on the business day immediately preceding September 15, 2023, only under the following circumstances: (1) during any calendar quarter beginning after March 31, 2017 (and only during such calendar quarter), if the closing sale price of Teradyne's common stock, for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than 130% of the conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price (as defined in the Indenture) per \$1,000 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the closing sale price of the Teradyne's common stock and the conversion rate on each such trading day; and (3) upon the occurrence of specified corporate events. On or after September 15, 2023 until the close of business on the second scheduled

## [Table of Contents](#)

trading day immediately preceding the maturity date, holders may convert their Notes at any time, regardless of the foregoing circumstances. Teradyne may satisfy its conversion obligation by paying or delivering cash, shares of its common stock or a combination of cash and shares of its common stock, at Teradyne's election. As of March 29, 2020, the conversion price was approximately \$31.61 per share of Teradyne's common stock. The conversion rate is subject to adjustment under certain circumstances. As of May 4, 2020, eight holders exercised the option to convert seventeen thousand dollars worth of Notes.

Concurrent with the offering of the Notes, Teradyne entered into convertible note hedge transactions (the "Note Hedge Transactions") with the initial purchasers or their affiliates (the "Option Counterparties"). The Note Hedge Transactions cover, subject to customary anti-dilution adjustments, the number of shares of the common stock that underlie the Notes, with a strike price equal to the conversion price of the Notes of \$31.61. The Note Hedge Transactions cover, subject to customary anti-dilution adjustments, approximately 14.6 million shares of Teradyne's common stock.

Separately and concurrent with the pricing of the Notes, Teradyne entered into warrant transactions with the Option Counterparties (the "Warrant Transactions") in which it sold net-share-settled (or, at its election subject to certain conditions, cash-settled) warrants to the Option Counterparties. The Warrant Transactions cover, subject to customary anti-dilution adjustments, approximately 14.6 million shares of common stock. As of March 29, 2020, the strike price of the warrants was approximately \$39.66 per share. The strike price is subject to adjustment under certain circumstances. The Warrant Transactions could have a dilutive effect to Teradyne's common stock to the extent that the market price per share of Teradyne's common stock, as measured under the terms of the Warrant Transactions, exceeds the applicable strike price of the warrants.

The Note Hedge Transactions are expected to reduce the potential dilution to Teradyne's common stock upon any conversion of the Notes. However, the Warrant Transactions could separately have a dilutive effect to the extent that the market value per share of Teradyne's common stock exceeds the applicable strike price of the warrant. The net cost of the Note Hedge Transactions, after being partially offset by the proceeds from the sale of the warrants, was approximately \$33.0 million.

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

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

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

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

The provisions of ASC 470-20, "*Debt with Conversion and Other Options*," are applicable to the Notes. ASC 470-20 requires Teradyne to separately account for the liability (debt) and equity (conversion feature) components of the Notes in a manner that reflects Teradyne's nonconvertible debt borrowing rate at the date of issuance when interest cost is recognized in subsequent periods.

## [Table of Contents](#)

Teradyne allocated \$100.8 million of the \$460.0 million principal amount of the Notes to the equity component, which represents a discount to the debt and will be amortized to interest expense using the effective interest method through December 2023. Accordingly, Teradyne's effective annual interest rate on the Notes will be approximately 5.0%. The Notes are classified as long-term debt in the balance sheet based on their December 15, 2023 maturity date. Debt issuance costs of approximately \$7.2 million are being amortized to interest expense using the effective interest method over the seven-year term of the Notes. As of March 29, 2020, debt issuance costs were approximately \$4.1 million.

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

	<u>March 29, 2020</u>	<u>December 31, 2019</u>
	(in thousands)	
Debt Principal	\$459,987	\$ 460,000
Unamortized discount	61,521	65,313
Net Carrying amount of convertible debt	<u>\$398,466</u>	<u>\$ 394,687</u>

  

	For the Three Months Ended	
	<u>March 29, 2020</u>	<u>March 31, 2019</u>
	(in thousands)	
Contractual interest expense on the coupon	\$ 1,438	\$ 1,438
Amortization of the discount component and debt issue fees recognized as interest expense	3,792	3,608
Total interest expense on the convertible debt	<u>\$ 5,230</u>	<u>\$ 5,046</u>

As of March 29, 2020, the remaining unamortized discount was \$61.5 million, which will be amortized over 3.7 years using the effective interest rate method. The carrying amount of the equity component was \$100.8 million. As of March 29, 2020, the if-converted value of the Notes was \$798.3 million.

## H. PREPAYMENTS

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

	<u>March 29, 2020</u>	<u>December 31, 2019</u>
	(in thousands)	
Contract manufacturer and supplier prepayments	\$173,082	\$ 143,392
Prepaid taxes	9,667	8,046
Prepaid maintenance and other services	10,828	8,503
Other prepayments	17,890	16,753
Total prepayments	<u>\$211,467</u>	<u>\$ 176,694</u>

## I. 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:

	<u>March 29, 2020</u>	<u>December 31, 2019</u>
	(in thousands)	
Maintenance, service and training	\$ 68,483	\$ 63,815
Extended warranty	33,503	30,677
Customer advances, undelivered elements and other	47,620	56,358
Total deferred revenue and customer advances	<u>\$149,606</u>	<u>\$ 150,850</u>

**J. PRODUCT WARRANTY**

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands)	
Balance at beginning of period	\$ 8,996	\$ 7,909
Acquisition	—	14
Accruals for warranties issued during the period	5,066	3,066
Accruals related to pre-existing warranties	1,056	1,330
Settlements made during the period	(4,147)	(4,567)
Balance at end of period	<u>\$ 10,971</u>	<u>\$ 7,752</u>

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands)	
Balance at beginning of period	\$ 30,677	\$ 27,422
Deferral of new extended warranty revenue	7,600	5,820
Recognition of extended warranty deferred revenue	(4,774)	(6,000)
Balance at end of period	<u>\$ 33,503</u>	<u>\$ 27,242</u>

**K. STOCK-BASED COMPENSATION**

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

Service-based restricted stock unit awards granted to employees vest in equal annual installments over four years. Restricted stock unit awards granted to non-employee directors vest after a one-year period, with 100% of the award vesting on the earlier of (a) the first anniversary of the grant date or (b) the date of the following year's Annual Meeting of Shareholders. Teradyne expenses the cost of the restricted stock unit awards subject to service-based vesting, which is determined to be the fair market value of the shares at the date of grant, ratably over the period during which the restrictions lapse.

Performance-based restricted stock units ("PRsUs") granted to Teradyne's executive officers may have a performance metric based on relative total shareholder return ("TSR"). Teradyne's three-year TSR performance is 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 0% to 200% of the target shares capped at four times the grant date value for grants prior to 2019. 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 shorter of the three-year service period or the period from the grant to the date described in the retirement provisions below. Compensation expense for executive officers meeting the retirement provisions prior to the grant date is recognized during the 365 days following the grant. 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.

## Table of Contents

PRsUs granted to Teradyne's executive officers may also have a performance metric based on three-year cumulative non-GAAP profit before interest and tax ("PBIT") as a percent of Teradyne's revenue. 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; non-cash convertible debt interest expense; 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 0% to 200% 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 shorter of the three-year service period or the period from the grant date to the date described in the retirement provisions below. Compensation expense for executive officers meeting the retirement provisions prior to the grant date is recognized during the 365 days following the grant. 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.

If a PRsU 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.

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

During the three months ended March 29, 2020 and March 31, 2019, Teradyne granted 0.4 million and 0.6 million of service-based restricted stock unit awards to employees at a weighted average grant date fair value of \$70.98 and \$35.88, respectively.

During the three months ended March 29, 2020 and March 31, 2019, Teradyne granted 0.1 million of PBIT PRsUs with a grant date fair value of \$70.94 and \$35.67, respectively.

During the three months ended March 29, 2020 and March 31, 2019, Teradyne granted 0.1 million TSR PRsUs, with a grant date fair value of \$89.93 and \$48.47, respectively. The fair value was estimated using the Monte Carlo simulation model with the following assumptions:

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
Risk-free interest rate	1.5%	2.6%
Teradyne volatility-historical	34.9%	31.8%
NYSE Composite Index volatility-historical	11.4%	12.0%
Dividend yield	0.6%	1.0%

Expected volatility was based on the historical volatility of Teradyne's stock and the NYSE Composite Index for the 2020 and 2019 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 \$0.40 per share divided by Teradyne's stock price on the grant date of \$72.10 for the 2020 grant and an estimated annual dividend amount of \$0.36 per share divided by Teradyne's stock price on the grant date of \$36.75 for the 2019 grant.

During the three months ended March 29, 2020 and March 31, 2019, Teradyne granted 0.1 million of service-based stock options to executive officers at a weighted average grant date fair value of \$20.67 and \$10.26, respectively.

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
Expected life (years)	5.0	5.0
Risk-free interest rate	1.6%	2.6%
Volatility-historical	31.6%	30.1%
Dividend yield	0.6%	1.0%

## Table of Contents

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 \$0.40 per share divided by Teradyne's stock price on the grant date of \$72.10 for the 2020 grant and an estimated annual dividend amount of \$0.36 per share divided by Teradyne's stock price on the grant date of \$36.75 for the 2019 grant.

### L. ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

Changes in accumulated other comprehensive (loss) income, which are presented net of tax, consist of the following:

	Foreign Currency Translation Adjustment	Unrealized Gains (Losses) on Marketable Securities (in thousands)	Retirement Plans Prior Service Credit	Total
<b>Three Months Ended March 29, 2020</b>				
Balance at December 31, 2019, net of tax of \$0, \$946, \$(1,124)	\$ (23,514)	\$ 3,480	\$ 1,180	\$(18,854)
Other comprehensive income (loss) before reclassifications, net of tax of \$0, \$187, \$0	(8,779)	1,037	—	(7,742)
Amounts reclassified from accumulated other comprehensive income, net of tax of \$0, \$(145), \$0	—	(515)	(2)	(517)
Net current period other comprehensive income (loss), net of tax of \$0, \$42, \$0	(8,779)	522	(2)	(8,259)
Balance at March 29, 2020, net of tax of \$0, \$988, \$(1,124)	<u>\$ (32,293)</u>	<u>\$ 4,002</u>	<u>\$ 1,178</u>	<u>\$(27,113)</u>
<b>Three Months Ended March 31, 2019</b>				
Balance at December 31, 2018, net of tax of \$0, \$(521), \$(1,081)	\$ (12,523)	\$ (1,845)	\$ 1,328	\$(13,040)
Other comprehensive income (loss) before reclassifications, net of tax of \$0, \$577, \$0	(4,659)	2,100	—	(2,559)
Amounts reclassified from accumulated other comprehensive income, net of tax of \$0, \$(20), \$(11)	—	(70)	(37)	(107)
Net current period other comprehensive income (loss), net of tax of \$0, \$557, \$(11)	(4,659)	2,030	(37)	(2,666)
Balance as March 31, 2019, net of tax of \$0, \$36, \$(1,092)	<u>\$ (17,182)</u>	<u>\$ 185</u>	<u>\$ 1,291</u>	<u>\$(15,706)</u>

Reclassifications out of accumulated other comprehensive (loss) income to the statement of operations for the three months ended March 29, 2020 and March 31, 2019 were as follows:

	For the Three Months Ended		Affected Line Item in the Statements of Operations
	March 29, 2020	March 31, 2019	
(in thousands)			
<b>Details about Accumulated Other Comprehensive (loss) Income Components</b>			
Available-for-sale marketable securities:			
Unrealized gains, net of tax of \$145, \$20	\$ 515	\$ 70	Interest income
Defined benefit pension and postretirement plans:			
Amortization of prior service benefit, net of tax of \$0, \$11	2	37	(a)
Total reclassifications, net of tax of \$145, \$31	<u>\$ 517</u>	<u>\$ 107</u>	Net income

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

### M. GOODWILL AND ACQUIRED INTANGIBLE ASSETS

#### Goodwill

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



## [Table of Contents](#)

The changes in the carrying amount of goodwill by reportable segments for the three months ended March 29, 2020, were as follows:

	<u>Industrial Automation</u>	<u>System Test</u>	<u>Wireless Test</u> (in thousands)	<u>Semiconductor Test</u>	<u>Total</u>
Balance at December 31, 2019					
Goodwill	\$ 396,483	\$ 158,699	\$ 361,819	\$ 261,996	\$ 1,178,997
Accumulated impairment losses	—	(148,183)	(353,843)	(260,540)	(762,566)
	<u>396,483</u>	<u>10,516</u>	<u>7,976</u>	<u>1,456</u>	<u>416,431</u>
AutoGuide acquisition	(149)	—	—	—	(149)
Foreign currency translation adjustment	(6,354)	—	—	5	(6,349)
Balance at March 29, 2020					
Goodwill	389,980	158,699	361,819	262,001	1,172,499
Accumulated impairment losses	—	(148,183)	(353,843)	(260,540)	(762,566)
	<u>\$ 389,980</u>	<u>\$ 10,516</u>	<u>\$ 7,976</u>	<u>\$ 1,461</u>	<u>\$ 409,933</u>

### *Intangible Assets*

Teradyne reviews long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate.

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

	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Foreign Currency Translation Adjustment</u> (in thousands)	<u>Net Carrying Amount</u>
Balance, March 29, 2020				
Developed technology	\$361,787	\$ (286,166)	\$ (6,663)	\$ 68,958
Customer relationships	75,669	(60,406)	(547)	14,716
Tradenames and trademarks	70,120	(38,067)	(1,406)	30,647
Backlog	260	(260)	—	—
Total intangible assets	<u>\$507,836</u>	<u>\$ (384,899)</u>	<u>\$ (8,616)</u>	<u>\$ 114,321</u>
Balance, December 31, 2019				
Developed technology	\$361,787	\$ (279,000)	\$ (5,709)	\$ 77,078
Customer relationships	75,669	(59,077)	(455)	16,137
Tradenames and trademarks	70,120	(36,671)	(1,184)	32,265
Backlog	260	(260)	—	—
Total intangible assets	<u>\$507,836</u>	<u>\$ (375,008)</u>	<u>\$ (7,348)</u>	<u>\$ 125,480</u>

Aggregate intangible asset amortization expense for the three months ended March 29, 2020 and March 31, 2019 was \$9.9 million and \$10.6 million, respectively.

Estimated intangible asset amortization expense for each of the five succeeding fiscal years is as follows:

<u>Year</u>	<u>Amortization Expense</u> (in thousands)
2020 (remainder)	20,411
2021	20,391
2022	19,498
2023	19,023
2024	18,718
Thereafter	16,280

**N. NET INCOME PER COMMON SHARE**

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands, except per share amounts)	
Net income for basic and diluted net income per share	\$ 176,191	\$ 109,138
Weighted average common shares-basic	166,589	173,532
Effect of dilutive potential common shares:		
Incremental shares from assumed conversion of convertible notes (1)	7,333	2,186
Convertible note hedge warrant shares (2)	5,492	—
Restricted stock units	1,163	1,021
Stock options	134	222
Employee stock purchase plan	25	11
Dilutive potential common shares	14,147	3,440
Weighted average common shares-diluted	180,736	176,972
Net income per common share-basic	\$ 1.06	\$ 0.63
Net income per common share-diluted	\$ 0.97	\$ 0.62

- (1) Incremental shares from assumed conversion of the convertible notes was calculated using the difference between the average Teradyne stock price for the period and the conversion price of \$31.61, multiplied by 14.6 million shares. The result of this calculation, representing the total intrinsic value of the convertible debt, was divided by the average Teradyne stock price for the period.
- (2) Convertible notes hedge warrant shares were calculated using the difference between the average Teradyne stock price for the period and the warrant price of \$39.66, multiplied by 14.6 million shares. The result of this calculation, representing the total intrinsic value of the warrant, was divided by the average Teradyne stock price for the period.

The computation of diluted net income per common share for the three months ended March 29, 2020 excludes the effect of the potential vesting of 0.3 million of restricted stock units because the effect would have been anti-dilutive.

The computation of diluted net income per common share for the three months ended March 31, 2019 excludes the effect of the potential vesting of 0.6 million shares of restricted stock units because the effect would have been anti-dilutive.

**O. RESTRUCTURING AND OTHER**

During the three months ended March 29, 2020, Teradyne recorded a gain of \$10.0 million for the decrease in the fair value of the AutoGuide and MiR contingent consideration liabilities, partially offset by \$1.4 million of acquisition related compensation and expenses and \$0.7 million of severance charges related to headcount reductions primarily in Industrial Automation and Semiconductor Test.

During the three months ended March 31, 2019, Teradyne recorded an expense of \$3.0 million for the increase in the fair value of the MiR contingent consideration liability, \$1.3 million of acquisition related compensation and expenses, and \$0.8 million of severance charges related to headcount reductions primarily in Semiconductor Test.

**P. RETIREMENT PLANS**

ASC 715, “*Compensation—Retirement Benefits*” requires an employer with a defined benefit plan or other postretirement benefit plan to recognize an asset or a liability on its balance sheet for the overfunded or underfunded status of the plan. The pension asset or liability represents a difference between the fair value of the pension plan’s assets and the projected benefit obligation at December 31. Teradyne uses a December 31 measurement date for all of its plans.

***Defined Benefit Pension Plans***

Teradyne has defined benefit pension plans covering a portion of domestic employees and employees of certain non-U.S. subsidiaries. Benefits under these plans are based on employees’ years of service and 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

## [Table of Contents](#)

of the U.S. qualified pension plan consist primarily of fixed income and equity securities. In addition, Teradyne has unfunded qualified foreign plans as well as 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”).

In the three months ended March 29, 2020, Teradyne contributed \$0.7 million to the U.S. supplemental executive defined benefit pension plan and \$0.2 million to certain qualified pension plans for non-U.S. subsidiaries.

For the three months ended March 29, 2020 and March 31, 2019, Teradyne’s net periodic pension cost was comprised of the following:

	For the Three Months Ended			
	March 29, 2020		March 31, 2019	
	United States	Foreign	United States	Foreign
	(in thousands)			
Service cost	\$ 433	\$ 201	\$ 405	\$ 188
Interest cost	1,522	115	1,795	173
Expected return on plan assets	(1,233)	(15)	(1,511)	(7)
Total net periodic pension cost	<u>\$ 722</u>	<u>\$ 301</u>	<u>\$ 689</u>	<u>\$ 354</u>

### **Postretirement Benefit Plan**

In addition to receiving pension benefits, Teradyne employees in the United States 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.

For the three months ended March 29, 2020 and March 31, 2019, Teradyne’s net periodic postretirement benefit cost was comprised of the following:

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
	(in thousands)	
Service cost	\$ 11	\$ 9
Interest cost	62	85
Amortization of prior service credit	(2)	(48)
Total net periodic postretirement benefit cost	<u>\$ 71</u>	<u>\$ 46</u>

## **Q. COMMITMENTS AND CONTINGENCIES**

### **Purchase Commitments**

As of March 29, 2020, Teradyne had entered into purchase commitments for certain components and materials. The purchase commitments covered by the agreements aggregate to approximately \$543.8 million, of which \$529.4 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 such as, but not limited to, patent, employment, commercial and environmental matters. Teradyne believes that it has meritorious defenses against all pending claims and intends to vigorously contest them. While it is not possible to predict or determine the outcomes of any pending claims or to provide possible ranges of losses that may arise, Teradyne believes the potential losses associated with all of these actions are unlikely to have a material adverse effect on its business, financial position or results of operations.

## [Table of Contents](#)

### R. INCOME TAXES

A reconciliation of the United States federal statutory corporate tax rate to Teradyne's effective tax rate was as follows:

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
US statutory federal tax rate	21.0%	21.0%
Foreign taxes	(5.7)	(3.1)
Tax credits	(1.9)	(3.0)
Discrete benefit related to equity compensation	(4.1)	(4.1)
Discrete benefit related to release of reserves for uncertain tax positions	—	(27.6)
Other, net	1.3	0.7
Effective tax rate	<u>10.6%</u>	<u>(16.1)%</u>

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 March 29, 2020, 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 March 29, 2020 and December 31, 2019, Teradyne had \$21.3 million and \$21.2 million, respectively, of reserves for uncertain tax positions. The \$0.1 million net increase in reserves for uncertain tax positions is associated with U.S. research and development tax credits generated in the current year.

As of March 29, 2020, Teradyne does not anticipate a material change in the balance of unrecognized tax benefits during the next twelve months.

Teradyne recognizes interest and penalties related to income tax matters in income tax expense. As of March 29, 2020 and December 31, 2019, \$1.6 million and \$1.4 million, respectively, of interest and penalties were accrued for uncertain tax positions. For the three months ended March 29, 2020 and March 31, 2019, expense of \$0.1 million and \$0.3 million, respectively, was recorded for interest and penalties related to income tax items.

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 March 29, 2020 was \$7.1 million, or \$0.04 per diluted share. The tax savings due to the tax holiday for the three months ended March 31, 2019 was \$2.1 million, or \$0.01 per diluted share. The tax holiday is scheduled to expire on December 31, 2020.

### S. SEGMENT INFORMATION

Teradyne has four reportable segments (Semiconductor Test, System Test, Industrial Automation and Wireless Test). Each of the Semiconductor Test, System Test, and Wireless Test segments is also an individual operating segment. The Industrial Automation reportable segment consists of operating segments with discrete financial information, which have been combined into one reportable segment as they share similar economic characteristics, types of products, production processes, distribution channels, and currency risks. 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 Industrial Automation segment includes operations related to the design, manufacturing and marketing of collaborative robotic arms, autonomous mobile robots and advanced robotic control software. The Wireless Test segment includes operations related to the design, manufacturing and marketing of wireless test products and services.

Teradyne evaluates performance based on several factors, of which the primary financial measure is business segment income (loss) 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, 2019.

## Table of Contents

Segment information for the three months ended March 29, 2020 and March 31, 2019 is as follows:

	<u>Semiconductor Test</u>	<u>System Test</u>	<u>Industrial Automation</u>	<u>Wireless Test</u>	<u>Corporate and Other</u>	<u>Consolidated</u>
<b>Three Months Ended March 29, 2020</b>						
Revenues	\$ 484,489	\$ 116,076	\$ 60,305	\$ 43,485	\$ —	\$ 704,355
Income (loss) before taxes (1)(2)	153,816	48,407	(15,335)	10,220	(39)	197,069
Total assets (3)	921,108	137,056	643,011	106,400	1,012,813	2,820,388
<b>Three Months Ended March 31, 2019</b>						
Revenues	\$ 340,853	\$ 58,220	\$ 66,136	\$ 29,041	\$ (151)	\$ 494,099
Income (loss) before taxes (1)(2)	83,049	15,340	(5,295)	3,628	(2,743)	93,979
Total assets (3)	770,967	98,916	596,899	73,066	1,076,795	2,616,643

- (1) Included in Corporate and Other are: contingent consideration adjustments, severance charges, interest income, interest expense, net foreign exchange gains (losses), intercompany eliminations and acquisition related charges.
- (2) Included in income (loss) before taxes are charges and credits related to restructuring and other, and inventory charges.
- (3) Total assets are attributable to each segment. Corporate assets consist of cash and cash equivalents, marketable securities and certain other assets.

Included in each segment are charges and credits in the following line items in the statements of operations:

	<u>For the Three Months Ended</u>	
	<u>March 29, 2020</u>	<u>March 31, 2019</u>
	<u>(in thousands)</u>	
<b>Semiconductor Test:</b>		
Cost of revenues—inventory charge	\$ 3,026	\$ 1,174
<b>Industrial Automation:</b>		
Restructuring and other—acquisition related expenses and compensation	618	1,261
<b>Corporate and Other:</b>		
Restructuring and other—MiR contingent consideration adjustment	(2,878)	3,003
Restructuring and other—AutoGuide contingent consideration adjustment	(7,142)	—
Restructuring and other—acquisition related expenses and compensation	741	—

## T. SHAREHOLDERS' EQUITY

### *Stock Repurchase Program*

In January 2020, Teradyne's Board of Directors authorized a new stock repurchase program for up to \$1.0 billion of common stock. Effective April 1, 2020, Teradyne suspended its share repurchase program.

During the three months ended March 29, 2020, Teradyne repurchased 1.3 million shares of common stock for \$79.0 million at an average price of \$58.81 per share. During the three months ended March 31, 2019, Teradyne repurchased 4.5 million shares of common stock for \$156.5 million at an average price of \$35.12 per share.

The total price includes commissions and is recorded as a reduction to retained earnings.

### *Dividend*

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

In January 2020, Teradyne's Board of Directors declared a quarterly cash dividend of \$0.10 per share. Dividend payments for the three months ended March 29, 2020 were \$16.7 million. In January 2019, Teradyne's Board of Directors declared a quarterly cash dividend of \$0.09 per share. Dividend payments for the three months ended March 31, 2019 were \$15.6 million.

## [Table of Contents](#)

While Teradyne declared a quarterly cash dividend and has suspended its share repurchase program, it may reduce or eliminate the cash dividend and may implement a new 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.

### **U. SUBSEQUENT EVENT**

On May 1, 2020, Teradyne entered into a credit agreement (the "Credit Agreement") with Truist Bank, as administrative agent and collateral agent, and the lenders party thereto. The Credit Agreement provides for a three-year, senior secured revolving credit facility of \$400.0 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 \$150.0 million.

Proceeds from the Credit Facility may be used for general corporate purposes and working capital. As of May 4, 2020, 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 0.50% to 1.25% per annum or LIBOR, a minimum of 0.75%, plus a margin ranging from 1.50% to 2.25% per annum, based on the consolidated leverage ratio of Teradyne. In addition, Teradyne will pay a commitment fee on the unused portion of the commitments under the Credit Facility ranging from 0.25% to 0.40% 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 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.

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.

### **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, 2019. 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 robotic arms, autonomous mobile robots and advanced robotic control software used by global manufacturing and light industrial customers to improve quality, increase manufacturing and material handling 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");

## Table of Contents

- industrial automation (“Industrial Automation”) products; and
- wireless test (“Wireless Test”) systems.

We have a customer base which includes integrated device manufacturers (“IDMs”), outsourced semiconductor assembly and test providers (“OSATs”), original equipment manufacturers (“OEMs”), 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, autonomous mobile robots and wireless test systems.

The sales of our products and services are dependent, to a large degree, on these 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, electronics and industrial automation industries. Historically, these demand fluctuations have resulted in significant variations in our results of operations.

The market for our test products is concentrated with a limited number of significant customers accounting for a substantial portion of the purchases of test equipment. A few customers drive significant demand for our products both through direct sales and sales to the customers’ supply partners. We expect that sales of our test products will continue to be concentrated with a limited number of significant customers for the foreseeable future.

On January 30, 2019, we acquired all of the issued and outstanding shares of Lemsys SA (“Lemsys”) for a total purchase price of approximately \$9.1 million. Lemsys strengthens our position in the electrification trends of vehicles, solar, wind, and industrial applications. Lemsys is included in our Semiconductor Test segment.

On November 13, 2019, we acquired 100% of the membership interests of AutoGuide, LLC (“AutoGuide”), a maker of high payload AMRs, an emerging and fast growing segment of the global forklift market. The total purchase price was approximately \$81.6 million, which included cash paid of approximately \$57.6 million and \$24.0 million in fair value of contingent consideration payable upon achievement of certain performance targets, extending potentially through 2022. The maximum contingent consideration that could be paid is \$106.9 million. AutoGuide’s AMRs are used for material transport of payloads up to 4,500 kg in manufacturing, warehouse and logistics applications. These products complement MiR’s lower payload products. AutoGuide is included in our Industrial Automation segment.

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.

### **Impact of the COVID-19 Pandemic on our Business**

The novel coronavirus (COVID-19) pandemic has resulted in government authorities implementing numerous measures in an effort to contain the spread of the virus, such as travel bans and restrictions, limitations on gatherings or social distancing requirements, quarantines, shelter-in-place orders, and business limitations and shutdowns. These measures have impacted our day-to-day operations and could disrupt our business, workforce and operations, as well as the operations of our customers, contract manufacturers and suppliers for an uncertain period of time. We are continuing to monitor the rapidly evolving situation regarding the COVID-19 pandemic and its impact on our business, results of operations, financial condition, liquidity and cash flows. However, despite careful tracking, we are unable to accurately predict the full impact of COVID-19, which will depend on future developments that are highly uncertain and cannot be predicted with accuracy, including, but not limited to, the duration and continued spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume.

### ***Health and Safety***

In response to the COVID-19 pandemic, we have taken proactive, aggressive action to protect the health and safety of our employees, customers, contract manufacturers and suppliers and we have complied with all government orders around the globe. The spread of COVID-19 has caused us to modify our business practices, including implementing social distancing protocols, suspending employee travel, requiring most employees to work remotely, cancelling physical participation in meetings, and extensively and frequently disinfecting our workspaces. Around the world, the majority of our employees are working from home. However, some of our engineering, operations, supply line and customer support teams must be on-site at our or our customers’ facilities. We are providing those on-site employees with the necessary protective resources and procedures to minimize their exposure risk. We may take further actions as may be required or recommended by government authorities or that we determine are in the best interests of our employees, customers, contract manufacturers and suppliers.

### **Operations**

We believe the COVID-19 pandemic, and the numerous measures implemented by authorities in response, has adversely impacted our results of operations, including by increasing costs and decreasing demand in our Industrial Automation businesses, but we cannot accurately estimate the amount of the impact to our first quarter 2020 financial results or to our future financial results. In addition, restrictions on our access to manufacturing facilities or on our support operations or workforce, or similar limitations for our contract manufacturers and suppliers, and restrictions or disruptions affecting transportation, such as reduced availability of transportation and increased border controls or closures, could limit our capacity to meet customer demand which could have a material adverse effect on our financial condition and results of operations. These measures have impacted and may further impact our workforce and operations, as well as those of our customers, contract manufacturers and suppliers. The constraints and limits imposed on our operations may slow or diminish our production and research and development activities as well as application support projects with our customers. At this time, application support projects are largely on track with employees assisting customers on-site where necessary but with the use of enhanced safety protocols. Research and development projects are, with minor exceptions, on schedule despite the rapid shift of a significant number of our engineers working remotely. While governmental measures may be modified or extended, we expect that our manufacturing and research and development facilities will remain operational, at sufficient capacity to support production demand. We are monitoring our operations closely in an effort to avoid any potential productivity loss caused by responses to the COVID-19 pandemic.

### **Supply**

We have not yet experienced any significant impacts or interruptions to our supply chain as a result of the COVID-19 pandemic. However, our suppliers have faced and may continue to face difficulties maintaining operations in light of government-ordered restrictions, including social distancing requirements and shelter-in-place mandates. Our supply chain team, and our suppliers, overcame numerous supply, production, and logistics obstacles during the first quarter, but there is no assurance we or they will be able to do so in the future. Although we regularly monitor the financial health of companies in our supply chain, financial hardship on our suppliers or sub-suppliers caused by the COVID-19 pandemic could disrupt our ability to obtain components required to manufacture our products, adversely affecting our operations. To mitigate the risk of any potential supply interruptions, we may choose to increase certain inventory levels during the quarter. Additionally, restrictions or disruptions affecting transportation, such as reduced availability of air transport, port closures and increased border controls or closures, have led in some instances to higher costs and delays, both for obtaining components and shipping finished goods to customers, which could harm our profitability, make our products less competitive, or cause our customers to seek alternative suppliers.

### **Demand**

The COVID-19 pandemic has significantly increased economic uncertainty in our markets, which could result in a significant decrease in demand for our products for an uncertain period of time. Demand for our Test products was strong throughout the first quarter and into the second quarter. While there is incremental softening in the automotive sector, there is strengthening demand in mobility, 5G, and memory test. Our Industrial Automation business, however, has seen a significant decline in demand, which we expect will continue in the second quarter, due to COVID-19 related shutdowns affecting global manufacturing. We anticipate that the COVID-19 pandemic could cause further global economic disruption that could cause demand for our products to decline, which would adversely affect our business.

### **Liquidity**

Although there is uncertainty related to the anticipated impact of the COVID-19 pandemic on our future results, we believe our business model, our current cash reserves and the recent steps we have taken to manage our cash flow, such as suspending our stock repurchase program, leave us well-positioned to manage our business through this crisis as it continues to unfold. We have a strong balance sheet as well as an operating model that can flex up and down with extreme demand swings and still remain profitable. Based on our analysis, we believe our existing balances of cash and cash equivalents and our currently anticipated operating cash flows will be sufficient to meet our working capital needs and other capital and liquidity requirements for the next twelve months. However, due to the uncertainty related to the future impact of the COVID-19 pandemic, in order to bolster our liquidity position, on May 1, 2020 we entered into a credit agreement providing for a three-year, senior secured revolving credit facility of \$400 million as further described in Note U: "Subsequent Event." As of May 4, 2020, we have not borrowed any funds under the credit facility. While test demand remained strong at the beginning of our second quarter and our balance sheet has over \$900 million in available cash with no short-term debt as of May 4, 2020, the impact of the COVID-19 pandemic on short-term Test and Industrial Automation demand remain uncertain.

We are continuing to monitor the rapidly evolving situation regarding the COVID-19 pandemic and guidance from government authorities around the world, including federal, state and local public health authorities and may take additional actions based on their recommendations. In these circumstances, there may be developments outside our control requiring us to adjust our operating plan. As a result, given the uncertain nature of this situation, we are not able to accurately predict the full extent of the impact of COVID-19 on our business, financial condition, results of operations, liquidity or cash flows in the future. In addition, see Part II—Item 1A, "Risk Factors," included herein for updates to our risk factors regarding risks associated with the COVID-19 pandemic.



## **Critical Accounting Policies and Estimates**

We have identified the policies which are critical to understanding our business and our results of operations. There have been no significant changes during the three months ended March 29, 2020 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, 2019, except as noted below.

Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and our markets. We are not aware of any specific event or circumstance that would require an update to our estimates or judgments or a revision of the carrying value of our assets or liabilities as of May 4, 2020, the date of issuance of this Quarterly Report on Form 10-Q. These estimates may change, as new events occur and additional information is obtained. Actual results could differ significantly from these estimates under different assumptions or conditions.

### **Goodwill**

On January 26, 2017, the Financial Accounting Standards Board ("FASB") issued ASU 2017-04, "*Intangibles—Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment.*" The new guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. We adopted this standard on January 1, 2020, on prospective basis. The adoption of ASU 2017-04 did not have a material impact on the consolidated statement of operations, cash flows, or earnings per share. We assess goodwill for impairment at least annually in the fourth quarter, as of December 31, on a reporting unit basis, or more frequently, when events and circumstances occur indicating that the recorded goodwill may be impaired. Under ASU 2017-04, goodwill impairment will be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. The same one-step impairment test will be applied to goodwill at all reporting units, even those with zero or negative carrying amounts. Entities will be required to disclose the amount of goodwill at reporting units with zero or negative carrying amounts.

### **Credit Losses**

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This standard introduced the expected credit losses methodology for the measurement of credit losses on financial assets that are not measured at fair value through net income and replaces the "incurred loss" model with an "expected credit loss" model that requires consideration of a broader range of information to estimate expected credit losses over the lifetime of the asset. We adopted this standard on January 1, 2020 on a modified retrospective basis. The adoption of ASU 2016-13 did not have a material impact on our consolidated statement of operations, balance sheets, cash flows, or earnings per share.

## **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. Due to the COVID-19 pandemic, there has been uncertainty and disruption in the global economy and our markets. Teradyne is not aware of any specific event or circumstance that would require an update to its estimates or judgments or a revision of the carrying value of its assets or liabilities as of May 4, 2020, the date of issuance of this Quarterly Report on Form 10-Q. These estimates may change, as new events occur and additional information is obtained. Actual results may differ significantly from these estimates under different assumptions or conditions.

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
Percentage of revenues:		
Revenues:		
Products	87%	80%
Services	13	20
Total revenues	<u>100</u>	<u>100</u>
Cost of revenues:		
Cost of products	37	33
Cost of services	6	8
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	<u>42</u>	<u>42</u>
Gross profit	58	58
Operating expenses:		
Selling and administrative	16	21
Engineering and development	12	16
Acquired intangible assets amortization	1	2
Restructuring and other	(1)	1
Total operating expenses	<u>28</u>	<u>39</u>
Income from operations	29	19
Non-operating (income) expense:		
Interest income	—	(1)
Interest expense	1	1
Other (income) expense, net	1	—
Income before income taxes	<u>28</u>	<u>19</u>
Income tax provision (benefit)	3	(3)
Net income	<u>25%</u>	<u>22%</u>

## Results of Operations

### First Quarter 2020 Compared to First Quarter 2019

#### Revenues

Revenues by our four reportable segments were as follows:

	For the Three Months Ended		Dollar Change
	March 29, 2020	March 31, 2019 (in millions)	
Semiconductor Test	\$ 484.5	\$ 340.9	\$143.6
System Test	116.1	58.2	57.9
Industrial Automation	60.3	66.1	(5.8)
Wireless Test	43.5	29.0	14.5
	<u>\$ 704.4</u>	<u>\$ 494.1</u>	<u>\$210.3</u>

The increase in Semiconductor Test revenues of \$143.6 million, or 42.1%, was driven primarily by an increase in semiconductor mobility tester sales resulting from increased complexity of silicon in handsets which drives demand for testers, and an increase in memory test sales of flash and DRAM memory testers. The increase in System Test revenues of \$57.9 million, or 99.5%, was primarily due to higher sales in Storage Test of 3.5” hard disk drive and system level testers, and higher sales in Defense/Aerospace

## [Table of Contents](#)

test instrumentation and systems, partially offset by lower sales in Production Board Test due to lower automotive electronics demand. The decrease in Industrial Automation revenues of \$5.8 million, or 8.8%, was primarily due to lower demand for collaborative robotic arms in automotive and manufacturing markets amplified by the impacts of COVID-19. The increase in Wireless Test revenues of \$14.5 million, or 50.0%, was primarily due to increased tester demand for 5G cellular and new connectivity standards such as Ultra Wideband.

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

	For the Three Months Ended	
	March 29, 2020	March 31, 2019
Taiwan	30%	17%
China	16	17
Korea	15	10
United States	11	15
Europe	8	11
Japan	7	12
Thailand	5	4
Singapore	3	6
Philippines	2	4
Malaysia	2	3
Rest of World	1	1
	<u>100%</u>	<u>100%</u>

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

### Gross Profit

Our gross profit was as follows:

	For the Three Months Ended		Dollar/ Point Change
	March 29, 2020	March 31, 2019 (in millions)	
Gross profit	\$ 405.6	\$ 287.6	\$117.9
Percent of total revenues	57.6%	58.2%	(0.6)

Gross profit as a percent of revenue decreased by 0.6 points, primarily due to product mix in Semiconductor Test.

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 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 March 29, 2020, we recorded an inventory provision of \$4.1 million included in cost of revenues primarily due to downward revisions to previously forecasted demand levels, of which \$3.0 million was related to Semiconductor Test and \$0.5 million was related to Wireless Test.

During the three months ended March 31, 2019, we recorded an inventory provision of \$2.4 million included in cost of revenues primarily due to downward revisions to previously forecasted demand levels, of which \$1.2 million was related to Semiconductor Test and \$0.5 million was related to System Test.

## [Table of Contents](#)

During the three months ended March 29, 2020 and March 31, 2019, we scrapped \$1.2 million and \$0.4 million of inventory, respectively. During the three months ended March 29, 2020 and March 31, 2019, we sold \$1.1 million and \$0.8 million of previously written-down or written-off inventory, respectively. As of March 29, 2020, we had inventory related reserves for inventory, which had been written-down or written-off totaling \$105.3 million. We have no pre-determined timeline to scrap the remaining inventory.

### *Selling and Administrative*

Selling and administrative expenses were as follows:

	For the Three Months Ended		Dollar Change
	March 29, 2020	March 31, 2019	
		(in millions)	
Selling and administrative	\$ 111.4	\$ 102.0	\$ 9.4
Percent of total revenues	15.8%	20.6%	

The increase of \$9.4 million in selling and administrative expenses was primarily due to higher sales and marketing spending in Semiconductor Test and Industrial Automation and higher variable compensation.

### *Engineering and Development*

Engineering and development expenses were as follows:

	For the Three Months Ended		Dollar Change
	March 29, 2020	March 31, 2019	
		(in millions)	
Engineering and development	\$ 85.2	\$ 76.8	\$ 8.4
Percent of total revenues	12.1%	15.5%	

The increase of \$8.4 million in engineering and development expenses was primarily due to higher spending in Industrial Automation and Semiconductor Test and higher variable compensation.

### *Restructuring and Other*

During the three months ended March 29, 2020, we recorded a gain of \$10.0 million for the decrease in the fair value of the AutoGuide and MiR contingent consideration liabilities, partially offset by \$1.4 million of acquisition related compensation and expenses and \$0.7 million of severance charges related to headcount reductions primarily in Industrial Automation and Semiconductor Test.

During the three months ended March 31, 2019, we recorded an expense of \$3.0 million for the increase in the fair value of the MiR contingent consideration liability, \$1.3 million of acquisition related compensation and expenses, and \$0.8 million of severance charges related to headcount reductions primarily in Semiconductor Test.

### *Interest and Other*

	For the Three Months Ended		Dollar Change
	March 29, 2020	March 31, 2019	
		(in millions)	
Interest income	\$ (2.8)	\$ (5.0)	\$ 2.2
Interest expense	5.6	5.5	0.1
Other (income) expense, net	6.8	(1.4)	8.2

## [Table of Contents](#)

Interest income decreased by \$2.2 million primarily due to lower interest rates and lower marketable securities balance in 2020 compared to 2019. Other (income) expense, net increased by \$8.2 million primarily due to change in unrealized gains/losses on equity securities, from gains in 2019 to losses in 2020.

### *Income (Loss) Before Income Taxes*

	For the Three Months Ended		Dollar Change
	March 29, 2020	March 31, 2019 (in millions)	
Semiconductor Test	\$ 153.8	\$ 83.0	\$ 70.8
System Test	48.4	15.3	33.1
Wireless Test	10.2	3.6	6.6
Industrial Automation	(15.3)	(5.3)	(10.0)
Corporate and Other (1)	—	(2.7)	2.7
	<u>\$ 197.1</u>	<u>\$ 94.0</u>	<u>\$103.1</u>

(1) Included in Corporate and Other are the following: contingent consideration adjustments, employee severance, interest (income) and expense, net foreign exchange (gains) and losses, intercompany eliminations, and acquisition related charges.

The increase in income before income taxes in Semiconductor Test was driven primarily by an increase in semiconductor mobility tester sales resulting from increased complexity of silicon in handsets which drives demand for testers, and an increase in memory test sales of flash and DRAM memory testers. 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 and system level testers, and higher sales in Defense/Aerospace test instrumentation and systems, partially offset by lower sales in Production Board Test due to lower automotive electronics demand. The increase in income before income taxes in Wireless Test was primarily due to increased demand for connectivity, millimeter wave and cellular test products. The decrease in income before income taxes in Industrial Automation was primarily due to lower demand for collaborative robotic arms.

### *Income Taxes*

The effective tax rate for the three months ended March 29, 2020 and March 31, 2019 was 10.6% and (16.1%), respectively. The increase in the effective tax rate from the three months ended March 31, 2019 to the three months ended March 29, 2020 is primarily attributable to the discrete tax benefit from the release of reserves for uncertain tax positions which was recognized in the three months ended March 31, 2019 and a reduction in the benefit from tax credits. These increases were partially offset by a projected shift in the geographic distribution of income, which decreases the income subject to taxation in higher tax rate jurisdictions relative to lower tax rate jurisdictions.

## [Table of Contents](#)

### Contractual Obligations

The following table reflects our contractual obligations as of March 29, 2020:

	Payments Due by Period					Other
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years	
			(in thousands)			
Convertible debt	\$ 459,987	\$ —	\$ —	\$459,987	\$ —	\$ —
Purchase obligations	543,774	529,368	14,406	—	—	—
Retirement plans contributions	130,923	5,040	10,408	10,268	105,207	—
Transition tax payable (1)	88,157	5,337	15,779	22,710	44,331	—
Operating lease obligations	73,708	22,183	27,730	13,515	10,280	—
Interest on long-term debt	23,000	5,750	11,500	5,750	—	—
Fair value of contingent consideration	20,472	662	19,810	—	—	—
Other long-term liabilities reflected on the balance sheet under GAAP (2)	82,360	—	39,492	10,843	456	31,569
<b>Total</b>	<b>\$1,422,381</b>	<b>\$568,340</b>	<b>\$139,125</b>	<b>\$523,073</b>	<b>\$160,274</b>	<b>\$31,569</b>

- (1) Represents the transition tax liability associated with our accumulated foreign earnings as a result of enactment of the Tax Reform Act on December 22, 2017.
- (2) Included in other long-term liabilities are liabilities for customer advances, extended warranty, uncertain tax positions, deferred tax liabilities and other obligations. For certain long-term obligations, we are unable to provide a reasonably reliable estimate of the timing of future payments relating to these obligations and therefore we included these amounts in the column marked "Other."

### Liquidity and Capital Resources

Our cash, cash equivalents, and marketable securities balances decreased by \$110.7 million in the three months ended March 29, 2020 to \$905.0 million.

Operating activities during the three months ended March 29, 2020 provided cash of \$43.1 million. Changes in operating assets and liabilities used cash of \$172.8 million. This was due to a \$150.6 million increase in operating assets and a \$22.2 million decrease in operating liabilities.

The increase in operating assets was primarily due to a \$126.8 million increase in accounts receivable due to increased sales and a \$39.6 million increase in prepayments and other assets, partially offset by a \$15.8 million decrease in inventories.

The decrease in operating liabilities was due to a \$44.4 million decrease in accrued employee compensation primarily due to first quarter payments related to variable compensation, \$1.3 million of retirement plan contributions, a \$0.9 million decrease in deferred revenue and customer advance payments, partially offset by a \$15.3 million increase in income taxes, a \$7.1 million increase in other accrued liabilities, and, a \$2.0 million increase in accounts payable.

Investing activities during the three months ended March 29, 2020 used cash of \$110.2 million, due to \$187.1 million used for purchases of marketable securities, and \$36.7 million used for purchases of property, plant and equipment, partially offset by \$98.5 million and \$15.0 million in proceeds from maturities and sales of marketable securities, respectively, and \$0.1 million, net of cash acquired, for the acquisition of AutoGuide.

Financing activities during the three months ended March 29, 2020 used cash of \$113.9 million, due to \$79.0 million used for the repurchase of 1.3 million shares of common stock at an average price of \$58.81 per share, \$22.1 million used for payments related to net settlements of employee stock compensation awards, \$16.7 million used for dividend payments, and \$8.9 million used for a payment related to MiR acquisition contingent consideration, partially offset by \$12.8 million from the issuance of common stock under employee stock purchase and stock option plans.

## [Table of Contents](#)

Operating activities during the three months ended March 31, 2019 provided cash of \$18.0 million. Changes in operating assets and liabilities used cash of \$134.2 million. This was due to a \$63.3 million increase in operating assets and a \$70.9 million decrease in operating liabilities.

The increase in operating assets was primarily due to a \$41.7 million increase in accounts receivable due to increased sales, an \$18.6 million increase in prepayments and other assets, and a \$2.9 million increase in inventories.

The decrease in operating liabilities was due to a \$59.5 million decrease in accrued employee compensation primarily due to first quarter payments related to variable compensation, a \$22.8 million decrease in income taxes, an \$11.5 million decrease in other accrued liabilities, and \$1.2 million of retirement plan contributions, partially offset by a \$17.7 million increase in accounts payable, and a \$6.5 million increase in deferred revenue and customer advance payments.

Investing activities during the three months ended March 31, 2019 used cash of \$261.0 million, due to \$375.2 million used for purchases of marketable securities, \$25.7 million used for purchases of property, plant and equipment, and \$7.0 million, net of cash acquired, used for the acquisition of Lemsys, partially offset by \$141.2 million and \$5.4 million in proceeds from maturities and sales of marketable securities, respectively, and proceeds from life insurance of \$0.3 million related to the cash surrender value from the cancellation of a Teradyne owned life insurance policy.

Financing activities during the three months ended March 31, 2019 used cash of \$199.8 million, due to \$156.5 million used for the repurchase of 4.5 million shares of common stock at an average price of \$35.12 per share, \$27.6 million used for a payment related to MiR and Universal Robots acquisition contingent consideration, \$15.6 million used for dividend payments, and \$14.3 million used for payments related to net settlements of employee stock compensation awards, partially offset by \$14.3 million from the issuance of common stock under employee stock purchase and stock option plans.

In January 2020, our Board of Directors declared a quarterly cash dividend of \$0.10 per share. Dividend payments for the three months ended March 29, 2020 were \$16.7 million.

In January 2019, our Board of Directors declared a quarterly cash dividend of \$0.09 per share. Dividend payments for the three months ended March 31, 2019 were \$15.6 million.

In January 2020, our Board of Directors cancelled the January 2018 stock repurchase program and approved a new stock repurchase program for up to \$1.0 billion of common stock. On April 1, 2020, we suspended the share repurchase program. During the three months ended March 29, 2020, we repurchased 1.3 million shares of common stock for \$79.0 million at an average price of \$58.81 per share. During the three months ended March 31, 2019, we repurchased 4.5 million shares of common stock for \$156.5 million at an average price of \$35.12 per share.

While we declared a quarterly cash dividend and suspended our share repurchase program, we may reduce or eliminate the cash dividend and may implement a new 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.

On May 1, 2020, we entered into a credit agreement providing for a three-year, senior secured revolving credit facility of \$400 million. As of May 4, 2020, we have not borrowed any funds under the credit facility.

We believe our cash, cash equivalents and marketable securities balance will be sufficient to pay our quarterly dividend and meet our working capital and expenditure needs for at least the next twelve months. Inflation has not had a significant long-term impact on earnings. At this time, the COVID-19 pandemic has not had an impact on our liquidity, but there is no assurance that continued impacts resulting from the pandemic will not have an adverse effect in the future.

### **Equity Compensation Plans**

As discussed in Note Q: “Stock Based Compensation” in our 2019 Annual Report on 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.

### **Item 3: Quantitative and Qualitative Disclosures about Market Risks**

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 March 2, 2020. There were no material changes in our exposure to market risk from those set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

## [Table of Contents](#)

In addition to market risks described in our Annual Report on Form 10-K, we have an equity price risk related to the fair value of our convertible senior unsecured notes issued in December 2016. In December 2016, Teradyne issued \$460 million aggregate principal amount of 1.25% convertible senior unsecured notes (the “Notes”) due December 15, 2023. As of March 29, 2020, the Notes had a fair value of \$829.4 million. The table below provides a sensitivity analysis of hypothetical 10% changes of Teradyne’s stock price as of the end of the first quarter of 2020 and the estimated impact on the fair value of the Notes. The selected scenarios are not predictions of future events, but rather are intended to illustrate the effect such event may have on the fair value of the Notes. The fair value of the Notes is subject to equity price risk due to the convertible feature. The fair value of the Notes will generally increase as Teradyne’s common stock price increases and will generally decrease as the common stock price declines in value. The change in stock price affects the fair value of the convertible senior notes, but does not impact Teradyne’s financial position, cash flows or results of operations due to the fixed nature of the debt obligation. Additionally, we carry the Notes at face value less unamortized discount on our balance sheet, and we present the fair value for required disclosure purposes only. In connection with the offering of the Notes we also sold warrants to the option counterparties. These transactions have been accounted for as an adjustment to our shareholders’ equity. The convertible note hedge transactions are expected to reduce the potential equity dilution upon conversion of the Notes. The warrants along with any shares issuable upon conversion of the Notes will have a dilutive effect on our earnings per share to the extent that the average market price of our common stock for a given reporting period exceeds the applicable strike price or conversion price of the warrants or Notes, respectively.

<u>Hypothetical Change in Teradyne Stock Price</u>	<u>Fair Value</u>	<u>Estimated change in fair value</u>	<u>Hypothetical percentage increase (decrease) in fair value</u>
10% Increase	\$901,709	\$ 72,271	8.7%
No Change	829,438	—	—
10% Decrease	759,085	(70,353)	(8.5)

### **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) or Rule 15d-15(f) promulgated under the Exchange Act. The evaluation included any impact to our controls caused by remote working arrangements for a number of our employees due to the COVID-19 pandemic. 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.



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

### Item 1A: Risk Factors

In addition to other information set forth in this Form 10-Q, including the risk discussed below, 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, 2019, 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 and many of these risks could be further increased due to the COVID-19 pandemic.

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 novel coronavirus (COVID-19) pandemic has impacted our business and could materially adversely affect our results of operations, financial condition, liquidity or cash flows.***

The global outbreak of the recent novel strain of the coronavirus (COVID-19) has resulted in government authorities implementing numerous measures in an effort to contain the spread of the virus, such as travel bans and restrictions, limitations on gatherings or social distancing requirements, quarantines, shelter-in-place orders, and business limitations and shutdowns. These measures have impacted our day-to-day operations and could disrupt our business, workforce and operations, as well as the operations of our customers, contract manufacturers and suppliers for an uncertain period of time. We believe the COVID-19 pandemic, and the numerous measures implemented by authorities in response, has adversely impacted our results of operations, including by increasing costs and decreasing demand in our Industrial Automation businesses, but we cannot accurately estimate the full extent of the impact for our first quarter 2020 financial results or to our future financial results.

The COVID-19 pandemic has significantly increased economic uncertainty in our markets, which could result in a significant decrease in demand for our products for an uncertain period of time. In addition, restrictions on our access to manufacturing facilities or on our support operations or workforce, or similar limitations for our contractor manufacturers and suppliers, and restrictions or disruptions affecting transportation, such as reduced availability of transportation and increased border controls or closures, could limit our capacity to meet customer demand, which could have a material adverse effect on our financial condition and results of operations. The spread of COVID-19 has caused us to modify our business practices, including implementing social distancing protocols, suspending employee travel, requiring most employees to work remotely, canceling physical participation in meetings, events and conferences, and extensively and frequently disinfecting our workspaces, and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers, contract manufacturers and suppliers. These measures may not be sufficient to mitigate the risks posed by the virus, and our ability to perform critical functions could be harmed. In January 2020, we announced our intention to repurchase \$250 million in shares in 2020. However, due to the uncertainty regarding the duration, severity and business impact of the COVID-19 pandemic, as of April 1, 2020, we have suspended our stock repurchase program. At this time, we do not know whether or when we will resume our 2020 repurchase plan or authorize future stock repurchase programs.

We are continuing to monitor the rapidly evolving situation regarding the COVID-19 pandemic and its impact on our business, results of operations, financial condition, liquidity and cash flows. However, despite careful tracking, we are unable to accurately predict the full impact of COVID-19, which will depend on future developments that are highly uncertain and cannot be predicted with accuracy, including, but not limited to, the duration and continued spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume.

#### ***Trade regulations and restrictions could impact our ability to sell products to and support certain customers, which may materially adversely affect our sales and results of operations.***

We are subject to U.S. laws and regulations that limit and restrict the export of some of our products and services and may restrict our transactions with certain customers, business partners and other persons. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies, and in other circumstances we may be required to obtain an export license before exporting the controlled item. We must also comply with export restrictions and laws imposed by other countries affecting trade and investments. We maintain an export compliance program but there are risks that the compliance controls could be circumvented, exposing us to legal liabilities. Compliance with these laws has not significantly limited our sales, but could significantly limit them in the future. Changes in, and responses to, U.S. trade policy could reduce the competitiveness of our products and cause our sales to drop, which could have a material adverse effect on our business, financial condition or results of operations.

## Table of Contents

The U.S. government from time to time has issued export restrictions that prohibit U.S. companies from exporting U.S. manufactured products, foreign manufactured products with more than 25% controlled U.S. content, as well as U.S. origin technology. For example, the U.S. Department of Commerce has restricted the access of U.S. origin technologies to certain Chinese companies by adding those companies to the Entity List under U.S. Export Administration Regulations (“EAR”).

On May 16, 2019, Huawei and 68 of its affiliates, including HiSilicon, were added to the U.S. Department of Commerce Entity List under the EAR. This action by the U.S. Department of Commerce imposes new export licensing requirements on exports, re-exports, and in-country transfers of all U.S. regulated products, software and technology to the designated Huawei entities. While most of our products are not subject to the EAR and therefore not affected by the Entity List restrictions, certain of our products are currently manufactured in the U.S. and thus subject to the Entity List restrictions. Compliance with the Entity List restrictions has not significantly impacted our sales. In addition, the prohibition on transfers of U.S. origin technology to Huawei could significantly limit our ability to service certain of our products sold to Huawei and our ability to engage in product development activities with Huawei and, therefore, could have a material adverse effect on our business, financial condition or results of operations. Furthermore, Huawei’s inability to obtain products from other companies in its supply chain may adversely impact Huawei’s demand for our products. Huawei or other foreign customers affected by future U.S. government sanctions or threats of sanctions may respond by developing their own solutions to replace our products or by adopting our foreign competitors’ solutions. Also, our controls related to Entity List compliance could be circumvented, exposing us to legal liabilities. Even if such restrictions are lifted, any financial or other penalties or continuing export restrictions imposed on Huawei could have a material adverse effect on our business, financial condition or results of operations.

The U.S. Department of Commerce may modify the U.S. EAR to expand the scope of the regulations to include additional products that would become subject to the Entity List restrictions relating to Huawei and the designated Huawei entities including HiSilicon. These modified regulations, if implemented as currently reported, may impact our sales to third party contract manufacturers used by Huawei and HiSilicon to manufacture and test semiconductor and other electronic devices. Because the business environment for Huawei is both fluid and uncertain, there are also risks that Huawei, HiSilicon and their third-party contract manufacturers may have less demand for our products and/or may purchase products from our competitors who are not impacted by the U.S. regulations. Until these or any new regulations become public and effective, we will not know the extent of the impact on our business with Huawei, HiSilicon and their third-party contract manufacturers. However, it is possible that these modified regulations and any other additional regulations that may be implemented by the U.S. Department of Commerce or other government agency would have a material impact on our business and financial results.

On April 27, 2020, the Department of Commerce announced new export controls for certain U.S. products and technology sold to military and civilian end users in China. We do not expect that compliance with the new export controls will significantly impact our ability to sell products to our customers in China or to manufacture products in China. The new export controls, however, could disrupt our supply chain, increase our compliance costs and impact the demand for our products in China and, thus, have a material adverse impact on our business, financial condition or results of operations. In addition, while we maintain an export compliance program, our compliance controls could be circumvented, exposing us to legal liabilities. We will continue to assess the potential impact of the new export controls on our business and operations and take appropriate actions, including filing for licenses with the Department of Commerce, to minimize any disruption. However, we cannot be certain that the actions we take will mitigate all of the risks associated with the new export controls that may impact our business.

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

In January 2020, our Board of Directors cancelled the January 2018 stock repurchase program and authorized a new stock repurchase program for up to \$1.0 billion of common stock. On April 1, 2020, we suspended the repurchase program. During the three months ended March 29, 2020, we repurchased 1.3 million shares of common stock for \$79.0 million at an average price of \$58.81 per share. During the three months ended March 31, 2019, we repurchased 4.5 million shares of common stock for \$156.5 million at an average price of \$35.12 per share.

The following table includes information with respect to repurchases we made of our common stock during the three months ended March 29, 2020 (in thousands except per share price):

Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may Yet Be Purchased Under the Plans or Programs
January 1, 2020 – January 26, 2020	208	\$ 69.05	207	\$ 985,700
January 27, 2020 – February 23, 2020	595	\$ 69.90	282	\$ 965,901
February 24, 2020 – March 29, 2020	858	\$ 52.59	855	\$ 920,961
	<u>1,661(1)</u>	<u>\$ 60.85(1)</u>	<u>1,344</u>	

(1) Includes approximately three hundred thousand shares at an average price of \$69.52 withheld from employees for the payment of taxes.

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[Table of Contents](#)

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

**Item 4: Mine Safety Disclosures**

Not Applicable

## Table of Contents

### **Item 6: Exhibits**

<u>Exhibit Number</u>	<u>Description</u>
31.1	<a href="#"><u>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)</u></a>
31.2	<a href="#"><u>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)</u></a>
32.1	<a href="#"><u>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)</u></a>
32.2	<a href="#"><u>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)</u></a>
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
104	Cover Page Interactive Data File (formatted as Inline XBRL, and contained in Exhibit 101)

**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/ SANJAY MEHTA

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**Sanjay Mehta**  
**Vice President,**  
**Chief Financial Officer and Treasurer**  
**(Duly Authorized Officer**  
**and Principal Financial Officer)**  
**May 4, 2020**





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

In connection with the Quarterly Report of Teradyne, Inc. (the "Company") on Form 10-Q for the period ended March 29, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark E. Jagiela, Chief Executive Officer of the Company, certify pursuant to 18 U.S.C (S) 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ MARK E. JAGIELA

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**Mark E. Jagiela**  
**Chief Executive Officer**  
**May 4, 2020**



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

In connection with the Quarterly Report of Teradyne, Inc. (the "Company") on Form 10-Q for the period ended March 29, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sanjay Mehta, Chief Financial Officer of the Company, certify pursuant to 18 U.S.C (S) 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ SANJAY MEHTA

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**Sanjay Mehta**  
**Chief Financial Officer**  
**May 4, 2020**