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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2024

OR

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

For the transition period from _____ to _____

Commission File No. 001-06462

TERADYNE, INC.
(Exact name of registrant as specified in its charter)

Massachusetts (State or Other Jurisdiction of 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)

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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Emerging growth company	☐
Smaller reporting company	☐		

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 29, 2024, was 156,111,885 shares.

TERADYNE, INC.

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PART I

Item 1: Financial Statements

TERADYNE, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

	March 31, 2024	December 31, 2023
	(in thousands, except per share amount)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 707,403	$ 757,571
Marketable securities	41,300	62,154
Accounts receivable, less allowance for credit losses of $1,947 and $1,988 at March 31, 2024 and December 31, 2023, respectively	426,333	422,124
Inventories, net	314,232	309,974
Prepayments	537,642	548,970
Other current assets	16,057	37,992
Current assets held for sale	22,426	23,250
Total current assets	2,065,393	2,162,035
Property, plant and equipment, net	457,248	445,492
Operating lease right-of-use assets, net	74,625	73,417
Marketable securities	121,905	117,434
Deferred tax assets	185,734	175,775
Retirement plans assets	11,449	11,504
Other assets	45,098	38,580
Acquired intangible assets, net	30,234	35,404
Goodwill	407,576	415,652
Long-term assets held for sale	11,458	11,531
Total assets	$ 3,410,720	$ 3,486,824
LIABILITIES		
Current liabilities:		
Accounts payable	$ 153,873	$ 180,131
Accrued employees' compensation and withholdings	121,144	191,750
Deferred revenue and customer advances	100,058	99,804
Other accrued liabilities	101,275	114,712
Operating lease liabilities	17,400	17,522
Income taxes payable	55,922	48,653
Current liabilities held for sale	4,687	7,379
Total current liabilities	554,359	659,951
Retirement plans liabilities	134,878	132,090
Long-term deferred revenue and customer advances	35,044	37,282
Long-term other accrued liabilities	16,653	19,998
Deferred tax liabilities	134	183
Long-term operating lease liabilities	65,554	65,092
Long-term incomes taxes payable	44,331	44,331
Long-term liabilities held for sale	1,938	2,000
Total liabilities	852,891	960,927
Commitments and contingencies (Note Q)		
SHAREHOLDERS' EQUITY		
Common stock, $0.125 par value, 1,000,000 shares authorized; 153,757 and 152,698 shares issued and outstanding at March 31, 2024 and December 31, 2023, respectively	19,220	19,087
Additional paid-in capital	1,848,088	1,827,274
Accumulated other comprehensive loss	(39,739)	(26,978)
Retained earnings	730,260	706,514
Total shareholders' equity	2,557,829	2,525,897
Total liabilities and shareholders' equity	$ 3,410,720	$ 3,486,824

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, 2023, are an integral part of the condensed consolidated financial statements.

TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
	(in thousands, except per share amount)	
Revenues:		
Products	$ 458,433	$ 473,418
Services	141,386	144,111
Total revenues	599,819	617,529
Cost of revenues:		
Cost of products	200,763	198,665
Cost of services	59,774	62,444
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	260,537	261,109
Gross profit	339,282	356,420
Operating expenses:		
Selling and administrative	149,188	150,955
Engineering and development	103,199	105,762
Acquired intangible assets amortization	4,697	4,802
Restructuring and other	4,427	2,037
Total operating expenses	261,511	263,556
Income from operations	77,771	92,864
Non-operating (income) expense:		
Interest income	(7,867)	(5,258)
Interest expense	661	987
Other (income) expense, net	12,075	51
Income before income taxes	72,902	97,084
Income tax provision	8,705	13,553
Net income	$ 64,197	$ 83,531
Net income per common share:		
Basic	$ 0.42	$ 0.54
Diluted	$ 0.40	$ 0.50
Weighted average common shares—basic	153,047	155,904
Weighted average common shares—diluted	162,348	166,308

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, 2023, 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 31, 2024	April 2, 2023
	(in thousands)	
Net income	$ 64,197	$ 83,531
Other comprehensive income (loss), net of tax:		
Foreign currency translation adjustment, net of tax of $0 and $0, respectively	(11,457)	9,309
Available-for-sale marketable securities:		
Unrealized (losses) gains on marketable securities arising during period, net of tax of $(221) and $503, respectively	(902)	2,294
Less: Reclassification adjustment for losses included in net income, net of tax of $30 and $2, respectively	106	5
	(796)	2,299
Cash flow hedges:		
Unrealized gains arising during period, net of tax of $358 and $167, respectively	1,274	596
Less: Reclassification adjustment for (gains) losses included in net income, net of tax of $(500) and $338 respectively	(1,780)	1,200
	(506)	1,796
Defined benefit post-retirement plan:		
Amortization of prior service credit, net of tax of $0 and $0, respectively	(2)	(2)
Other comprehensive income (loss)	(12,761)	13,402
Comprehensive income	$ 51,436	$ 96,933

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, 2023, are an integral part of the condensed consolidated financial statements.

TERADYNE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(Unaudited)

	Shareholders' Equity					
	Common Stock Shares	Common Stock Par Value	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	(in thousands)					
For the Three Months Ended March 31, 2024						
Balance, December 31, 2023	152,698	$ 19,087	$ 1,827,274	$ (26,978)	$ 706,514	$ 2,525,897
Net issuance of common stock under stock-based plans	466	58	3,758			3,816
Stock-based compensation expense			17,158			17,158
Warrant exercises	813	102	(102)			—
Repurchase of common stock	(220)	(27)			(22,068)	(22,095)
Cash dividends ($0.12 per share)					(18,383)	(18,383)
Net income					64,197	64,197
Other comprehensive income (loss)				(12,761)		(12,761)
Balance, March 31, 2024	153,757	$ 19,220	$ 1,848,088	$ (39,739)	$ 730,260	$ 2,557,829
For the Three Months Ended April 2, 2023						
Balance, December 31, 2022	155,759	$ 19,470	$ 1,755,963	$ (49,868)	$ 725,729	$ 2,451,294
Net issuance of common stock under stock-based plans	579	73	(3,943)			(3,870)
Stock-based compensation expense			20,332			20,332
Repurchase of common stock	(893)	(112)			(97,936)	(98,048)
Cash dividends ($0.11 per share)					(17,179)	(17,179)
Settlements of convertible notes	324	41	(41)			—
Exercise of convertible notes hedge call options	(324)	(41)	41			—
Net income					83,531	83,531
Other comprehensive income (loss)				13,402		13,402
Balance, April 2, 2023	155,445	$ 19,431	$ 1,772,352	$ (36,466)	$ 694,145	$ 2,449,462

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, 2023, are an integral part of the condensed consolidated financial statements.

TERADYNE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
	(in thousands)	
Cash flows from operating activities:		
Net income	$ 64,197	$ 83,531
Adjustments to reconcile net income from operations to net cash provided by operating activities:		
Depreciation	23,354	22,680
Stock-based compensation	15,758	18,885
Provision for excess and obsolete inventory	6,177	5,610
Amortization	4,766	4,926
Deferred taxes	(9,669)	(7,634)
Losses (gains) on investments	10,466	(2,238)
Other	787	108
Changes in operating assets and liabilities		
Accounts receivable	(8,055)	37,204
Inventories	(6,932)	(23,697)
Prepayments and other assets	11,089	(15,380)
Accounts payable and other liabilities	(105,548)	(83,208)
Deferred revenue and customer advances	(1,444)	(32,705)
Retirement plans contributions	(1,421)	(1,234)
Income taxes	3,754	12,488
Net cash provided by operating activities	7,279	19,336
Cash flows from investing activities:		
Purchases of property, plant and equipment	(44,023)	(41,444)
Purchases of marketable securities	(16,042)	(69,276)
Proceeds from maturities of marketable securities	14,438	7,468
Proceeds from sales of marketable securities	20,734	7,929
Proceeds from insurance	873	460
Net cash used for investing activities	(24,020)	(94,863)
Cash flows from financing activities:		
Repurchase of common stock	(22,117)	(93,308)
Dividend payments	(18,370)	(17,165)
Payments of convertible debt principal	—	(15,155)
Payments related to net settlement of employee stock compensation awards	(13,115)	(19,870)
Issuance of common stock under stock purchase and stock option plans	16,934	15,997
Net cash used for financing activities	(36,668)	(129,501)
Effects of exchange rate changes on cash and cash equivalents	3,241	(537)
Decrease in cash and cash equivalents	(50,168)	(205,565)
Cash and cash equivalents at beginning of period	757,571	854,773
Cash and cash equivalents at end of period	$ 707,403	$ 649,208
Non-cash investing activities:		
Capital expenditures incurred but not yet paid:	$ 3,086	$ 3,823

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, 2023, are an integral part of the condensed consolidated financial statements.

A. THE COMPANY

Teradyne, Inc. (“Teradyne”) is a leading global supplier of automated test equipment and robotics solutions. Teradyne designs, develops, manufactures and sells automated test systems and robotics products. Teradyne’s automated test systems are used to test semiconductors, wireless products, data storage and complex electronics systems in many industries including consumer electronics, wireless, automotive, industrial, computing, communications, and aerospace and defense industries. Teradyne’s robotics products include collaborative robotic arms, autonomous mobile robots, and advanced robotic control software used by global manufacturing, logistics and industrial customers to improve quality, increase manufacturing and material handling efficiency and decrease manufacturing and logistics costs. Teradyne’s automated test equipment and robotics products and services include:

- semiconductor test (“Semiconductor Test”) systems;
- storage and system level test (“Storage Test”) systems, defense/aerospace (“Defense/Aerospace”) test instrumentation and systems, and circuit-board test and inspection (“Production Board Test”) systems (collectively these products represent “System Test”);
- wireless test (“Wireless Test”) systems; and
- robotics (“Robotics”) products.

B. ACCOUNTING POLICIES

Basis of Presentation

The consolidated interim financial statements include the accounts of Teradyne and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated. These interim financial statements are unaudited and reflect all normal recurring adjustments that are, in the opinion of management, necessary for the fair statement of such interim financial statements. The December 31, 2023 condensed consolidated balance sheet data was derived from audited financial statements but does not include all disclosures required by United States of America generally accepted accounting principles (“U.S. GAAP”) for complete financial statements. The accompanying financial information should be read in conjunction with the consolidated financial statements and notes thereto contained in Teradyne’s Annual Report on Form 10-K, filed with the U.S. Securities and Exchange Commission (“SEC”) on February 22, 2024, for the year ended December 31, 2023.

Preparation of Financial Statements and Use of Estimates

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

C. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2023-07, *"Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures"*, which will require Teradyne to disclose significant segment expenses and other segment items used by the Chief Operating Decision Maker ("CODM") on an annual and interim basis as well as provide in interim periods all disclosures about a reportable segment’s profit or loss and assets that are currently required annually. Additionally, Teradyne will be required to disclose the title and position of the CODM. The new standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. This ASU will have no impact on results of operations, cash flows or financial condition. Upon

adoption, Teradyne will apply the amendments in this ASU retrospectively to all prior period disclosures presented in the financial statements.

In December 2023, FASB issued ASU 2023-09 – *"Income Taxes (Topic 740): Improvements to Income Tax Disclosures"*, which requires expanded disclosures relating to the tax rate reconciliation, income taxes paid, income (loss) before income tax expense (benefit) and income tax expense (benefit), requiring a greater disaggregation of information for each. The provisions of ASU 2023-09 are effective for fiscal years beginning after December 15, 2024. The amendments in this update should be applied on a prospective basis, but retrospective application is permitted. This ASU will have no impact on results of operations, cash flows or financial condition.

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		System Test	Robotics		Wireless Test	
	System on-a-Chip	Memory		Universal Robots	Mobile Industrial Robots		Total
				(in thousands)			
For the Three Months Ended March 31, 2024 (1)							
Timing of Revenue Recognition							
Point in Time	$ 229,592	$ 102,436	$ 58,073	$ 65,893	$ 19,290	$ 20,914	$ 496,198
Over Time	72,716	7,510	17,249	1,868	603	3,675	103,621
Total	$ 302,308	$ 109,946	$ 75,322	$ 67,761	$ 19,893	$ 24,589	$ 599,819
Geographical Market							
Asia Pacific	$ 270,567	$ 95,606	$ 25,781	$ 11,625	$ 2,954	$ 17,141	$ 423,674
Americas	22,551	9,052	36,594	20,005	14,625	5,824	108,651
Europe, Middle East and Africa	9,190	5,288	12,947	36,131	2,314	1,624	67,494
Total	$ 302,308	$ 109,946	$ 75,322	$ 67,761	$ 19,893	$ 24,589	$ 599,819
For the Three Months Ended April 2, 2023 (1)							
Timing of Revenue Recognition							
Point in Time	$ 273,275	$ 61,258	$ 56,857	$ 70,029	$ 15,959	$ 35,363	$ 512,741
Over Time	73,559	6,917	17,774	2,008	1,218	3,312	104,788
Total	$ 346,834	$ 68,175	$ 74,631	$ 72,037	$ 17,177	$ 38,675	$ 617,529
Geographical Market							
Asia Pacific	$ 283,259	$ 63,695	$ 39,590	$ 13,217	$ 1,502	$ 23,231	$ 424,494
Americas	41,568	2,944	28,980	20,447	11,806	12,846	118,591
Europe, Middle East and Africa	22,007	1,536	6,061	38,373	3,869	2,598	74,444
Total	$ 346,834	$ 68,175	$ 74,631	$ 72,037	$ 17,177	$ 38,675	$ 617,529

(1) Includes $0.9 million and $1.3 million in the three months ended March 31, 2024 and in the three months ended April 2, 2023, respectively, for leases of Teradyne's systems recognized outside Accounting Standards Codification ("ASC") 606 *"Revenue from Contracts with Customers."*

Contract Balances

During the three months ended March 31, 2024 and April 2, 2023, Teradyne recognized $28.2 million and $50.7 million, respectively, that was included within the deferred revenue and customer advances balances at the beginning of the period. This revenue primarily relates to undelivered hardware, extended warranties, training, application support, and post contract support. Each of these represents a distinct performance obligation. As of March 31, 2024, Teradyne had $1,075.2 million of unsatisfied performance obligations. Teradyne expects to recognize approximately 90% of the remaining performance obligations in the next 12 months and the remainder in 1-3 years.

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:

	March 31, 2024	December 31, 2023
	(in thousands)	
Maintenance, service and training	$ 61,404	$ 66,458
Customer advances, undelivered elements and other	39,189	35,731
Extended warranty	34,509	34,897
Total deferred revenue and customer advances	$ 135,102	$ 137,086

Accounts Receivable

During the three months ended March 31, 2024 and April 2, 2023, Teradyne sold certain trade accounts receivables on a non-recourse basis to third-party financial institutions pursuant to factoring agreements. During the three months ended March 31, 2024 and April 2, 2023, total trade accounts receivable sold under the factoring agreements were $23.4 million and $34.2 million, respectively. Factoring fees for the sales of receivables were recorded in interest expense and were not material. Teradyne accounted for these transactions as sales of receivables and presented cash proceeds as cash provided by operating activities in the consolidated statements of cash flows.

E. ASSETS HELD FOR SALE

On November 7, 2023, Teradyne entered into a definitive agreement to sell Teradyne's Device Interface Solutions ("DIS") business, a component of the Semiconductor Test segment, to Technoprobe S.p.A. ("Technoprobe") for $85.0 million in cash. As a result, the related assets and liabilities met the criteria and were classified as held-for-sale in Teradyne's consolidated balance sheet as of December 31, 2023. The transaction, which does not qualify as a strategic shift required for discontinued operations treatment, is expected to close in the second quarter of 2024, subject to regulatory approval.

Assets held-for-sale is comprised of the following as of March 31, 2024 and December 31, 2023:

	March 31, 2024	December 31, 2023
	(in thousands)	
Current assets:		
Inventories, net	$ 19,276	$ 17,952
Prepayments	3,150	5,298
Total current assets held for sale	22,426	23,250
Property, plant and equipment, net	8,994	8,986
Operating lease right-of-use assets, net	2,464	2,545
Total assets held for sale	$ 33,884	$ 34,781
Current liabilities:		
Accounts payable	$ 3,954	$ 6,356
Other accrued liabilities	323	552
Operating lease liabilities	410	471
Total current liabilities held for sale	4,687	7,379
Long-term operating lease liabilities	1,938	2,000
Total liabilities held for sale	$ 6,625	$ 9,379
Net assets held for sale	$ 27,259	$ 25,402

F. INVENTORIES

Inventories, net consisted of the following at March 31, 2024 and December 31, 2023:

	March 31, 2024	December 31, 2023
	(in thousands)	
Raw material	$ 243,871	$ 258,422
Work-in-process	39,870	26,851
Finished goods	30,491	24,701
Total inventories, net (1)	$ 314,232	$ 309,974

(1) Inventories, net at March 31, 2024 and December 31, 2023 excludes $19.3 million and $18.0 million, respectively, of primarily work-in-process inventories, net classified as assets held for sale. See Note E: "Assets held for sale" for additional information.

Inventory reserves at March 31, 2024 and December 31, 2023 were $136.0 million and $136.0 million, respectively.

G. 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 equity and debt mutual funds are classified as Level 1 and available-for-sale debt securities are classified as Level 2. 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 31, 2024 and April 2, 2023, 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 31, 2024 and April 2, 2023, were $1.0 million and $0.3 million, respectively. Realized losses recorded in the three months ended March 31, 2024 and April 2, 2023, were $0.2 million and $0.1 million, respectively. Realized gains and losses are included in other (income) expense, net.

Unrealized gains on equity securities recorded in the three months ended March 31, 2024 and April 2, 2023 were $2.6 million and $2.0 million, respectively. 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) on the balance sheet.

The cost of securities sold is based on average cost.

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 31, 2024 and December 31, 2023.

	March 31, 2024			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
Assets				
Cash	$ 278,229	$ —	$ —	$ 278,229
Cash equivalents	428,675	499	—	429,174
Available-for-sale securities:				
U.S. Treasury securities	—	40,068	—	40,068
Corporate debt securities	—	35,845	—	35,845
Certificates of deposit and time deposits	—	21,706	—	21,706
Debt mutual funds	10,007	—	—	10,007
U.S. government agency securities	—	3,863	—	3,863
Commercial paper	—	1,689	—	1,689
Non-U.S. government securities	—	798	—	798
Equity securities:				
Mutual funds	49,229	—	—	49,229
	$ 766,140	$ 104,468	$ —	$ 870,608
Derivative assets	—	4,251	—	4,251
Total	$ 766,140	$ 108,719	$ —	$ 874,859
Liabilities				
Derivative liabilities	—	936	—	$ 936
Total	$ —	$ 936	$ —	$ 936

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
Assets				
Cash and cash equivalents	$ 706,904	$ 499	$ —	$ 707,403
Marketable securities	—	41,300	—	41,300
Long-term marketable securities	59,236	62,669	—	121,905
Prepayments	—	4,251	—	4,251
Total	$ 766,140	$ 108,719	$ —	$ 874,859
Liabilities				
Other current liabilities	$ —	$ 936	$ —	$ 936
Total	$ —	$ 936	$ —	$ 936

	December 31, 2023			
	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
Assets				
Cash	$ 298,156	$ —	$ —	$ 298,156
Cash equivalents	453,298	6,117	—	459,415
Available-for-sale securities:				
Corporate debt securities	—	52,734	—	52,734
U.S. Treasury securities	—	41,808	—	41,808
Certificates of deposit and time deposits	—	21,772	—	21,772
Debt mutual funds	8,773	—	—	8,773
U.S. government agency securities	—	4,892	—	4,892
Commercial paper	—	1,667	—	1,667
Non-U.S. government securities	—	810	—	810
Equity securities:				
Mutual Funds	47,132	—	—	47,132
	$ 807,359	$ 129,800	$ —	$ 937,159
Derivative assets	—	18,746	—	18,746
Total	$ 807,359	$ 148,546	$ —	$ 955,905
Liabilities				
Derivative liabilities	—	2,545	—	2,545
Total	$ —	$ 2,545	$ —	$ 2,545

Reported as follows:

	(Level 1)	(Level 2)	(Level 3)	Total
	(in thousands)			
Assets				
Cash and cash equivalents	$ 751,454	$ 6,117	$ —	$ 757,571
Marketable securities	—	62,154	—	62,154
Long-term marketable securities	55,905	61,529	—	117,434
Prepayments	—	18,746	—	18,746
Total	$ 807,359	$ 148,546	$ —	$ 955,905
Liabilities				
Other current liabilities	$ —	$ 2,545	$ —	$ 2,545
Total	$ —	$ 2,545	$ —	$ 2,545

The carrying amounts and fair values of Teradyne's financial instruments at March 31, 2024 and December 31, 2023, were as follows:

	March 31, 2024		December 31, 2023	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(in thousands)			
Assets				
Cash and cash equivalents	$ 707,403	$ 707,403	$ 757,571	$ 757,571
Marketable securities	163,205	163,205	179,588	179,588
Derivative assets	4,251	4,251	18,746	18,746
Liabilities				
Derivative liabilities	936	936	2,545	2,545

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 31, 2024:

	March 31, 2024				
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Corporate debt securities	$ 39,946	$ 89	$ (4,190)	$ 35,845	$ 31,461
U.S. Treasury securities	44,519	1	(4,452)	40,068	38,914
Certificates of deposit and time deposits	21,706	—	—	21,706	—
Debt mutual funds	10,363	—	(356)	10,007	3,303
U.S. government agency securities	3,883	—	(20)	3,863	3,863
Commercial paper	1,670	19	—	1,689	—
Non-U.S. government securities	798	—	—	798	—
	$ 122,885	$ 109	$ (9,018)	$ 113,976	$ 77,541

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Marketable securities	$ 41,308	$ 19	$ (27)	$ 41,300	$ 17,657
Long-term marketable securities	81,577	90	(8,991)	72,676	59,884
	$ 122,885	$ 109	$ (9,018)	$ 113,976	$ 77,541

The following table summarizes the composition of available-for-sale marketable securities at December 31, 2023:

	December 31, 2023				
	Available-for-Sale				
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Corporate debt securities	$ 56,458	$ 201	$ (3,925)	$ 52,734	$ 44,263
U.S. Treasury securities	45,725	14	(3,931)	41,808	35,080
Certificates of deposit and time deposits	21,772	—	—	21,772	—
Debt mutual funds	9,081	—	(308)	8,773	3,303
U.S. government agency securities	4,898	—	(6)	4,892	4,892
Commercial paper	1,633	34	—	1,667	—
Non-U.S. government securities	810	—	—	810	—
	$ 140,377	$ 249	$ (8,170)	$ 132,456	$ 87,538

Reported as follows:

	Cost	Unrealized Gain	Unrealized (Loss)	Fair Market Value	Fair Market Value of Investments with Unrealized Losses
			(in thousands)		
Marketable securities	$ 62,385	$ 36	$ (267)	62,154	$ 34,844
Long-term marketable securities	77,992	213	(7,903)	70,302	52,694
	$ 140,377	$ 249	$ (8,170)	$ 132,456	$ 87,538

As of March 31, 2024, the fair market value of investments with unrealized losses less than one year and greater than one year totaled $36.2 million and $41.4 million, respectively. As of December 31, 2023, the fair market value of investments with unrealized losses for less than one year and greater than one year totaled $22.3 million and $65.2 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 31, 2024 and December 31, 2023 were not other than temporary.

The contractual maturities of investments in available-for-sale securities held at March 31, 2024, were as follows:

	March 31, 2024	
	Cost	Fair Market Value
	(in thousands)	
Due within one year	$ 41,308	$ 41,300
Due after 1 year through 5 years	26,360	25,819
Due after 5 years through 10 years	7,760	7,405
Due after 10 years	37,094	29,445
Total	$ 112,522	$ 103,969

Contractual maturities of investments in available-for-sale securities held at March 31, 2024, exclude debt mutual funds with a fair market value of $10.0 million as they do not have a contractual maturity date.

Derivatives

Teradyne conducts business in various foreign countries, with certain transactions denominated in local currencies. As a result, Teradyne is exposed to risks relating to changes in foreign currency exchange rates. Teradyne's foreign currency risk management objective is to minimize the effect of exchange rate fluctuations associated with the remeasurement of monetary assets and liabilities denominated in foreign currencies, and changes in its cash inflows attributable to the forecasted cash flows from certain foreign currency denominated revenues.

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.

Teradyne also enters into foreign currency forward and option contracts designated as cash flow hedges to hedge the risk of changes in its cash inflows attributable to changes in foreign currency exchange rates. The cash flow hedges have maturities of less than six months and mature in the period of revenue recognition for certain products and services in backlog and forecasted to be recognized in a future period. Teradyne evaluates cash flow hedges for effectiveness at inception based on the critical terms match method. The hedges are not expected to incur any ineffectiveness however a quarterly qualitative assessment of effectiveness is done to determine if the critical terms match method remains appropriate to use. The change in fair value of the contracts is recorded in accumulated other comprehensive income (loss) and reclassified to earnings at maturity date.

Teradyne does not use derivative financial instruments for speculative purposes.

At March 31, 2024 and December 31, 2023, Teradyne had the following contracts to buy and sell non-U.S. currencies for U.S. dollars and other non-U.S. currencies with the following notional amounts:

	Net Notional Value	
	March 31, 2024	December 31, 2023
	(in millions)	
Currency Hedged (Buy/Sell)		
U.S. dollar/Japanese yen	$ 57.5	$ 11.0
U.S. dollar/Danish krone	28.4	36.0
U.S. dollar/Taiwan dollar	20.1	42.7
U.S. dollar/Korean won	6.6	7.2
U.S. dollar/British pound sterling	1.0	1.5
Euro/U.S. dollar	25.8	25.3
Singapore dollar/U.S. dollar	17.6	16.6
Philippine peso/U.S. dollar	9.9	10.1
Chinese yuan/U.S. dollar	0.6	1.0
Danish krone/U.S. dollar	0.6	0.7
Total	$ 168.1	$ 152.1

The fair value of the outstanding contracts was a net loss of $0.1 million and a net loss of $1.8 million at March 31, 2024 and December 31, 2023, respectively.

Unrealized 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.

At March 31, 2024 and December 31, 2023, Teradyne had the following cash flow hedge contracts to buy and sell non-U.S. currencies for U.S. dollars with the following notional amounts:

	Net Notional Value	
	March 31, 2024	December 31, 2023
	(in millions)	
Currency Hedged (Buy/Sell)		
U.S. dollar/Japanese yen	$ —	$ 35.5
Total	$ —	$ 35.5

There were no outstanding cash flow hedge contracts at March 31, 2024. The fair value of the outstanding cash flow hedge contracts was a gain of $0.6 million at December 31, 2023.

Unrealized gains and losses on foreign currency cash flow hedge contracts are included in accumulated other comprehensive income (loss). At maturity, the gains or losses associated with cash flow hedge contracts are recorded to revenue.

On November 7, 2023, in connection with our agreement to acquire 10% investment in Technoprobe S.p.A we purchased a call option to buy 481.0 million Euros. The expiration date of the option is April 26, 2024. On April 12, 2024, Teradyne entered into a forward to buy 481.0 million Euros expiring on May 23, 2024. At March 31, 2024 and December 31, 2023, the fair value of the outstanding contract was $3.4 million and $17.4 million, respectively. For the three months ended March 31, 2024, an unrealized loss of $13.9 million was recorded in other (income) expense, net.

The following table summarizes the fair value of derivative instruments as of March 31, 2024 and December 31, 2023:

	Balance Sheet Location	March 31, 2024	December 31, 2023
		(in thousands)	
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts	Other current assets	$ 805	$ 733
Foreign exchange option contracts	Other current assets	3,446	17,364
Foreign exchange forward contracts	Other current liabilities	(936)	(2,545)
Derivatives designated as hedging instruments:			
Foreign exchange forward contracts	Other current assets	—	648
Total derivatives		$ 3,315	$ 16,200

The following table summarizes the effect of derivative instruments recognized in the statement of operations for the three months ended March 31, 2024 and April 2, 2023:

	Location of (Gains) Losses Recognized in Statement of Operations	For the Three Months Ended	
		March 31, 2024	April 2, 2023
		(in thousands)	
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts (1)	Other (income) expense, net	$ (1,699)	$ 1,259
Foreign exchange option contracts	Other (income) expense, net	13,918	—
Derivatives designated as hedging instruments:			
Foreign exchange forward and option contracts	Revenue	(2,280)	1,538
Total Derivatives		$ 9,939	$ 2,797

(1) The table does not reflect the corresponding gains and losses from the remeasurement of the monetary assets and liabilities denominated in foreign currencies. For the three months ended March 31, 2024 and April 2, 2023, net losses from remeasurement of monetary assets and liabilities denominated in foreign currencies were $2.7 million and $0.4 million, respectively.

See Note H: “Debt” regarding derivatives related to the convertible senior notes.

H. 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”) 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 bore interest at a rate of 1.25% per year payable semiannually in arrears on June 15 and December 15 of each year. The Notes matured on December 15, 2023.

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. 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. These transactions have been accounted for as an adjustment to our shareholders’ equity. The Warrant Transactions, which began expiring March 18, 2024 and will continue to expire through July 10, 2024, currently cover, subject to customary anti-dilution adjustments, approximately 13.8 million shares of common stock. During the three months ended March 31, 2024, 0.8 million warrants expired. As of March 31, 2024, the strike price of the warrants was approximately $39.37 per share. The strike price is subject to adjustment under certain circumstances. The Warrant Transactions could result in additional shares of Teradyne’s common stock being issued 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 interest expense on Teradyne's senior notes for three months ended April 2, 2023 was as follows:

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
	(in thousands)	
Contractual interest expense on the coupon	$ —	$ 138
Amortization of debt issuance fees recognized as interest expense	—	113
Total interest expense on the convertible debt	$ —	$ 251

Revolving Credit Facility

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 provided for a three-year, senior secured revolving credit facility of $400.0 million (the "Credit Facility").

On December 10, 2021, the Credit Agreement was amended to extend the maturity date of the Credit Facility to December 10, 2026. On October 5, 2022, the Credit Agreement was amended to increase the amount of the Credit Facility to $750.0 million from $400.0 million.

The Credit Agreement provides that, subject to customary conditions, Teradyne may seek to obtain from existing or new lenders the available incremental amount under the Credit Facility, not to exceed the greater of $200.0 million or 15% of consolidated EBIDTA. The interest rate applicable to loans under the Credit Facility are, at Teradyne's option, equal to either a base rate plus a margin ranging from 0.00% to 0.75% per annum or SOFR plus a margin ranging from 1.10% to 1.85% 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 0.15% to 0.25% 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 SOFR 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.

As of May 3, 2024, the Credit Agreement was undrawn and Teradyne was in compliance with all covenants under the Credit Agreement.

I. PREPAYMENTS

Prepayments consist of the following:

	March 31, 2024	December 31, 2023
	(in thousands)	
Contract manufacturer and supplier prepayments	$ 491,512	$ 502,257
Prepaid maintenance and other services	21,894	17,592
Prepaid taxes	14,335	16,083
Other prepayments	9,901	13,038
Total prepayments (1)	$ 537,642	$ 548,970

(1) Excludes $3.2 million and $5.3 million at March 31, 2024 and December 31, 2023, respectively, of contract manufacturer and supplier prepayments, classified as assets held for sale. See Note E: "Assets held for sale" for additional information.

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 31, 2024	April 2, 2023
	(in thousands)	
Balance at beginning of period	$ 15,698	$ 14,181
Accruals for warranties issued during the period	3,259	4,117
Accruals related to pre-existing warranties	(683)	(405)
Settlements made during the period	(2,950)	(4,992)
Balance at end of period	$ 15,324	$ 12,901

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 31, 2024	April 2, 2023
	(in thousands)	
Balance at beginning of period	$ 34,897	$ 56,180
Deferral of new extended warranty revenue	6,914	4,413
Recognition of extended warranty deferred revenue	(7,302)	(11,250)
Balance at end of period	$ 34,509	$ 49,343

K. STOCK-BASED COMPENSATION

On February 1, 2023 (the “Retirement Date”), Mark E. Jagiela retired as Chief Executive Officer of Teradyne and a member of Teradyne’s Board of Directors, and Teradyne entered into an agreement (the “Retirement Agreement”) with Mr. Jagiela. Under the Retirement Agreement, Mr. Jagiela’s unvested time-based restricted stock units and stock options granted prior to his Retirement Date were modified to allow continued vesting; and any vested options or options that vest during that period may be exercised for the remainder of the applicable option term. During the three months ended April 2, 2023, Teradyne recorded a stock-based compensation expense of $5.9 million related to the Retirement Agreement.

Under Teradyne’s stock compensation plans, Teradyne grants time-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 time-based vesting, which is determined to be the fair market value of the shares at the date of grant, ratably over the period during which the restrictions lapse.

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. 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 year 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.

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 year 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.

On January 22, 2024, the Board enacted the Executive Retirement Policy for Restricted Stock Unit and Option Vesting (the "Retirement Policy"). Under the Retirement Policy, an executive officer that is over the age of 65 and has 10 or more years of service as of the effective date of his or her retirement will be eligible for continued vesting of his or her unvested time-based restricted stock units and stock options granted prior to his or her retirement date.

During the three months ended March 31, 2024 and April 2, 2023, Teradyne granted 0.5 million and 0.5 million of service-based restricted stock unit awards to employees at a weighted average grant date fair value of $94.28 and $102.36, respectively.

During the three months ended March 31, 2024 and April 2, 2023, Teradyne granted 0.1 million and 0.1 million of PBIT PRSUs with a grant date fair value of $94.01 and $102.23, respectively.

During the three months ended March 31, 2024 and April 2, 2023, Teradyne granted 0.1 million and 0.1 million of TSR PRSUs, with a grant date fair value of $100.87 and $137.64, respectively. The fair value was estimated using the Monte Carlo simulation model with the following assumptions:

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
Risk-free interest rate	3.9%	3.9%
Teradyne volatility-historical	42.4%	50.2%
NYSE Composite Index volatility-historical	15.6%	24.8%
Dividend yield	0.5%	0.4%

Expected volatility was based on the historical volatility of Teradyne's stock and the NYSE Composite Index over the most recent three-year period. The risk-free interest rate was determined using the U.S. Treasury yield curve in effect at the time of grant. Dividend yield was based upon an estimated annual dividend amount of $0.48 per share divided by Teradyne's stock price on the grant date of $95.14 for the 2024 grant, and an estimated annual dividend amount of $0.44 per share divided by Teradyne's stock price on the grant date of $103.44 for the 2023 grant.

During the three months ended March 31, 2024 and April 2, 2023, Teradyne granted 0.1 million and 0.1 million of service-based stock options to executive officers at a weighted average grant date fair value of $37.50 and $40.90, 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 31, 2024	April 2, 2023
Expected life (years)	4.0	4.0
Risk-free interest rate	4.0%	3.7%
Volatility-historical	46.3%	46.7%
Dividend yield	0.5%	0.4%

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 $0.48 per share divided by Teradyne's stock price on the grant date of $95.14 for the 2024 grant and an estimated annual dividend amount of $0.44 per share divided by Teradyne's stock price on the grant date of $103.44 for the 2023 grant.

L. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

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

	Foreign Currency Translation Adjustment	Unrealized (Losses) Gains on Marketable Securities	Unrealized (Losses) Gains on Cash Flow Hedges	Retirement Plans Prior Service Credit	Total
			(in thousands)		
Three Months Ended March 31, 2024					
Balance at December 31, 2023, net of tax of $0, $(1,728), $142, $(1,132), respectively	$ (22,442)	$ (6,194)	$ 506	$ 1,152	$ (26,978)
Other comprehensive (loss) gain before reclassifications, net of tax of $0, $(221), $358, $0, respectively	(11,457)	(902)	1,274	—	(11,085)
Amounts reclassified from accumulated other comprehensive income (loss), net of tax of $0, $30, $(500), $0, respectively	—	106	(1,780)	(2)	(1,676)
Net current period other comprehensive loss, net of tax of $0, $(191), $(142), $0, respectively	(11,457)	(796)	(506)	(2)	(12,761)
Balance at March 31, 2024, net of tax of $0, $(1,919), $0, $(1,132), respectively	$ (33,899)	$ (6,990)	$ —	$ 1,150	$ (39,739)
Three Months Ended April 2, 2023					
Balance at December 31, 2022, net of tax of $0, $(2,308), ($708), $(1,130), respectively	$ (39,849)	$ (8,661)	$ (2,517)	$ 1,159	$ (49,868)
Other comprehensive gain before reclassifications, net of tax of $0, $503, $167, $0, respectively	9,309	2,294	596	—	12,199
Amounts reclassified from accumulated other comprehensive income (loss), net of tax of $0, $2, $338, $0, respectively	—	5	1,200	(2)	1,203
Net current period other comprehensive gain (loss), net of tax of $0, $505, $505, $0, respectively	9,309	2,299	1,796	(2)	13,402
Balance at April 2, 2023, net of tax of $0, $(1,803), $(203), $(1,130), respectively	$ (30,540)	$ (6,362)	$ (721)	$ 1,157	$ (36,466)

Reclassifications out of accumulated other comprehensive income (loss) to the statement of operations for the three months ended March 31, 2024 and April 2, 2023, were as follows:

Details about Accumulated Other Comprehensive Income (Loss) Components	For the Three Months Ended		Affected Line Item in the Statements of Operations
	March 31, 2024	April 2, 2023	
	(in thousands)		
Available-for-sale marketable securities:			
Unrealized losses, net of tax of $(30), $(2), respectively	$ (106)	$ (5)	Other (income) expense, net
Cash flow hedges:			
Unrealized (losses) gains, net of tax of $500, $(338), respectively	1,780	(1,200)	Revenue
Defined benefit pension and postretirement plans:			
Amortization of prior service credit, net of tax of $0, $0, respectively	2	2	(a)
Total reclassifications, net of tax of $470, $(340), respectively	$ 1,676	$ (1,203)	Net income

(a) The amortization of prior service credit is included in the computation of net periodic postretirement benefit cost. 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. In the three months ended March 31, 2024, there were no interim indicators of impairment. Goodwill is considered impaired when the net book value of a reporting unit exceeds its estimated fair value.

The changes in the carrying amount of goodwill by reportable segments for the three months ended March 31, 2024, were as follows:

	Robotics	Wireless Test	Semiconductor Test	System Test	Total
			(in thousands)		
Balance at December 31, 2023					
Goodwill	$ 395,463	$ 361,819	$ 262,237	$ 158,699	$ 1,178,218
Accumulated impairment losses	—	(353,843)	(260,540)	(148,183)	(762,566)
Total Goodwill	395,463	7,976	1,697	10,516	415,652
Foreign currency translation adjustment	(7,962)	—	(114)	—	(8,076)
Balance at March 31, 2024					
Goodwill	$ 387,502	$ 361,819	$ 262,123	$ 158,699	1,170,142
Accumulated impairment losses	—	(353,843)	(260,540)	(148,183)	(762,566)
Total Goodwill	$ 387,502	$ 7,976	$ 1,583	$ 10,516	$ 407,576

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:

	Gross Carrying Amount	Accumulated Amortization	Foreign Currency Translation Adjustment	Net Carrying Amount
	(in thousands)			
Balance at March 31, 2024				
Developed technology	$ 267,706	$ (246,266)	$ (5,635)	$ 15,805
Customer relationships	52,109	(48,278)	203	4,034
Tradenames and trademarks	59,007	(47,231)	(1,381)	10,395
Total intangible assets	$ 378,822	$ (341,775)	$ (6,813)	$ 30,234
Balance at December 31, 2023				
Developed technology	$ 267,706	$ (243,191)	$ (5,343)	$ 19,172
Customer relationships	52,109	(47,850)	232	4,491
Tradenames and trademarks	59,007	(46,021)	(1,245)	11,741
Total intangible assets	$ 378,822	$ (337,062)	$ (6,356)	$ 35,404

Aggregate intangible asset amortization expense was $4.7 million and $4.8 million, respectively, for the three months ended March 31, 2024 and April 2, 2023.

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

Year	Amortization Expense
	(in thousands)
2024	$ 14,010
2025	11,290
2026	2,364
2027	1,148
2028	1,066
Thereafter	356

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 31, 2024	April 2, 2023
	(in thousands, except per share amounts)	
Net income for basic and diluted net income per share	$ 64,197	$ 83,531
Weighted average common shares-basic	153,047	155,904
Effect of dilutive potential common shares:		
Convertible note hedge warrant shares (1)	8,862	8,983
Incremental shares from assumed conversion of convertible notes (2)	—	914
Restricted stock units	419	453
Stock options	16	48
Employee stock purchase plan	4	6
Dilutive potential common shares	9,301	10,404
Weighted average common shares-diluted	162,348	166,308
Net income per common share-basic	$ 0.42	$ 0.54
Net income per common share-diluted	$ 0.40	$ 0.50

(1) Convertible notes hedge warrant shares were calculated using the difference between the average Teradyne stock price for the period and the warrant price, multiplied by the number of warrant 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.

(2) Incremental shares from assumed conversion of the convertible notes were calculated using the difference between the average Teradyne stock price for the period and the conversion price, multiplied by the number of convertible notes shares. The result of this calculation, representing the total intrinsic value of the convertible notes, 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 31, 2024 and April 2, 2023, excludes the effect of the potential vesting of 0.4 million and 0.5 million, respectively, of restricted stock units because the effect would have been anti-dilutive.

O. RESTRUCTURING AND OTHER

During the three months ended March 31, 2024, Teradyne recorded $2.2 million of acquisition and divestiture expenses related to the Technoprobe transaction, and $2.0 million of severance charges related to headcount reductions primarily in Robotics and Semiconductor Test, which included charges related to a voluntary early retirement program for employees meeting certain conditions.

During the three months ended April 2, 2023, Teradyne recorded a charge of $2.0 million of severance charges related to headcount reductions primarily in Semiconductor Test, Robotics, and Corporate.

P. RETIREMENT PLANS

ASC 715, “Compensation—Retirement Benefits,” requires an employer with defined benefit plans or other postretirement benefit plans to recognize an asset or a liability on its balance sheet for the overfunded or underfunded status of the plans as defined by ASC 715. The pension asset or liability represents a difference between the fair value of the pension plan’s assets and the projected benefit obligation at December 31. Teradyne uses a December 31 measurement date for all 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 of the U.S. qualified pension plan consist primarily of fixed income and equity securities. In addition, Teradyne has an unfunded supplemental executive defined benefit plan in the United States to provide retirement benefits in excess of levels allowed by the Employment Retirement Income Security Act (“ERISA”) and the Internal Revenue Code (the “IRC”), as well as unfunded qualified foreign plans.

In the three months ended March 31, 2024 and April 2, 2023, Teradyne contributed $0.8 million and $0.8 million, respectively, to the U.S. supplemental executive defined benefit pension plan, and $0.3 million and $0.2 million, respectively, to certain qualified pension plans for non-U.S. subsidiaries.

For the three months ended March 31, 2024 and April 2, 2023, Teradyne’s net periodic pension cost was comprised of the following:

	For the Three Months Ended			
	March 31, 2024		April 2, 2023	
	United States	Foreign	United States	Foreign
	(in thousands)			
Service cost	$ 231	$ 117	$ 272	$ 109
Interest cost	1,647	246	1,711	262
Expected return on plan assets	(1,268)	(16)	(1,285)	(9)
Total net periodic pension cost	$ 610	$ 347	$ 698	$ 362

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. During the three months ended March 31, 2024, Teradyne recorded special termination benefit charges associated with a voluntary early retirement program.

For the three months ended March 31, 2024 and April 2, 2023, Teradyne's net periodic postretirement benefit cost was comprised of the following:

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
	(in thousands)	
Service cost	$ 10	$ 9
Interest cost	73	61
Amortization of prior service credit	(2)	(2)
Special termination benefits	292	—
Total net periodic postretirement benefit cost	$ 373	$ 68

Q. COMMITMENTS AND CONTINGENCIES

Purchase Commitments

As of March 31, 2024, Teradyne had entered into purchase commitments for certain components and materials. The purchase commitments covered by the agreements aggregate to approximately $428.8 million, of which $404.7 million is for less than one year.

Legal Claims

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

Guarantees and Indemnification Obligations

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

Teradyne enters into agreements in the ordinary course of business with customers, resellers, distributors, integrators and suppliers. Most of these agreements require Teradyne to defend and/or indemnify the other party against intellectual property infringement claims brought by a third party with respect to Teradyne's products. From time to time, Teradyne also indemnifies customers and business partners for damages, losses and liabilities they may suffer or incur relating to personal injury, personal property damage, product liability, breach of confidentiality obligations and environmental claims relating to the use of Teradyne's products and services or resulting from the acts or omissions of Teradyne, its employees, authorized agents or subcontractors. On occasion, Teradyne has also provided guarantees to customers regarding the delivery and performance of its products in addition to the warranty described below.

As a matter of ordinary course of business, Teradyne warrants that its products will substantially perform in accordance with its standard published specifications in effect at the time of delivery. Most warranties have a one-year duration commencing from

installation. A provision is recorded upon revenue recognition to cost of revenues for estimated warranty expense based upon historical experience. When Teradyne receives revenue for extended warranties beyond the standard duration, the revenue is deferred and recognized on a straight-line basis over the contract period. Related costs are expensed as incurred. As of March 31, 2024 and December 31, 2023, Teradyne had a product warranty accrual of $15.3 million and $15.7 million, respectively, included in other accrued liabilities and revenue deferrals related to extended warranties of $34.5 million and $34.9 million, respectively, included in short and long-term deferred revenue and customer advances.

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

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

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

Based on historical experience and information known as of March 31, 2024 and December 31, 2023, except for product warranty, Teradyne has not recorded any liabilities for these guarantees and obligations because the amount would be immaterial.

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 31, 2024	April 2, 2023
U.S. statutory federal tax rate	21.0%	21.0%
Tax credits	(3.1)	(2.5)
Discrete benefit related to reserves for uncertain tax positions	(3.1)	—
International provisions of the U.S. Tax Cuts and Jobs Act of 2017	(2.2)	(3.2)
Foreign taxes	(2.1)	(0.6)
Discrete benefit related to equity compensation	(0.9)	(3.3)
Other, net	2.3	2.6
Effective tax rate	11.9%	14.0%

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 31, 2024, 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 31, 2024 and December 31, 2023, Teradyne had $15.9 million and $18.6 million, respectively, of reserves for uncertain tax positions. The $2.7 million net decrease in reserves for uncertain tax positions is related to the settlement of an audit.

As of March 31, 2024, Teradyne estimates that it is reasonably possible that the balance of unrecognized tax benefits may decrease approximately $0.8 million in the next twelve months because of a lapse of statutes of limitation. The estimated decrease relates to U.S. federal and state research and development credits.

Teradyne recognizes interest and penalties related to income tax matters in income tax expense. As of March 31, 2024 and December 31, 2023, $0.7 million and $1.3 million, respectively, of interest and penalties were accrued for uncertain tax positions. For the three months ended March 31, 2024 and April 2, 2023, benefit of $0.6 million and expense of $0.1 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 31, 2024, was $1.1 million, or $0.01 per diluted share. The tax savings due to the tax holiday for the three months ended April 2, 2023, was $0.2 million, or $0.0 per diluted share. In November 2020, Teradyne entered into an agreement with the Singapore Economic Development Board which extended our Singapore tax holiday under substantially similar terms to the agreement which expired on December 31, 2020. The new tax holiday is scheduled to expire on December 31, 2025.

On August 16, 2022, the Inflation Reduction Act of 2022 (“IRA”) was signed into law. The IRA introduced a 15% alternative minimum tax based on the financial statement income of certain large corporations (“CAMT”), effective January 1, 2023. Teradyne currently does not expect the CAMT to have a material impact on its financial results.

On December 15, 2022, the European Union ("EU") Member States formally adopted the EU’s Pillar Two Directive, which generally provides for a minimum effective tax rate of 15%, as established by the Organization for Economic Co-operation and Development ("OECD") Pillar Two Framework. The EU’s Pillar Two Directive effective dates are January 1, 2024, and January 1, 2025, for different aspects of the directive. On July 17, 2023, the OECD published Administrative Guidance proposing certain safe harbor rules that effectively extend certain effective dates to January 1, 2027. Certain EU Member States where Teradyne has a legal presence have recently enacted the directive and administrative guidance into their local tax legislation. Additionally, countries outside the EU where Teradyne has a legal presence have enacted similar language as the EU Members States in their local tax legislation. Teradyne is closely monitoring these developments and evaluating the potential financial impact on income tax expense. As of March 31, 2024, Teradyne anticipates it will meet the safe harbors in most jurisdictions, and any remaining tax under the rules should be immaterial for the year ending December 31, 2024.

S. SEGMENT INFORMATION

Teradyne has four reportable segments (Semiconductor Test, System Test, Wireless Test and Robotics). Each of the reportable segments represents an individual operating segment.

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 storage and system level test, defense/aerospace instrumentation test, and circuit-board test. The Wireless Test segment includes operations related to the design, manufacturing and marketing of wireless test products and services. The Robotics segment includes operations related to the design, manufacturing and marketing of collaborative robotic arms, autonomous mobile robots and advanced robotic control software. Each operating segment has a segment manager who is accountable to and maintains regular contract with Teradyne’s chief operating decision maker (Teradyne’s chief executive officer) to discuss operating activities, financial results, forecasts, and plans for the segment.

Teradyne evaluates performance based on several factors, of which the primary financial measure is business segment income (loss) before income taxes. The accounting policies of the business segments are the same as those described in Note B: “Accounting Policies” in Teradyne’s Annual Report on Form 10-K for the year ended December 31, 2023.

Segment information for the three months ended March 31, 2024 and April 2, 2023 is as follows:

	Semiconductor Test	System Test	Robotics	Wireless Test	Segment Total	Corporate and Eliminations	Consolidated
				(in thousands)			
Three Months Ended March 31, 2024							
Revenues	$ 412,254	$ 75,322	$ 87,654	$ 24,589	$ 599,819	$ —	$ 599,819
Income (loss) before income taxes (1)(2)	79,414	18,391	(14,047)	(893)	$ 82,865	(9,963)	$ 72,902
Total assets (3)	1,348,829	181,803	721,318	69,519	$ 2,321,469	1,089,251	$ 3,410,720
Three Months Ended April 2, 2023							
Revenues	$ 415,009	$ 74,631	$ 89,214	$ 38,675	$ 617,529	$ —	$ 617,529
Income (loss) before income taxes (1)(2)	96,185	15,275	(18,490)	9,352	$ 102,322	(5,238)	$ 97,084
Total assets (3)	1,386,851	173,669	676,092	87,875	$ 2,324,487	1,058,920	$ 3,383,407

(1) Included in Corporate and Eliminations are: interest income, interest expense, net foreign exchange gains (losses), intercompany eliminations, severance charges, pension, acquisition and divestiture related fees, and an expense for the modification of outstanding equity awards.

(2) Included in income (loss) before taxes are charges related to restructuring and other, expense for the modification of outstanding equity awards, and inventory charges.

(3) Total assets are attributable to each segment. Semiconductor Test includes $33.9 million of total assets classified as assets held for sale. See Note E: "Assets held for sale" for additional information. 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:

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
	(in thousands)	
Semiconductor Test:		
Cost of revenues—inventory charge	$ 4,956	$ 3,768
Restructuring and other—employee severance	983	794
System Test:		
Cost of revenues—inventory charge	$ —	$ 675
Robotics:		
Cost of revenues—inventory charge	$ —	$ 782
Corporate and Eliminations:		
Restructuring and other—acquisition & divestiture related expenses	2,214	—
Selling and administrative —equity modification	1,469	5,889
Restructuring and other—employee severance	$ —	$ 659

T. SHAREHOLDERS' EQUITY

Stock Repurchase Program

In January 2023, Teradyne's Board of Directors cancelled its January 2021 repurchase program and approved a new repurchase program for up to $2.0 billion of common stock. As of January 1, 2023, share repurchases in excess of issuances are subject to a 1% excise tax, which is included as part of the cost basis of the shares acquired. Teradyne intends to repurchase up to $90.0 million of its common stock in 2024 based on market conditions.

During the three months ended March 31, 2024, Teradyne repurchased 0.2 million shares of common stock for a total cost of $22.1 million at an average price of $100.31 per share. The cumulative repurchases under the January 2023 repurchase program as of March 31, 2024 were 4.1 million shares of common stock for $422.6 million at an average price per share of $102.35.

During the three months ended April 2, 2023, Teradyne repurchased 0.9 million shares of common stock for $93.7 million at an average price of $104.88 per share.

The total cost of shares acquired includes commissions and related excise tax, and is recorded as a reduction to retained earnings.

Dividend

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

In January 2024 and January 2023, Teradyne's Board of Directors declared a quarterly cash dividend of $0.12 per share and $0.11 per share, respectively. Dividend payments for the three months ended March 31, 2024 and April 2, 2023, were $18.4 million and $17.2 million, respectively.

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, 2023. 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 automated test equipment and robotics products. We design, develop, manufacture and sell automatic test systems and robotics products. Our automatic test systems are used to test semiconductors, wireless products, data storage and complex electronics systems in many industries including the consumer electronics, wireless, automotive, industrial, computing, communications, and aerospace and defense industries. Our robotics products include collaborative robotic arms and autonomous mobile robots ("AMRs") used by global manufacturing, logistics and industrial customers to improve quality, increase manufacturing and material handling efficiency and decrease manufacturing and logistics costs. Our automatic test equipment and robotics products and services include:

- semiconductor test ("Semiconductor Test") systems;
- storage and system level test ("Storage Test") systems, defense/aerospace ("Defense/Aerospace") test instrumentation and systems, and circuit-board test and inspection ("Production Board Test") systems (collectively these products represent "System Test");
- wireless test ("Wireless Test") systems; and
- robotics ("Robotics") products.

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 test 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.

In the first quarter of 2024, artificial intelligence applications ("AI") drove Semiconductor Test performance above our plan, particularly in Memory. We expect AI to continue to drive meaningful demand into the second quarter of 2024, helping to offset weak demand in the smartphone mobility test market. We anticipate an upturn in mobility, which may not materialize until 2025.

Our Robotics segment consists of Universal Robots A/S ("UR"), a leading supplier of collaborative robotic arms, and Mobile Industrial Robots A/S ("MiR"), a leading maker of AMRs for industrial automation. The market for our Robotics segment products is dependent on the adoption of new automation technologies by large manufacturers as well as small and medium enterprises ("SMEs") throughout the world. Robotics results in the first quarter of 2024 were in line with our forecast, putting us in position for full year growth due to new product offerings, expansion of our Original Equipment Manufacturer ("OEM") and large account channels, along with increasing recurring revenue via service and software offerings.

On November 7, 2023, Teradyne and Technoprobe S.p.A, ("Technoprobe"), a leader in the design and production of probe cards, announced the establishment of a strategic partnership that will seek to accelerate growth for both companies and enable higher performance semiconductor test interfaces for customers worldwide. As part of the partnership, Teradyne agreed to make an investment of 481.0 million Euros in exchange for a 10% equity investment in Technoprobe, and Technoprobe agreed to acquire 100% of Teradyne's Device Interface Solutions ("DIS") business in exchange for $85.0 million. The transaction is expected to close during the second quarter of 2024, subject to regulatory approval.

Our financial statements are denominated in U.S. dollars. While the majority of our revenues are in U.S. dollars, historically approximately 70 percent of our Robotics revenue is denominated in foreign currencies. Strengthening of the U.S. dollar would negatively affect Robotics revenue growth in 2024.

Our corporate strategy continues to focus on profitably gaining market share in our test businesses through the introduction of differentiated products that target expanding segments and accelerating growth through continued investment in our Robotics businesses. We plan to execute on our strategy while balancing capital allocations between returning capital to our shareholders through stock repurchases and dividends and using capital for opportunistic accretive acquisitions.

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 31, 2024, 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, 2023, except as noted below.

Critical accounting estimates are complex and may require significant judgment by management. Changes to the underlying assumptions may have a material impact on our financial condition and results of operations. 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.

Preparation of Financial Statements and Use of Estimates

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

SELECTED RELATIONSHIPS WITHIN THE CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
Percentage of revenues:		
Revenues:		
Products	76%	77%
Services	24	23
Total revenues	100	100
Cost of revenues:		
Cost of products	33	32
Cost of services	10	10
Total cost of revenues (exclusive of acquired intangible assets amortization shown separately below)	43	42
Gross profit	57	58
Operating expenses:		
Selling and administrative	25	24
Engineering and development	17	17
Acquired intangible assets amortization	1	1
Restructuring and other	1	—
Total operating expenses	44	43
Income from operations	13	15
Non-operating (income) expense:		
Interest income	(1)	(1)
Interest expense	—	—
Other (income) expense, net	2	—
Income before income taxes	12	16
Income tax provision	1	2
Net income	11%	14%

Results of Operations

First Quarter 2024 Compared to First Quarter 2023

Revenues

Revenues by our reportable segments were as follows:

	For the Three Months Ended		
	March 31, 2024	April 2, 2023	Dollar Change
		(in millions)	
Semiconductor Test	$ 412.3	$ 415.0	$ (2.7)
System Test	75.3	74.6	0.7
Robotics	87.7	89.2	(1.5)
Wireless Test	24.6	38.7	(14.1)
	$ 599.8	$ 617.5	$ (17.7)

The decrease in Semiconductor Test revenues of $2.7 million, or 0.7%, was driven primarily by lower tester sales for automotive applications, offset by Memory Test sales in DRAM wafer sort. The increase in System Test revenues of $0.7 million, or 0.9%, was primarily due to higher sales in Defense/Aerospace, partially offset by lower sales in Storage Test of system level testers. The decrease in Wireless Test revenues of $14.1 million, or 36.4% was primarily due to a decrease in connectivity and ultra wide band test products.

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

	For the Three Months Ended	
	March 31, 2024	April 2, 2023
Korea	28%	12%
United States	17	18
Taiwan	12	18
Japan	11	9
Europe	11	12
China	7	10
Singapore	3	8
Malaysia	3	3
Philippines	2	5
Thailand	2	3
Rest of World	4	2
	100%	100%

(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		
	March 31, 2024	April 2, 2023	Dollar/Point Change
		(in millions)	
Gross profit	$ 339.3	$ 356.4	$ (17.1)
Percent of total revenues	56.6%	57.7%	(1.2)

Gross profit as a percent of revenue decreased by 1.2 points, primarily due to product mix and lower volume.

Selling and Administrative

Selling and administrative expenses were as follows:

	For the Three Months Ended		
	March 31, 2024	April 2, 2023	Dollar Change
	(in millions)		
Selling and administrative	$ 149.2	$ 151.0	$ (1.8)
Percent of total revenues	24.9%	24.4%	

The decrease of $1.8 million in selling and administrative expenses was primarily due to lower spending in Robotics, partially offset by higher spending in Semiconductor Test.

Engineering and Development

Engineering and development expenses were as follows:

	For the Three Months Ended		
	March 31, 2024	April 2, 2023	Dollar Change
	(in millions)		
Engineering and development	$ 103.2	$ 105.8	$ (2.6)
Percent of total revenues	17.2%	17.1%	

The decrease of $2.6 million in engineering and development expenses was primarily due to lower spending in Robotics.

Restructuring and Other

During the three months ended March 31, 2024, we recorded $2.2 million of acquisition and divestiture related costs and $2.0 million of severance charges related to headcount reductions primarily in Semiconductor Test and Robotics.

During the three months ended April 2, 2023, we recorded $2.0 million of severance charges related to headcount reduction primarily in Semiconductor Test, Robotics and Corporate.

Interest and Other

	For the Three Months Ended		
	March 31, 2024	April 2, 2023	Dollar Change
	(in millions)		
Interest income	$ (7.9)	$ (5.3)	$ (2.6)
Interest expense	0.7	1.0	$ (0.3)
Other (income) expense, net	12.1	0.1	$ 12.0

Other (income) expense, net increased $12.0 million primarily due to the change in value of our call option purchased in connection with the anticipated acquisition of Technoprobe.

Income (Loss) Before Income Taxes

	For the Three Months Ended		
	March 31, 2024	April 2, 2023	Dollar Change
		(in millions)	
Semiconductor Test	$ 79.4	$ 96.2	$ (16.8)
System Test	18.4	15.3	3.1
Wireless Test	(0.9)	9.4	(10.3)
Robotics	(14.0)	(18.5)	4.5
Corporate and Eliminations (1)	(10.0)	(5.2)	(4.8)
	$ 72.9	$ 97.1	$ (24.2)

(1) Included in Corporate and Eliminations are: interest income, interest expense, net foreign exchange gains (losses), intercompany eliminations, severance charges, pension, acquisition and divestiture related fees, and an expense for the modification of outstanding equity awards

The decrease in income before income taxes in Semiconductor Test was driven primarily by lower margins due to product mix as well as higher operating expenses on similar sales levels. The decrease in income before income taxes in Wireless Test was primarily due to a decrease in sales of connectivity and ultra wide band test products. The increase in income before income taxes in Robotics was driven primarily by lower operating expenses on similar sales. The loss before income taxes in Corporate and Eliminations was primarily due to changes in unrealized gains/losses on equity securities and the call option related to our anticipated investment in Technoprobe.

Income Taxes

The effective tax rate for the three months ended March 31, 2024 and April 2, 2023, was 11.9% and 14.0%, respectively. The decrease in the effective tax rate from the three months ended April 2, 2023, to three months ended March 31, 2024, primarily resulted from the benefit of a reduction in uncertain tax positions and the benefit of a projected shift in the geographic distribution of income. These benefits were partially offset by a decrease in benefit related to equity compensation.

Contractual Obligations

There have been no changes outside of the ordinary course of business to our contractual obligations as disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023.

Liquidity and Capital Resources

Our cash, cash equivalents and marketable securities balances decreased by $66.6 million in the three months ended March 31, 2024, to $870.6 million.

Operating activities during the three months ended March 31, 2024, provided cash of $7.3 million. Changes in operating assets and liabilities used cash of $108.6 million due to a $3.9 million increase in operating assets and a $104.7 million decrease in operating liabilities.

The increase in operating assets was primarily due to an $8.1 million and $6.9 million increase in accounts receivable and inventories, respectively, partially offset by a $11.1 million decrease in other assets.

The decrease in operating liabilities was due to a $70.2 million decrease in accrued employee compensation $28.4 million decrease in accounts payable, $7.0 million decrease in accrued other, $1.4 million decrease in deferred revenue and customer advance payments, and $1.4 million of retirement plan contributions, partially offset by a $3.8 million increase in income taxes.

Investing activities during the three months ended March 31, 2024, used cash of $24.0 million due to $44.0 million used for the purchases of property, plant and equipment, $16.0 million used for the purchase of marketable securities, partially offset by $20.7 million and $14.4 million in proceeds from the sale of maturities and marketable securities, respectively, and $0.9 million in proceeds from life insurance.

Financing activities during the three months ended March 31, 2024, used cash of $36.7 million due to $22.1 million used for the repurchase of 0.2 million shares of common stock at an average price of $100.31 per share, $18.4 million used for dividend payments and $13.1 million used for payment related to net settlements of employee stock compensation awards, partially offset by $16.9 million from the issuance of common stock under employee stock purchase and stock option plans.

Operating activities during the three months ended April 2, 2023, provided cash of $19.3 million. Changes in operating assets and liabilities used cash of $106.5 million due to a $1.9 million increase in operating assets and $104.7 million decrease in operating liabilities.

The increase in operating assets was due to a $23.7 million increase in inventories, a $15.4 million increase in prepayments and other assets due to prepayments to our contract manufactures, partially offset by a $37.2 million decrease in accounts receivable.

The decrease in operating liabilities was due to a $93.1 million decrease in accrued employee compensation, a $32.7 million decrease in deferred revenue and customer advance payments, and $1.2 million of retirement plan contributions, partially offset by a $12.5 million increase in income taxes, a $9.6 million increase in accrued other liabilities, and a $0.3 million increase in accounts payable.

In January 2024 and January 2023, Teradyne's Board of Directors declared a quarterly cash dividend of $0.12 per share and $0.11 per share, respectively. Dividend payments for the three months ended March 31, 2024 and April 2, 2023, were $18.4 million and $17.2 million, respectively.

In January 2023, our Board of Directors cancelled the 2021 repurchase program and approved a new repurchase program for up to $2.0 billion of common stock.

During the three months ended March 31, 2024, we repurchased 0.2 million shares of common stock for $22.1 million, which excludes related excise tax, at an average price of $100.31 per share. We intend to repurchase up to $90.0 million of common stock in 2024 subject to market conditions. The cumulative repurchases under the 2023 repurchase program as of March 31, 2024 were 4.1 million shares of common stock for $419.4 million, which excludes related excise tax, at an average price per share of $102.35. During the three months ended April 2, 2023 , we repurchased 0.9 million shares of common stock for $93.3 million, which excludes related excise tax, at an average price of $104.88 per share.

While we have previously declared a quarterly cash dividend and authorized a share repurchase program, we may reduce or eliminate the cash dividend or share repurchase program in the future. 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 a three-year, senior secured revolving credit facility of $400 million. On December 10, 2021, the credit agreement was amended to extend the senior secured revolving credit facility to December 10, 2026. On October 5, 2022, the credit agreement was amended to increase the amount of the credit facility to $750.0 million from $400.0 million. As of May 3, 2024, we have not borrowed any funds under the credit facility.

We believe our cash, cash equivalents, marketable securities and senior secured revolving credit facility 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.

Equity Compensation Plans

In addition to our 1996 Employee Stock Purchase Program as discussed in Note Q: "Stock-Based Compensation" in our 2023 Annual Report on Form 10-K, we have 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 and directors. Both plans were approved by our shareholders.

Recently Issued Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2023-07, *"Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures"*, which will require us to disclose

significant segment expenses and other segment items used by the Chief Operating Decision Maker ("CODM") on an annual and interim basis as well as provide in interim periods all disclosures about a reportable segment's profit or loss and assets that are currently required annually. Additionally, we will be required to disclose the title and position of the CODM. The new standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. This ASU will have no impact on our results of operations, cash flows or financial condition. Upon adoption, we will apply the amendments in this ASU retrospectively to all prior period disclosures presented in the financial statements.

In December 2023, FASB issued ASU 2023-09 – *"Income Taxes (Topic 740): Improvements to Income Tax Disclosures"*, which requires expanded disclosures relating to the tax rate reconciliation, income taxes paid, income (loss) before income tax expense (benefit) and income tax expense (benefit), requiring a greater disaggregation of information for each. The provisions of ASU 2023-09 are effective for fiscal years beginning after December 15, 2024. The amendments in this update should be applied on a prospective basis, but retrospective application is permitted. This ASU will have no impact on results of operations, cash flows or financial condition.

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 February 22, 2024. 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, 2023.

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. 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.

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended March 31, 2024, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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. 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.

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, 2023, which could materially affect our business, financial condition or future results. The risk factors described in our Annual Report on Form 10-K remain applicable to our business.

The risks described in our Annual Report on Form 10-K are not the only risks that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

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

In January 2023, Teradyne's Board of Directors cancelled our 2021 repurchase program and approved a new repurchase program for up to $2.0 billion of common stock. During the three months ended March 31, 2024, we repurchased 0.2 million shares of common stock for a total cost of $22.1 million at an average price of $100.31 per share. We record share repurchases at cost, which includes broker commissions and related excise taxes. During the three months ended April 2, 2023, we repurchased 0.9 million shares of common stock for $93.7 million at an average price of $104.88 per share.

The following table includes information with respect to repurchases we made of our common stock during the three months ended March 31, 2024, (in thousands except per share price):

Period	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may Yet Be Purchased Under the Plans or Programs (2)
January 1, 2024 - January 28, 2024	22	$ 110.59	—	$ 1,599,497
January 29, 2024 - February 25, 2024	229	$ 101.92	130	$ 1,586,608
February 26, 2024 - March 31, 2024	92	$ 102.51	90	$ 1,577,380
	343 (1)	102.65 (1)	220	

(1) Includes approximately one hundred twenty two thousand shares at an average price of $106.86 withheld from employees for the payment of taxes.

(2) As of January 1, 2023, share repurchases net of share issuances are subject to a 1% excise tax under the Inflation Reduction Act. Excise tax incurred is included as part of the cost basis of shares repurchased in the Condensed Consolidated Statements of Convertible Common Shares and Stockholders' Equity.

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

Item 5: Other Information

10b 5-1 Trading Plans

Our officers (as defined in Rule 16a-1(f) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) ("Section 16 Officers") and directors from time to time enter into contracts, instructions or written plans for the purchase or sale of our securities that are intended to satisfy the conditions specified in Rule 10b5-1(c) under the Exchange Act for an affirmative defense against liability for trading in securities on the basis of material nonpublic information. We refer to these contracts, instructions, and written plans as "Rule 10b5-1 trading plans" and each one as a "Rule 10b5-1 trading plan." During our fiscal quarter ended March 31, 2024, the following Section 16 Officers or directors adopted, modified or terminated Rule 10b5-1 trading plans:

Richard Burns, President, Semiconductor Test

Richard Burns, our President, Semiconductor Test, entered into a new Rule 10b5-1 trading plan on February 15, 2024. The Rule 10b5-1 trading plan provides that Mr. Burns, acting through a broker, may sell up to an aggregate of (i) 50% of the (net) shares resulting from the vesting of 10,759 (gross) restricted stock units (net shares are net of tax withholding), and (ii) 100% of the (net) shares resulting from the exercise of up to 8,700 stock options (net shares are net of the stock option exercise prices). Subject to price limits, the first trade under Mr. Burns's Rule 10b5-1 trading plan is scheduled for May 20, 2024. Mr. Burns's plan is scheduled to terminate on February 28, 2025, subject to earlier termination upon the sale of all shares subject to the plan, upon termination by Mr. Burns or the broker, or as otherwise provided in the plan.

Mercedes Johnson, Director

Mercedes Johnson, a member of our Board of Directors, entered into a new Rule 10b5-1 trading plan on February 2, 2024. The Rule 10b5-1 trading plan provides that Ms. Johnson, acting through a broker, may sell up to an aggregate of 7,500 shares. Subject to price limits, the first trade under Ms. Johnson's Rule 10b5-1 trading plan is scheduled for June 3, 2024. Ms. Johnson's plan is scheduled to terminate on April 30, 2025, subject to earlier termination upon the sale of all shares subject to the plan, upon termination by Ms. Johnson or the broker, or as otherwise provided in the plan.

Item 6: Exhibits

Exhibit Number	Description
10.1	Form of Time-Based Restricted Stock Unit Agreement for Executive Officers under the 2006 Equity and Cash Compensation Incentive Plan, as amended* (filed herewith)
10.2	Form of Executive Officer Stock Option Agreement under the 2006 Equity and Cash Compensation Incentive Plan, as amended* (filed herewith)
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a) of Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents
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

Sanjay Mehta
Vice President,
Chief Financial Officer and Treasurer
(Duly Authorized Officer
and Principal Financial Officer)
May 3, 2024

Exhibit 10.1

TERADYNE, INC. 2006 EQUITY AND CASH COMPENSATION INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK UNIT GRANT AND TERMS FOR U.S. EXECUTIVE RECIPIENTS

Name:

Employee ID:

In granting restricted stock units, Teradyne, Inc. ("Teradyne") seeks to provide employees of Teradyne and its subsidiaries with incentive to help drive Teradyne's future success and to share in the economic benefits of that success. We all look forward to your contributions to that effort.

You have been granted a restricted stock unit award consisting of the right to receive up to XX shares of Teradyne common stock. This grant was approved effective [ ](the "Effective Date").

This award is subject to the Restricted Stock Unit Terms for U.S. Recipients attached hereto and the terms of the Teradyne, Inc. 2006 Equity and Cash Compensation Incentive Plan (the "Plan"). The shares covered by this award will be delivered over time as described in and subject to the vesting conditions of the Restricted Stock Unit Terms for U.S. Recipients.

The Plan prospectus, consisting of a "Participant Information" document that summarizes the Plan and the complete Plan, is available on "In-Site," Teradyne's internal Web site: Equity Compensation (Options & RSU's) (sharepoint.com)

Please note that printed versions of the Plan prospectus documents are available to you, at no charge, upon request to the HR Service Center, Teradyne, Inc., 600 Riverpark Drive, North Reading, MA 01864, (978) 370-3041 or hr.service.center@teradyne.com

TERADYNE, INC

/s/ Ryan E. Driscoll
Ryan E. Driscoll
V.P., General Counsel and Secretary

(US Executive RSU)
Grant #

RESTRICTED STOCK UNIT TERMS FOR U.S. RECIPIENTS

1. Award Grant, Vesting and Transfer

(a) Award Grant. Teradyne, Inc. hereby grants to the recipient an award (this "Award") of restricted stock units (the "RSUs") under the Teradyne, Inc. 2006 Equity and Cash Compensation Incentive Plan (the "Plan"). The RSUs represent the right of the recipient to receive that number of shares of Teradyne common stock set forth in the Notice of Restricted Stock Unit Grant and Terms for U.S. Recipients (the "Notice of Grant") attached hereto upon satisfaction of the terms set forth in these Restricted Stock Unit Terms for U.S. Recipients (this "Agreement"). This Award is governed by and subject to the terms of the Plan, the Notice of Grant and this Agreement.

Capitalized terms used but not otherwise defined herein will have the meaning set forth in the Notice of Grant or the Plan. In the event of any inconsistencies or differences between the Plan and this Agreement, the Plan shall prevail. The terms governing this Award are intended to comply with all applicable laws and regulations.

(b) This Award vests yearly on the anniversary of the Effective Date. None of the RSUs subject to this Award will be vested on the Effective Date. Except as provided in (c) below, 25% of the RSUs granted will vest on the first and each of the three subsequent anniversaries of the Effective Date until the total grant is fully vested on the fourth anniversary of the Effective Date. The Committee shall have the right to accelerate the date that any installment of this Award becomes vested, including, but not limited to, events such as disability, death or upon the acquisition of control of Teradyne by another entity.

(c) This Award will not vest further after termination of employment or other business relationship except in limited certain circumstances. This Award will not vest after the recipient's employment or other business relationship ends, regardless of the reason, provided, however, that if the recipient's employment or other business relationship with Teradyne or, if different, the recipient's employer (the "Employer") or any of the other Subsidiaries of Teradyne ends on account of (1) death, the unvested portion of this Award which would have vested under the applicable rule stated in (b) above shall automatically become vested in full on the date of his or her termination of employment or business relationship on account of death or (2) retirement after attaining both at least age sixty-five and at least ten years of service, provided that the recipient submits written notice of such intent to retire at least six months prior to its effective date, then (i) one hundred percent of the unvested portion of this Award granted at least 365 calendar days prior to retirement shall vest in accordance with the rule stated in (b) above and (ii) a pro-rated portion of the unvested portion of this Award granted within 365 calendar days of the retirement based on the number of days of employment or other business relationship during the 365 calendar day period from the grant date shall continue to vest in accordance with the rule stated in (b) above.

The recipient's employment or other business relationship shall be considered as continuing uninterrupted during any bona fide approved leave of absence provided (i) that the period of such leave does not exceed 90 days and is not a personal leave unless the personal leave is based on recipient's accrued, unused personal paid time-off benefits provided under a program sponsored by Teradyne, the Employer or any other Subsidiary of Teradyne, (ii) the recipient's right to reemployment is guaranteed by statute following the approved leave of absence, or (iii) the Committee has agreed in writing that Teradyne, the Employer or any other Subsidiary of Teradyne is contractually obligated to continue the recipient's employment or other business relationship after the approved leave of absence period. Notwithstanding the foregoing leave of absence provision, vesting of this Award shall continue during the period a recipient is determined to be disabled under the Teradyne Short-Term Disability program and Long-Term Disability Plan, provided that such vesting shall cease upon the earlier to occur of the recipient's (A) termination of employment from Teradyne, the Employer or any other Subsidiary of Teradyne and (B) the last day of the twenty-four (24) month period beginning on the date on which Long-Term Disability benefits commenced.

(d) No rights as stockholder; Issuance. The recipient shall not have any rights as a stockholder in, to or with respect to any shares which may be covered by this Award (including but not limited to the right to vote or to receive dividends) until this Award is settled by issuance of shares to the recipient. All shares issued in respect of this Award will be transferred or issued to the recipient (or his or her estate, in the event of his or her death) as soon as is practicable after the date the RSUs vest but, in any event, within 2½ months following the calendar year in which the RSUs become vested (or any earlier date, after vesting, as required to avoid characterization as non-qualified deferred compensation under Section 409A of the Code). Teradyne will not be required to transfer or issue any shares upon vesting

of the RSUs until arrangements satisfactory to it have been made by the recipient to address any Tax-Related Items (as defined in Section 4 below) which might arise by reason of the vesting of the RSUs and/or transfer or issuance of shares.

(e) This Award may not be assigned or transferred. Other than as provided in Section 11(a) of the Plan, this Award is not assignable or transferable (except by will or the laws of descent and distribution).

2. Capital Changes and Business Succession. Section 3(c) of the Plan contains provisions for adjusting (or substituting) the number and class of securities, vesting schedule and other terms of outstanding stock-based awards granted under the Plan if a recapitalization, stock split, merger, or other specified event occurs and the Committee determines that an adjustment (or substitution) is appropriate. In that event, the recipient of this Award will be notified of the adjustment (or substitution), if any, to this Award.

3. Employment or Business Relationship. This Award and the recipient's participation in the Plan shall not create any right of continued employment or business relationship or be interpreted as forming or amending an employment contract or business relationship with Teradyne or its Subsidiaries, and does not affect the right of the recipient, Teradyne or the Employer to terminate the recipient's employment or a business relationship at any time.

4. Tax Obligations.

(a) Responsibility for Taxes. The recipient acknowledges that, regardless of any action taken by Teradyne or the Employer, the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the recipient's participation in the Plan and legally applicable to the recipient ("Tax-Related Items"), is and remains the recipient's responsibility and may exceed the amount actually withheld by Teradyne or the Employer. The recipient further acknowledges that Teradyne and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Award, including, but not limited to, the grant, vesting or settlement of the RSUs, the subsequent sale of shares acquired pursuant to such settlement and the receipt of any dividends or other distributions, and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of this Award to reduce or eliminate the recipient's liability for Tax-Related Items or achieve any particular tax result. Further, if the recipient is subject to Tax-Related Items in more than one jurisdiction, the recipient acknowledges that Teradyne and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

(b) Tax Withholding. Prior to any relevant taxable or tax withholding event, as applicable, the recipient agrees to make adequate arrangements satisfactory to Teradyne and/or the Employer to satisfy all Tax-Related Items. The recipient authorizes Teradyne and/or the Employer, or their respective agents, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by withholding in shares to be issued upon settlement of the RSUs; provided, however, that the number of shares withheld will be determined using rates that do not exceed the maximum statutory tax rates for the jurisdiction(s) applicable to the recipient. For tax purposes, the recipient is deemed to have been issued the full number of shares subject to the vested RSUs, notwithstanding that a number of the shares are held back solely for the purpose of paying the Tax-Related Items. Alternatively, a recipient may elect to satisfy his or her obligations for Tax-Related Items by delivery of cash or check to Teradyne or the Employer. In the event that withholding in shares is problematic under applicable tax or securities law or has materially adverse accounting consequences and the recipient does not satisfy his or her obligations for Tax-Related Items by delivery of cash or check, the recipient (1) authorizes and directs Teradyne and any brokerage firm determined acceptable to Teradyne to sell on the recipient's behalf a whole number of shares from those shares issuable to the recipient as Teradyne determines to be appropriate to generate cash proceeds sufficient to satisfy any applicable withholding obligation for Tax-Related Items; (2) authorizes Teradyne or the Employer to withhold the Tax-Related Items from the recipient's wages or other compensation; and (3) agrees, upon request from Teradyne or the Employer, to make a cash payment in an amount equal to the withholding obligations for any Tax-Related Items. Teradyne may refuse to issue or deliver the shares or the proceeds of the sale of shares if the recipient fails to comply with his or her obligations in connection with the Tax-Related Items.

5. Compliance with Laws. Shares to be issued under this Award are currently registered under the United States Securities Act of 1933, as amended. If such registration is not in effect at the time of vesting, the recipient will be required to represent to Teradyne that he or she is acquiring such shares as an investment and not with a view to the sale of those shares. Notwithstanding any other provision of the Plan or the Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of common stock, Teradyne shall not be required to deliver any shares of common stock issuable upon settlement of the RSUs prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the United States Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign

governmental agency, which registration, qualification or approval Teradyne shall, in its absolute discretion, deem necessary or advisable. The recipient understands that Teradyne is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the recipient agrees that Teradyne shall have unilateral authority to amend the Plan and the Agreement without the recipient's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

6. Code Section 409A. This Award is intended to be exempt from the application of Section 409A of the Code, and any ambiguities herein will be interpreted to so comply. Teradyne reserves the right, to the extent Teradyne deems necessary or advisable in its sole discretion, to amend or modify the terms of this Award (or the Plan) or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take other actions, including any amendments or actions that would result in a reduction to the benefit payable under this Award, in each case, without the consent of the recipient of the Award, as may be necessary to ensure that all vesting or settlement provided under this Award are made in a manner that complies with Section 409A of the Code or to mitigate any additional tax, interest and/or penalties or other adverse tax consequences that may apply under Section 409A of the Code if compliance is not practical; provided, however, that nothing in this Section 6 creates an obligation on the part of Teradyne to modify the terms of this Award or the Plan. In that light, Teradyne makes no representation that the terms of this Award will comply with Section 409A of the Code or that the settlement of this Award will not be subject to taxes, interest and penalties or other adverse tax consequences under Section 409A of the Code. In no event whatsoever shall Teradyne or any of its affiliates be liable to the recipient of this Award or any other party for any additional tax, interest, penalties or other liability that may be imposed on the recipient of this Award by Section 409A of the Code or for any action taken by Teradyne with respect thereto.

7. Governing Law and Venue. The Award and the provisions of this Agreement are governed by, and subject to, the laws of the Commonwealth of Massachusetts, without regard to the conflict of law provisions, as provided in the Plan. For purposes of litigating any dispute that arises under this Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Massachusetts, agree that such litigation shall be conducted in the courts of Middlesex County, or the federal courts for the United States for the District of Massachusetts, where this grant is made and/or to be performed.

8. Electronic Delivery and Acceptance. Teradyne may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The recipient hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by Teradyne or a third party designated by Teradyne.

9. Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

10. Imposition of Other Requirements. Teradyne reserves the right to impose other requirements on the recipient's participation in the Plan, on the RSUs and on any shares of common stock acquired under the Plan, to the extent Teradyne determines it is necessary or advisable for legal or administrative reasons, and to require the recipient to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

11. Waiver. The recipient acknowledges that a waiver by Teradyne of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by the recipient or any other recipient.

12. No Advice Regarding Grant. Teradyne is not providing any tax, legal or financial advice, nor is Teradyne making any recommendations regarding the recipient's participation in the Plan, or the recipient's acquisition or sale of the underlying shares of common stock. The recipient should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

13. Insider Trading Restrictions/Market Abuse Laws. The recipient acknowledges that, depending on the recipient's or his or her broker's country of residence or where the shares of common stock are listed, the recipient may be subject to insider trading restrictions and/or market abuse laws which may affect the recipient's ability to accept, acquire, sell or otherwise dispose of shares of common stock, rights to shares of common stock (*e.g.*, RSUs) or rights linked to the value of shares of common stock under the Plan during such times the recipient is considered to have "inside information" regarding Teradyne (as defined by the laws or regulations in the recipient's country). The recipient is responsible for ensuring compliance with any restrictions and should consult his or her personal legal advisor on this matter.

14. Recoupment. The recipient agrees that the RSUs and any financial gain realized by the recipient through settlement of the RSUs or sale of any shares of common stock acquired shall be subject to forfeiture and/or repayment to the Company to the extent required to comply with the application of any recoupment policy or any recovery or clawback policy required by law or any other applicable laws or the rules and regulations of the securities exchange or inter-dealer quotation system on which the shares of common stock are listed or quoted, including, without limitation, pursuant to Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

Exhibit 10.2

TERADYNE, INC. 2006 EQUITY AND CASH COMPENSATION INCENTIVE PLAN
NOTICE OF STOCK OPTION GRANT AND TERMS FOR U.S. RECIPIENTS

Name:
Employee Number:

In granting stock options, Teradyne, Inc. ("Teradyne") seeks to provide employees with incentive to help drive Teradyne's future success and to share in the economic benefits of that success. We all look forward to your contributions to that effort.

In recognition of your contributions to Teradyne, you have been granted a stock option award consisting of the right to receive up to xx shares of Teradyne common stock upon exercise of this option in accordance with its terms. This stock option grant was approved effective (the "Effective Date"). The Stock Option Grant Details applicable to this stock option grant are listed below.

This stock option grant is subject to the Stock Option Terms for U.S. Recipients attached hereto and the terms of the Teradyne, Inc. 2006 Equity and Cash Compensation Incentive Plan (the "Plan"). Stock options covered by this award will be exercisable over time as described in and subject to the vesting conditions of the attached Stock Option Terms for U.S. Recipients.

The Plan prospectus, consisting of a "Participant Information" document that summarizes the Plan and the complete Plan, is available on "In-Site," Teradyne's internal Web site. To access the information, go to: Equity Compensation (Options & RSU's) (sharepoint.com)

Please note that printed versions of the Plan prospectus documents are available to you, at no charge, upon request to the HR Service Center, Teradyne, Inc., 600 Riverpark Drive, North Reading, MA 01864, (978) 370-3041 or hr.service.center@teradyne.com

TERADYNE, INC.

Stock Option Grant Details:
Grant Date/Effective Date:
Number of Shares under Option:
Per Share Exercise Price/FMV on Grant Date:

/s/ Ryan E. Driscoll
Ryan E. Driscoll
Vice President, General Counsel
and Secretary

(2024 Stock Option)
Grant #

STOCK OPTION TERMS FOR U.S. RECIPIENTS

1. Option Grant, Exercise and Vesting.

(a) Stock Option Grant. Teradyne, Inc. hereby grants to the recipient an award (this "Award") of nonstatutory stock options (the "Stock Options") under the Teradyne, Inc. 2006 Equity and Cash Compensation Incentive Plan (the "Plan"). The Stock Options represent the right of the recipient to purchase that number of shares of Teradyne common stock set forth in the Notice of Stock Option Grant and Terms for U.S. Recipients (the "Notice of Grant") attached hereto upon satisfaction of the terms set forth in these Stock Option Terms for U.S. Recipients (this "Agreement"). This Award is governed by and subject to the terms of the Plan, the Notice of Grant and this Agreement.

Capitalized terms used but not otherwise defined herein will have the meaning set forth in the Notice of Grant or the Plan. In the event of any inconsistencies or differences between the Plan and this Agreement, the Plan shall prevail. The terms governing this Award are intended to comply with all applicable laws and regulations.

(b) These Stock Options vest and become exercisable yearly on the anniversary of the Effective Date. None of the Stock Options subject to this Award will be vested or exercisable on the Effective Date. Except as provided in (d) below, 25% of the Stock Options granted will vest and become exercisable on the first and each of the three subsequent anniversaries of the Effective Date until the total grant is fully vested and exercisable on the fourth anniversary of the Effective Date. The Committee shall have the right to accelerate the date that any installment of this Award becomes vested and exercisable, including, but not limited, to events such as disability, death or upon the acquisition of control of Teradyne by another entity.

(c) After Stock Options become exercisable, they can be exercised at any time prior to and on the Option Expiration Date. This Award expires at the close of business at Teradyne's headquarters on the date that is seven years from the Effective Date (the "Option Expiration Date"). This Award may expire earlier if the recipient's employment or other business relationship terminates, as described below.

(d) The Stock Options will not vest further after termination of employment or other business relationship except in limited certain circumstances. If the recipient's employment or business relationship with Teradyne or, if different, the recipient's employer (the "Employer") or any Subsidiary of Teradyne terminates for any reason except death, then this Award will not vest after the recipient's employment or other business relationship ends and this Award will automatically expire at the close of business at Teradyne's headquarters on the date ninety (90) days after the recipient's termination date, or if earlier, the Option Expiration Date.

If the recipient's employment or other business relationship with Teradyne, the Employer or any Subsidiary of Teradyne ends on account of death, the unvested portion of this Award which would have vested under the applicable rule stated in (b) above shall automatically become vested in full on the date of the recipient's termination of employment or business relationship on account of death and the vested portion of this Award may be exercised in accordance with Section 11(a) of the Plan until the earlier of (1) the close of business at Teradyne's headquarters on the date that is one year subsequent to the recipient's termination due to death or (2) the Option Expiration Date.

If the recipient's employment or other business relationship with Teradyne, ends on account of retirement after attaining both at least age sixty-five and at least ten years of service to Teradyne, provided that the recipient submits written notice of such intent to retire at least six months prior to its effective date, then (i) one hundred percent of the unvested portion of this Award granted at least 365 calendar days prior to retirement shall continue to vest in accordance with the rule stated in (b) above and (ii) a pro-rated portion of the unvested portion of this Award granted within 365 calendar days of the retirement based on the number of days of employment or other business relationship during the 365 calendar day period from the grant date shall continue to vest in accordance with the rule stated in (b) above, in both cases such vested portion of this Award may be exercised in accordance with Section 11(a) of the Plan until the Option Expiration Date.

The recipient's employment or other business relationship shall be considered as continuing uninterrupted during any bona fide approved leave of absence provided (i) that the period of such leave

does not exceed 90 days and is not a personal leave unless the personal leave is based on recipient's accrued, unused personal paid time-off benefits provided under a program sponsored by Teradyne, the Employer or any other Subsidiary of Teradyne, (ii) the recipient's right to reemployment is guaranteed by statute following the approved leave of absence, or (iii) the Committee has agreed in writing that Teradyne, the Employer or any other Subsidiary of Teradyne is contractually obligated to continue the recipient's employment or other business relationship after the approved leave of absence period. Notwithstanding the foregoing leave of absence provision, vesting of this Award shall continue during the period a recipient is determined to be disabled under the Teradyne Short-Term Disability program and Long-Term Disability Plan, provided that such vesting shall cease upon the earlier to occur of the recipient's (A) termination of employment from Teradyne, the Employer or any other Subsidiary of Teradyne and (B) the last day of the twenty-four (24) month period beginning on the date on which Long-Term Disability benefits commenced.

2. Procedure for Exercising Stock Options.

(a) Stock Options are exercised by giving written notice to Teradyne in the form (or by such other procedures as) specified by the Committee stating the election to exercise, specifying the number of shares as to which Stock Options are being exercised and paying Teradyne the full exercise price for such shares, plus any applicable Tax-Related Items (as defined in Section 6 below). Payment can be made to Teradyne by a combination of cash, certified or bank check, or personal check (in each case in United States dollars), or by delivery of shares of Teradyne common stock having a Fair Market Value equal as of the date of the exercise to the cash exercise price of the Option or through a broker-dealer sale and remittance procedure pursuant to which the recipient shall provide written irrevocable instructions to a brokerage firm to effect the immediate sale of some or all of the purchased shares and remit to Teradyne sufficient funds to cover the aggregate exercise price payable for the purchased shares, plus any applicable Tax-Related Items designated by Teradyne, and shall provide written directives to Teradyne to deliver the purchased shares directly to such brokerage firm to complete the sale transaction, provided that such process is consistent with and permissible under applicable law.

(b) The recipient shall not have any rights as a stockholder in, to or with respect to any shares which may be covered by this Award (including but not limited to the right to vote or to receive dividends) until the issuance of shares to the recipient upon exercise of the Stock Options. All shares issuable upon exercise of the Stock Options will be transferred or issued to the recipient (or his or her estate, in the event of death) promptly upon exercise.

(c) With regard to any Stock Option exercises, Teradyne will not be required to transfer or issue any shares until arrangements satisfactory to it have been made to address any Tax-Related Items and withholding requirements which might arise by reason of the Stock Option exercise. Teradyne will pay any transfer or issue tax and deliver the shares purchased.

3. Assignment and Transferability. This Stock Option may not be assigned or transferred (except by will or the laws of descent and distribution) other than as provided in Section 11(a) of the Plan.

4. Capital Changes and Business Succession. Section 3(c) of the Plan contains provisions for adjusting (or substituting) the number and class of securities, vesting schedule, exercise price and other terms of outstanding stock-based awards granted under the Plan if a recapitalization, stock split, merger, or other specified event occurs and the Committee determines that an adjustment (or substitution) is appropriate. In that event, the recipient will be notified of the adjustment (or substitution), if any, to this Award.

5. Employment or Business Relationship. This Award and the recipient's participation in the Plan shall not create any right of continued employment or business relationship or be interpreted as forming or amending an employment contract or business relationship with Teradyne or its Subsidiaries, and does not affect the right of the recipient, Teradyne or the Employer to terminate the recipient's employment or a business relationship at any time.

6. Tax Obligations.

(a) Responsibility for Taxes. The recipient acknowledges that, regardless of any action taken by Teradyne or the Employer, the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the recipient's participation in the Plan and legally applicable to the recipient ("Tax-Related Items"), is and remains the recipient's responsibility and may exceed the amount actually withheld by Teradyne or the Employer. The recipient further acknowledges that Teradyne and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection

with any aspect of the Stock Options, including, but not limited to, the grant, vesting or exercise of the Stock Options, the subsequent sale of shares acquired pursuant to such exercise and the receipt of any dividends or other distributions, and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Stock Option to reduce or eliminate the recipient's liability for Tax-Related Items or achieve any particular tax result. Further, if the recipient is subject to Tax-Related Items in more than one jurisdiction, the recipient acknowledges that Teradyne and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

(b) Tax Withholding. Prior to any relevant taxable or tax withholding event, as applicable, the recipient agrees to make adequate arrangements satisfactory to Teradyne and/or the Employer to satisfy all Tax-Related Items. In this regard, the recipient authorizes Teradyne and/or the Employer, or their respective agents, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by withholding from proceeds of the sale of shares acquired at exercise of the Stock Options either through a voluntary sale or through a mandatory sale arranged by Teradyne (on the recipient's behalf pursuant to this authorization) without further consent. Teradyne may withhold or account for Tax-Related Items by considering maximum applicable rates, in which case the recipient will receive a refund of any over-withheld amount in cash and will have no entitlement to the common stock equivalent. Alternatively, the recipient may elect to satisfy the recipient's obligations for Tax-Related Items by delivery of cash or check to Teradyne or the Employer.

7. Compliance with Laws. Shares to be issued under this Award are currently registered under the United States Securities Act of 1933, as amended. If such registration is not in effect at the time of vesting, the recipient will be required to represent to Teradyne that the recipient is acquiring such shares as an investment and not with a view to the sale of those shares. Notwithstanding any other provision of the Plan or the Agreement, unless there is an available exemption from any registration, qualification or other legal requirement applicable to the shares of common stock, Teradyne shall not be required to deliver any shares of common stock issuable upon exercise of the Stock Options prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the United States Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval Teradyne shall, in its absolute discretion, deem necessary or advisable. The recipient understands that Teradyne is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the recipient agrees that Teradyne shall have unilateral authority to amend the Plan and the Agreement without the recipient's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

8. Governing Law and Venue. The Award and the provisions of this Agreement are governed by, and subject to, the laws of the Commonwealth of Massachusetts, without regard to the conflict of law provisions, as provided in the Plan. For purposes of litigating any dispute that arises under this Award or this Agreement, the parties hereby submit to and consent to the jurisdiction of the Commonwealth of Massachusetts, agree that such litigation shall be conducted in the courts of Middlesex County, or the federal courts for the United States for the District of Massachusetts, where this grant is made and/or to be performed.

9. Electronic Delivery and Acceptance. Teradyne may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The recipient hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by Teradyne or a third party designated by Teradyne.

10. Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

11. Imposition of Other Requirements. Teradyne reserves the right to impose other requirements on the recipient's participation in the Plan, on the Stock Options and on any shares of common stock acquired under the Plan, to the extent Teradyne determines it is necessary or advisable for legal or administrative reasons, and to require the recipient to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

12. Waiver. The recipient acknowledges that a waiver by Teradyne of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by the recipient or any other recipient.

13. No Advice Regarding Grant. Teradyne is not providing any tax, legal or financial advice, nor is Teradyne making any recommendations regarding the recipient's participation in the Plan, or the recipient's acquisition or sale of the underlying shares of common stock. The recipient should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

14. Insider Trading Restrictions/Market Abuse Laws. The recipient acknowledges that, depending on the recipient's or his or her broker's country of residence or where the shares of common stock are listed, the recipient may be subject to insider trading restrictions and/or market abuse laws which may affect the recipient's ability to accept, acquire, sell or otherwise dispose of shares of common stock, rights to shares of common stock (*e.g.*, Stock Options) or rights linked to the value of shares of common stock under the Plan during such times the recipient is considered to have "inside information" regarding Teradyne (as defined by the laws or regulations in the recipient's country). The recipient is responsible for ensuring compliance with any restrictions and should consult his or her personal legal advisor on this matter.

15. Recoupment. The recipient agrees that the Stock Option and any financial gain realized by the recipient through exercise of the Stock Option or sale of any shares of common stock acquired shall be subject to forfeiture and/or repayment to the Company to the extent required to comply with the application of any recoupment policy or any recovery or clawback policy required by law or any other applicable laws or the rules and regulations of the securities exchange or inter-dealer quotation system on which the shares of common stock are listed or quoted, including, without limitation, pursuant to Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

Exhibit 31.1

CERTIFICATIONS

I, Gregory S. Smith, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Teradyne, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2024

By: /s/ GREGORY S. SMITH

Gregory S. Smith
Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Sanjay Mehta, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Teradyne, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2024

By: /s/ SANJAY MEHTA

Sanjay Mehta
Chief Financial Officer

Exhibit 32.1

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

In connection with the Quarterly Report of Teradyne, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory S. Smith, Chief Executive Officer of the Company, certify pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ GREGORY S. SMITH

Gregory S. Smith
Chief Executive Officer
May 3, 2024

Exhibit 32.2

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

In connection with the Quarterly Report of Teradyne, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024, 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 Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ SANJAY MEHTA

Sanjay Mehta
Chief Financial Officer
May 3, 2024