

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

**FORM S-8  
REGISTRATION STATEMENT**  
*UNDER  
THE SECURITIES ACT OF 1933*

**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 01864  
(Address of Principal Executive Offices)

Teradyne, Inc. 1996 Employee Stock Purchase Plan  
(Full Title of the Plan)

Charles Gray, Esq.  
Teradyne, Inc.  
600 Riverpark Drive  
North Reading, Massachusetts 01864  
(Name and Address of Agent for Service)

(978) 370-2700  
(Telephone Number, Including Area Code, of Agent for Service)

**COPY TO:**

Marko Zatylny, Esq.  
Ropes & Gray LLP  
Prudential Tower  
800 Boylston Street  
Boston, Massachusetts 02199  
(617) 951-7000

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.

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock (par value \$0.125)	3,000,000 shares	\$124.13	\$372,390,000	\$40,628

- (1) This registration statement covers the registration of 3,000,000 additional shares of Common Stock of Teradyne, Inc., par value \$0.125 per share (“Common Stock”), authorized for issuance under the Teradyne, Inc. 1996 Employee Stock Purchase Plan (the “ESPP”). In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement also covers an indeterminate number of additional shares of Common Stock that may become issuable pursuant to terms designed to prevent dilution resulting from stock splits, stock dividends or similar transactions.
  - (2) The price applicable to such shares is not currently known. The price of \$124.13 per share, which is the average of the high and low price of Teradyne’s Common Stock as reported on the Nasdaq Global Select Market on May 10, 2021, is set forth solely for purposes of calculating the filing fee pursuant to Rules 457(c) and 457(h) of the Securities Act.
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## EXPLANATORY NOTE

This Registration Statement is filed to register an additional 3,000,000 shares of the Teradyne, Inc.'s Common Stock, for issuance under the ESPP. This Registration Statement is submitted in accordance with General Instruction E to Form S-8 regarding registration of additional securities of the same class, and, pursuant to such instruction, the contents of the Registration Statement on Form S-8 (File No. 333-188824) filed with the Securities and Exchange Commission on [May 24, 2013](#), the contents of the Registration Statement on Form S-8 (File No. 333-159723) filed with the Securities and Exchange Commission on [June 4, 2009](#), the contents of the Registration Statement on Form S-8 (File No. 333-143231) filed with the Securities and Exchange Commission on [May 24, 2007](#), the contents of the Registration Statement on Form S-8 (File No. 333-116632) filed with the Securities and Exchange Commission on [June 18, 2004](#), the contents of the Registration Statement on Form S-8 (File No. 333-101983) filed with the Securities and Exchange Commission on [December 19, 2002](#), the contents of the Registration Statement on Form S-8 (File No. 333-56373) filed with the Securities and Exchange Commission on [June 9, 1998](#) and the contents of the Registration Statement on Form S-8 (File No. 333-07177) filed with the Securities and Exchange Commission on [June 28, 1996](#), are each incorporated herein by reference.

### Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

<u>Exhibit Number</u>	<u>Description</u>
3.1	<a href="#">Restated Articles of Organization of Teradyne, Inc., as amended (incorporated by reference to Exhibit 3.1 to Teradyne's Current Report on Form 8-K filed on May 13, 2021).</a>
3.2	<a href="#">Amended and Restated By-Laws of Teradyne, Inc. (incorporated by reference to Exhibit 3.1 to Teradyne's Current Report on Form 8-K filed on January 28, 2021).</a>
5.1	<a href="#">Opinion of Ropes &amp; Gray LLP.</a>
10.1	<a href="#">1996 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.1 to Teradyne's Current Report on Form 8-K filed on May 13, 2021).</a>
23.1	<a href="#">Consent of Ropes &amp; Gray LLP (included in Exhibit 5.1).</a>
23.2	<a href="#">Consent of PricewaterhouseCoopers LLP.</a>
24.1	<a href="#">Power of Attorney (included on the signature page of this Registration Statement).</a>

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of North Reading, the Commonwealth of Massachusetts, on this 14th day of May, 2021.

### TERADYNE, INC.

By: /s/ Sanjay Mehta

Sanjay Mehta  
Vice President, Chief Financial Officer and Treasurer

## POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Mark E. Jagiela and Sanjay Mehta, and each of them singly, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of Teradyne, Inc., and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of each of them or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Mark E. Jagiela</u> Mark E. Jagiela	Chief Executive Officer and Director (Principal Executive Officer)	May 14, 2021
<u>/s/ Sanjay Mehta</u> Sanjay Mehta	Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	May 14, 2021
<u>/s/ Michael A. Bradley</u> Michael A. Bradley	Director	May 14, 2021
<u>/s/ Edwin J. Gillis</u> Edwin J. Gillis	Director	May 14, 2021
<u>/s/ Timothy E. Guertin</u> Timothy E. Guertin	Director	May 14, 2021
<u>/s/ Peter Herweck</u> Peter Herweck	Director	May 14, 2021
<u>/s/ Mercedes Johnson</u> Mercedes Johnson	Director	May 14, 2021
<u>/s/ Marilyn Matz</u> Marilyn Matz	Director	May 14, 2021
<u>/s/ Paul J. Tufano</u> Paul J. Tufano	Director	May 14, 2021



ROPES & GRAY LLP  
PRUDENTIAL TOWER  
800 BOYLSTON STREET  
BOSTON, MA 02199-3600  
WWW.ROPESGRAY.COM

May 14, 2021  
Teradyne, Inc.  
600 Riverpark Drive  
North Reading, Massachusetts 01864

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with the registration statement on Form S-8 (the "Registration Statement"), filed by Teradyne, Inc., a Massachusetts corporation (the "Company"), on the date hereof, with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of an aggregate of 3,000,000 shares of Common Stock, \$0.125 par value per share, of the Company (the "Shares"). The Shares are issuable under the Company's 1996 Employee Stock Purchase Plan (the "Plan").

We have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Massachusetts Business Corporation Act.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and sold in accordance with the terms of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Teradyne, Inc. of our report dated February 22, 2021 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in Teradyne, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020.

*PricewaterhouseCoopers LLP*

Boston, Massachusetts  
May 14, 2021