TERADYNE, INC Form SC 13G February 14, 2007

#### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934 (Amendment No.)\*

TERADYNE INC

(Name of Issuer)

Common Stock

(Title of Class of Securities)

880770102

(CUSIP Number)

Check the following box if a fee is being paid with this statement \_\_\_\_\_. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following page(s))

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CUSIP NO. 880770102

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- 1 Name of Reporting Person
  S.S. or I.R.S. Identification No. of Above Person
  - T. ROWE PRICE ASSOCIATES, INC.

52-0556948

2 Check the Appropriate Box if a Member of a Group\*

(a) \_\_\_\_ NOT APPLICABLE (b) \_\_\_\_

3 SEC Use Only

4 Citizenship or Place of Organization

MARYLAND

Number of 5 Sole Voting Power

\* \*

Shares 2,922,016

Beneficially 6 Shared Voting Power

\*:

Owned By Each -0-

Reporting 7 Sole Dispositive Power

**\*** \*

Person 17,313,089

With 8 Shared Dispositive Power

-0-

9 Aggregate Amount Beneficially Owned by Each Reporting Person

17,313,089

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares\*

NOT APPLICABLE

11 Percent of Class Represented by Amount in Row 9

9.1%

12 Type of Reporting Person\*

ΙA

\*SEE INSTRUCTION BEFORE FILLING OUT!

\*\*Any shares reported in Items 5 and 6 are also reported in Item 7.

SCHEDULE 13G

PAGE 3 OF 5

Item 1(a) Name of Issuer:

Reference is made to page 1 of this Schedule 13G

Item 1(b) Address of Issuer's Principal Executive Offices:

600 Riverpark Drive, North Reading, MA 01864

Item 2(a) Name of Person(s) Filing:

	(1) T. Rowe Price Associates, Inc. ("Price Associates")
	(2)
	Attached as Exhibit A is a copy of an agreement between the Persons Filing (as specified hereinabove) that this Schedule 13G is being filed on behalf of each of them.
Item 2(	o) Address of Principal Business Office:
	100 E. Pratt Street, Baltimore, Maryland 21202
Item 2(c	c) Citizenship or Place of Organization:
	(1) Maryland
	(2)
Item 2(	l) Title of Class of Securities:
	Reference is made to page 1 of this Schedule 13G
Item 2(€	e) CUSIP Number: 880770102
Item 3	The person filing this Schedule 13G is an:
Х	Investment Adviser registered under Section 203 of the Investment Advisers Act of $1940$
	Investment Company registered under Section 8 of the Investment Company Act of 1940
Item 4 SCHEDULE	Schedule 13G.
PAGE 4	9 OF 5
Item 5 0	Ownership of Five Percent or Less of a Class.
X N	Not Applicable.
C	This statement is being filed to report the fact that, as of the date of this report, the reporting person(s) has (have) ceased to be the beneficial owner of more than five percent of the class of securities.
	Ownership of More than Five Percent on Behalf of Another Person
,	(1) Price Associates does not serve as custodian of the assets of any of its clients; accordingly, in each instance only the client or the client's custodian or trustee bank has the right to receive dividends paid with respect to, and proceeds from the sale of, such securities.

The ultimate power to direct the receipt of dividends paid with respect to, and the proceeds from the sale

of, such securities, is vested in the individual and institutional clients which Price Associates serves as investment adviser. Any and all discretionary authority which has been delegated to Price Associates may be revoked in whole or in part at any time.

Except as may be indicated if this is a joint filing with one of the registered investment companies sponsored by Price Associates which it also serves as investment adviser ("T. Rowe Price Funds"), not more than 5% of the class of such securities is owned by any one client subject to the investment advice of Price Associates.

(2) With respect to securities owned by any one of the T. Rowe Price Funds, only State Street Bank and Trust Company, as custodian for each of such Funds, has the right to receive dividends paid with respect to, and proceeds from the sale of, such securities. No other person is known to have such right, except that the shareholders of each such Fund participate proportionately in any dividends and distributions so paid.

Item 7 Identification and Classification of the Subsidiary Which
 Acquired the Security Being Reported on By the Parent
 Holding Company.

Not Applicable.

Item 8 Identification and Classification of Members of the Group.

Not Applicable. SCHEDULE 13G PAGE 5 OF 5

Item 9 Notice of Dissolution of Group.

Not Applicable.

Item 10 Certification.

By signing below I (we) certify that, to the best of my (our) knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect. T. Rowe Price Associates, Inc. hereby declares and affirms that the filing of Schedule 13G shall not be construed as an admission that Price Associates is the beneficial owner of the securities referred to, which beneficial ownership is expressly denied.

Signature.

After reasonable inquiry and to the best of my (our) knowledge and belief, I (we) certify that the information set forth in this statement is true, complete and correct.

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Dated: February 14, 2007
                T. ROWE PRICE ASSOCIATES, INC.
                By: /s/ Henry H. Hopkins
                     Henry H. Hopkins, Vice President
               This Schedule 13G, including all exhibits, must be filed
      Note:
                with the Securities and Exchange Commission, and a copy
                hereof must be sent to the issuer by registered or
                certified mail not later than February 14th following
                the calendar year covered by the statement or within the
                time specified in Rule 13d-1(b)(2), if applicable.
      12/31/2006
; MARGIN-RIGHT: 0pt" align="left">34,705 (24)
33,357
David W. Unsworth Jr.
236,545 (25)
227,359
Gilad Ottensoser
21,926 (26)
21,074
John H. Shaw III
21,926 (27)
21,074
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Kristin Hussian 6,000 6,000 Rachel Glicksman 144,000 144,000 Crown Taylor 2,449,265 2,449,265 3.58% Michael E. Martin 10,000 10,000 Jack S. Steinhauser 15,000 15,000 \* Harrison W. Schumacher

87,500

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87,500
Paul J. Mysyk
87,500
87,500
Axiom Capital Management,
37,500
37,500
Inc. (28)
David Jordan
56,250
56,250
Barry Zelin
56,250
56,250
Sichenzia Ross Friedman
50,000
50,000
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Ference LLP (29)

### \* Represents less than 1%.

The number and percentage of shares beneficially owned is determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rule, beneficial ownership includes any shares as to which the selling stockholders has sole or shared voting power or investment power and also any shares, which the selling stockholders has the right to acquire within 60 days. The actual number of shares of common stock issuable upon the conversion of the convertible debentures is subject to adjustment depending on, among other factors, the future market price of the common stock, and could be materially less or more than the number estimated in the table.

- (1) This column represents shares of common stock issuable upon conversion of convertible debentures and exercise of warrants issued in our June 2005 private placement, which is an estimated number based on a conversion price as of a recent date of October 30, 2006 of \$.1256 divided into the principal amount of the debenture.
- (2) Includes a good faith estimate of the shares issuable upon conversion of the convertible debentures and exercise of warrants issued in June 2005, based on current market prices. Because the number of shares of common stock issuable upon conversion of the convertible debentures issued in June 2005 is dependent in part upon the market price of the common stock prior to a conversion, the actual number of shares of common stock that will be issued upon conversion will fluctuate daily and cannot be determined at this time. Under the terms of the convertible debentures issued in June 2005, if the convertible debentures had actually been converted on October 30, 2006, the convertible debentures would have had a conversion price of \$.1256. The actual number of shares of common stock offered in this prospectus, and included in the registration statement of which this prospectus is a part, includes such additional number of shares of common stock as may be issued or issuable upon conversion of the convertible debentures and exercise of the related warrants issued in June 2005 by reason of any stock split, stock dividend or similar transaction involving the common stock, in accordance with Rule 416 under the Securities Act of 1933. However the selling stockholders have contractually agreed to restrict their ability to convert their convertible debentures or exercise their warrants issued in June 2005 and receive shares of our common stock such that the number of shares of common stock held by them in the aggregate and their affiliates after such conversion or exercise does not exceed 4.9% of the then issued and outstanding shares of common stock as determined in accordance with Section 13(d) of the Exchange Act. Accordingly, the number of shares of common stock set forth in the table for the selling stockholders exceeds the number of shares of common stock that the selling stockholders could own beneficially at any given time through their ownership of the convertible debentures and the warrants. In that regard, the beneficial ownership of the common stock by the selling stockholder set forth in the table is not determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

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- (3) Assumes that all securities registered will be sold.
- (4) Represents the aggregate maximum number and percentage of shares that the selling stockholder can own at one time (and therefore, offer for resale at any one time) due to their 4.9% limitation.
- (5) Brett Cohen in his capacity as the President of JGB Management, Inc., the general partner of JGB Capital, LP, has voting and investment power over such securities.
- (6) Paul T. Mannion and Andy Reckles in their capacity as members of PEF Advisors, LLC, the general partner of Palisades Master Fund, LP, share voting and investment power over such securities.
- (7) Mel Craw and Maxi Brezzi, in their capacity as managers of GreenLight Switzerland SA, the investment advisor to Crescent International Ltd., have voting and investment power over the shares owned by Crescent International Ltd. Messrs. Craw and Brezzi disclaim beneficial ownership of such shares.
- (8) Vincent Sabarra in his capacity as President of HPC Capital Management, has voting and investment power over such securities.
- (9) Konrad Ackerman and Rainer Posch have voting and investment control over the shares owned by this entity.
- (10) Includes 400,000 shares of common stock underlying warrants.
- (11) Includes 13,650 shares of common stock underlying warrants.
- (12) James Goren and Alexander Goren have voting and investment control over the shares owned by this entity.
- (13) Includes 500,000 shares of common stock underlying warrants.
- (14) Keith Goodman, Manager of Nite Capital LLC, which is the General Partner of Nite Capital L.P. has voting and investment control over the shares owned by this entity.
- (15) Includes 150,001 shares of common stock underlying warrants.
- (16) George Young, our Chairman and CEO, has voting and investment control over the shares owned by this entity.
- (17) David W. Unsworth has voting and investment control over the shares owned by this entity.
- (18) Includes 27,016 shares of common stock underlying warrants.

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- (19) David Jenkins and Christopher K. Norman have voting and investment control over the shares owned by this entity.
- (20) Represents shares of common stock underlying warrants.
- (21) Joel Padowitz has voting and investment control over the shares owned by this entity.
- (22) Includes 29,131 shares of common stock underlying warrants.
- (23) Includes 16,599 shares of common stock underlying warrants.
- (24) Includes 8,299 shares of common stock underlying warrants.
- (25) Includes 64,742 shares of common stock underlying warrants.
- (26) Includes 3,002 shares of common stock underlying warrants.
- (27) Includes 3,002 shares of common stock underlying warrants.
- (28) Liam F. Dalton and Mark D. Martino have voting and investment control over the shares owned by this entity.
- (29) Greg Sichenzia, Marc Ross, Richard Friedman and Michael Ference have voting and investment control over the shares owned by this entity.