

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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 7, 2013

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

000-09992

(Commission File Number)

04-2564110

(I.R.S. Employer Identification No.)

One Technology Drive, Milpitas, California

(Address of principal executive offices)

95035

(Zip Code)

Registrant's telephone number, including area code: (408) 875-3000

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On February 7, 2013, KLA-Tencor Corporation (the "Company") issued a press release announcing that the Company's Board of Directors has declared a cash dividend of \$0.40 per share on the Company's Common Stock. Such dividend shall be payable on March 1, 2013 to the Company's stockholders of record as of the close of business on February 19, 2013. A copy of the press release is attached hereto as Exhibit 99.1.

In its meeting held on February 7, 2013, the Company's Board of Directors also approved a clarifying amendment to the definition of "Compensation" in Section 2(e) of the Company's Amended and Restated 1997 Employee Stock Purchase Plan ("ESPP") to specify that "payments upon vesting of cash long-term incentive awards issued by the Company" are included as compensation eligible for deduction for purposes of the ESPP. Prior to this amendment, the ESPP generally provided that any amounts includable as "wages" subject to tax under Section 3101(a) of the Internal Revenue Code, as amended (which includes payments under the Company's cash long-term incentive awards), qualify as "Compensation" for purposes of the ESPP. Accordingly, the Company does not deem this amendment, which simply adds payments under cash long-term incentive awards to the illustrative list of included types of compensation, to be material.

The foregoing description of the amendment to the ESPP is qualified in its entirety by reference to the ESPP, which will be attached as an exhibit to the Company's Quarterly Report on Form 10-Q for the period ending March 31, 2013, which the Company expects to file with the Securities and Exchange Commission on or prior to May 10, 2013.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibit is filed herewith:

| Exhibit No. | Description |
|--------------------|---|
| 99.1 | Text of press release issued by KLA-Tencor Corporation dated February 7, 2013 |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

KLA-TENCOR CORPORATION

Date: February 7, 2013

By: /s/ BRIAN M. MARTIN

Name: Brian M. Martin

Title: Executive Vice President and General Counsel

EXHIBIT INDEX

| Exhibit No. | Description |
|--------------------|---|
| 99.1 | Text of press release issued by KLA-Tencor Corporation dated February 7, 2013 |

FOR IMMEDIATE RELEASE

Investor Relations:

Ed Lockwood
Sr. Director, Investor Relations
(408) 875-9529
ed.lockwood@kla-tencor.com

Media Relations:

Meggan Powers
Sr. Director, Corporate Communications
(408) 875-8733
meggan.powers@kla-tencor.com

**KLA-TENCOR DECLARES REGULAR CASH DIVIDEND FOR THE
THIRD QUARTER OF FISCAL YEAR 2013**

MILPITAS, Calif.—February 7, 2013 (PR Newswire) — KLA-Tencor Corporation (NASDAQ: KLAC) today announced that its Board of Directors has declared a quarterly cash dividend of \$0.40 per share on its common stock payable on March 1, 2013 to KLA-Tencor stockholders of record as of the close of business on February 19, 2013.

About KLA-Tencor: KLA-Tencor Corporation, a leading provider of process control and yield management solutions, partners with customers around the world to develop state-of-the-art inspection and metrology technologies. These technologies serve the semiconductor, LED and other related nanoelectronics industries. With a portfolio of industry-standard products and a team of world-class engineers and scientists, the company has created superior solutions for its customers for more than 35 years. Headquartered in Milpitas, California, KLA-Tencor has dedicated customer operations and service centers around the world. Additional information may be found at www.kla-tencor.com. (KLAC-F)

###