
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): 07/13/2010

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Commission File Number: 000-09992

Delaware
(State or other jurisdiction of
incorporation)

04-2564110
(IRS Employer
Identification No.)

One Technology Drive, Milpitas, California 95035
(Address of principal executive offices, including zip code)

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

N/A
(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 July 13, 2010, KLA-Tencor Corporation (the "Company") issued a press release announcing that the Company's Board of Directors has authorized an increase of the level of the Company's quarterly dividend from \$0.15 to \$0.25 per share. This increase is expected to take effect beginning with the Company's quarterly dividend to be declared in August 2010. A copy of the press release is attached hereto as Exhibit 99.1.

Forward Looking Statements: Statements in this Form 8-K and in the attached Exhibit 99.1 other than historical facts, such as statements regarding the anticipated future level of the Company's quarterly dividend, the Company's commitment to continue paying dividends at any level in the future and the Company's future operating results and financial strength (including without limitation the Company's future cash flows and availability of cash for the payment of dividends), are forward-looking statements and are subject to the Safe Harbor provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current information and expectations, and involve a number of risks and uncertainties. Actual future results and/or events may differ materially from those projected in such statements due to various factors, including without limitation: a change in the Company's dividend policy by the Company's Board of Directors (which has the ability in its sole discretion to increase, decrease or eliminate entirely the Company's dividend at any time); unanticipated material payment obligations incurred by the Company that decrease the Company's willingness or ability to continue paying dividends at the anticipated increased level, or at all; the financial condition of the global capital markets and the general macroeconomic environment; the demand for semiconductors; new and enhanced product offerings by competitors; the ability of the Company's research and development teams to successfully innovate and develop technology that is responsive to customer demands; and changing customer demands or technological requirements. For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this Form 8-K, please refer to the Company's Annual Report on Form 10-K for the year ended June 30, 2009, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein). The Company assumes no obligation to, and does not currently intend to, update these forward-looking statements.

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 July 13, 2010

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 hereunto duly authorized.

KLA-TENCOR CORPORATION

Date: July 13, 2010

By: /s/ Brian M. Martin

Brian M. Martin
Senior Vice President and General Counsel

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
EX-99.1	Text of press release issued by KLA-Tencor Corporation dated July 13, 2010

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 INCREASES QUARTERLY DIVIDEND LEVEL TO \$0.25 PER SHARE FROM \$0.15 PER SHARE

MILPITAS, Calif., July 13, 2010 - KLA-Tencor Corporation® (NASDAQ: KLAC) today announced that its board of directors has authorized an increase of the level of the company's quarterly dividend from \$0.15 to \$0.25 per share. This increase is expected to take effect beginning with KLA-Tencor's quarterly dividend to be declared in August 2010. This represents a 67% increase compared to the prior quarterly dividend and is the second dividend increase since KLA-Tencor first instituted its dividend in April 2005.

"KLA-Tencor's strong cash flows and solid balance sheet provide us the financial flexibility to return significant cash to our shareholders while also providing the capacity to fuel our growth initiatives," said Rick Wallace, president and chief executive officer of KLA-Tencor.

"We remain committed to increasing shareholder value through executing our strategic objectives of customer focus, growth, operations excellence, and talent development," Wallace added. "This increase in the level of the dividend reflects our confidence in the outlook for KLA-Tencor and our commitment to rewarding our shareholders for their continued investment."

This announcement and other news regarding KLA-Tencor will be discussed later today, July 13, 2010, at the company's annual SEMICON West analyst briefing at the Westin San Francisco Market Street Hotel, with a live webcast beginning at 12:30 p.m. Pacific Daylight Time. The live webcast can be accessed through the Investors page of the KLA-Tencor web site at <http://ir.kla-tencor.com/>.

About KLA-Tencor: KLA-Tencor is the world leader in yield management and process control solutions for semiconductor manufacturing and related nanoelectronics industries. Headquartered in Milpitas, California, the company has sales and service offices around the world. An S&P 500 company, KLA-Tencor is traded on the NASDAQ Global Select Market under the symbol KLAC. Additional information about the company is available at <http://www.kla-tencor.com> (KLAC-F).

Forward Looking Statements:

Statements in this press release other than historical facts, such as statements regarding the anticipated future level of KLA-Tencor's quarterly dividend, the company's commitment to continue paying dividends at any level in the future, and KLA-Tencor's future operating results and financial strength (including without limitation the company's future cash flows and availability of cash for the payment of dividends), are forward-looking statements and are subject to the Safe Harbor provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current information and expectations, and involve a number of risks and uncertainties. Actual future results and/or events may differ materially from those projected in such statements due to various factors, including without limitation: a change in KLA-Tencor's dividend policy by the company's Board of Directors (which has the ability in its sole discretion to increase, decrease or eliminate entirely the company's dividend at any time); unanticipated material payment obligations incurred by KLA-Tencor that decrease the company's willingness or ability to continue paying dividends at the anticipated increased level, or at all; the financial condition of the global capital markets and the general macroeconomic environment; the demand for semiconductors; new and enhanced product offerings by competitors; the ability of KLA-Tencor's research and development teams to successfully innovate and develop technology that is responsive to customer demands; and changing customer demands or technological requirements. For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this release, please refer to KLA-Tencor's Annual Report on Form 10-K for the year ended June 30, 2009, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein). KLA-Tencor assumes no obligation to, and does not currently intend to, update these forward-looking statements.

###