

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): October 30, 2014

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 October 30, 2014, KLA-Tencor Corporation issued a press release announcing its proposed offering of senior notes under an automatic shelf registration statement on file with the Securities and Exchange Commission. A copy of the press release is filed herewith as Exhibit 99.1 to this Current Report on Form 8-K.

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 October 30, 2014

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: October 30, 2014

By: /s/ BRIAN M. MARTIN
Name: Brian M. Martin
Title: Executive Vice President and General Counsel

EXHIBIT INDEX

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FOR IMMEDIATE RELEASE

Investor Relations:

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KLA-TENCOR ANNOUNCES OFFERING OF SENIOR NOTES

MILPITAS, Calif., October 30, 2014 - KLA-Tencor Corporation (NASDAQ: KLAC) today announced that it intends to offer, subject to market and other conditions, senior notes under an automatic shelf registration statement on file with the Securities and Exchange Commission (the "SEC").

J.P. Morgan Securities LLC is acting as the sole book-running manager of the offering.

KLA-Tencor has filed an effective registration statement (including a preliminary prospectus supplement and accompanying base prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the effective registration statement (including the preliminary prospectus supplement and accompanying base prospectus) for more complete information about KLA-Tencor and this offering. You may obtain these documents free of charge by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, copies may be obtained from J.P. Morgan Securities LLC at the following address: 383 Madison Avenue, New York, New York 10179, Attention: Investment Grade Syndicate Desk-3rd Floor or by calling collect at (212) 834-4533.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of these securities, in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

Forward-Looking Statements:

Statements in this press release other than historical facts, such statements regarding KLA-Tencor's intention to offer, subject to market and other conditions, senior notes, 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 results may differ materially from those projected in such statements due to various factors, including but not limited to: the demand for semiconductors; the financial condition of the global capital markets and the general macroeconomic environment; new and enhanced product and technology offerings by competitors; cancellation of orders by customers; the ability of KLA-Tencor's research and development teams to successfully innovate and develop technologies and products that are responsive to customer demands; KLA-Tencor's ability to successfully manage its costs; market acceptance of the company's existing and newly issued products; and changing customer demands. 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, 2014, 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.

About KLA-Tencor:

KLA-Tencor Corporation (NASDAQ: KLAC), 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)