

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE TO

(Rule 13e-4)

**TENDER OFFER STATEMENT UNDER SECTION 14(d)(1) OR 13(e)(1)
OF THE SECURITIES EXCHANGE ACT OF 1934**

(AMENDMENT NO. 1)

KLA-TENCOR CORPORATION

(Name of Subject Company (Issuer) and Filing Person (Offeror))

Options to Purchase Shares of Common Stock, Par Value \$0.001 Per Share

(Title of Class of Securities)

482480100

(CUSIP Number of Class of Securities)

(Underlying Common Stock)

Brian Martin

Senior Vice President and Chief Legal Officer

KLA-Tencor Corporation

160 Rio Robles

San Jose, California 95134

(408) 875-3000

(Name, address and telephone number of person authorized to receive notices and communications on behalf of filing person)

Copy to:

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Palo Alto, California 94306

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CALCULATION OF FILING FEE

Transaction valuation*

\$2,821.27

Amount of filing fee**

\$0.09***

- * The "transaction valuation" set forth above is based on the Black-Scholes option valuation model, and assumes that all outstanding options eligible for tender covering an aggregate of 301,800 shares of common stock of KLA-Tencor Corporation will be amended pursuant to this offer, which may not occur.
- ** The amount of the filing fee, calculated in accordance with Rule 0-11 under the Securities Exchange Act of 1934, as amended, as modified by Fee Advisory No. 5 for fiscal year 2007, equals \$30.70 per \$1,000,000 of transaction valuation. The transaction valuation set forth above was calculated for the sole purpose of determining the filing fee, and should not be used or relied upon for any other purpose.
- *** Previously paid.
- Check box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- | | |
|---------------------------|-----------------|
| Amount Previously Paid: | Not applicable. |
| Form or Registration No.: | Not applicable. |
| Filing party: | Not applicable. |
| Date filed: | Not applicable. |
- Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.
- Check the appropriate boxes below to designate any transactions to which the statement relates:
- third party tender offer subject to Rule 14d-1.
- issuer tender offer subject to Rule 13e-4.
- going-private transaction subject to Rule 13e-3.
- amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer.

Introductory Statement

This Amendment No. 1 (the "Amendment") to the Tender Offer Statement on Schedule TO (the "Schedule TO") filed by KLA-Tencor Corporation ("KLA-Tencor") with the Securities and Exchange Commission (the "SEC") on May 16, 2007, is the final amendment relating to the offer by KLA-Tencor to amend or replace certain outstanding options. The purpose of Amendment No. 1 is to report the results of the Offer to Amend or Replace Eligible Options (the "Offer").

ITEM 4 TERMS OF THE TRANSACTION

(a) Material Terms.

The Offer expired at 11:59 p.m. Pacific Time on June 14, 2007. Pursuant to the Offer, KLA-Tencor has amended outstanding Eligible Options covering approximately 283,900 shares of KLA-Tencor common stock to increase the exercise price of each such option to the lower of (i) the fair market value per share of KLA-Tencor common stock on the actual grant date of that option or (ii) \$56.12, the closing selling price per share of such common stock on the June 15, 2007 amendment date. In addition, the participants whose Eligible Options have been so amended are now eligible for special cash bonuses in the aggregate amount of up to approximately \$361,595.73 to compensate them for the higher exercise prices per share in effect for their amended options.

KLA-Tencor did not cancel any Eligible Options tendered pursuant to the Offer. Therefore, KLA-Tencor did not grant any New Options on June 15, 2007.

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Amendment No. 1 to Schedule TO is true, complete and correct.

KLA-TENCOR CORPORATION

By: /s/ Brian Martin

Brian Martin
Senior Vice President & Chief Legal Officer

Date: June 18, 2007