

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. 4)
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)

Jeffrey L. Hall
Senior Vice President and Chief Financial 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:

S. James DiBernardo, Esq.
Jill Mather Bartow, Esq.
Morgan, Lewis, & Bockius LLP
Two Palo Alto Square
Palo Alto, California 94306
(650) 843-4000

CALCULATION OF FILING FEE

Transaction valuation*

\$141,307,107.00

Amount of filing fee**

\$4,338.13***

- * 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 5,139,344 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. 4 (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO (the "Schedule TO") filed with the Securities and Exchange Commission (the "SEC") on February 27, 2007, relating to our offer to amend or replace outstanding "Eligible Options" (as defined in the Offer to Amend or Replace attached to the Schedule TO as Exhibit (a)(1)) held by current employees subject to taxation in the United States so that those options will not be subject to Section 409A of the Internal Revenue Code. Except as amended and supplemented hereby and by Amendment No. 1, Amendment No. 2 and Amendment No. 3 thereto, all terms of the Schedule TO and the Offer to Amend or Replace and all disclosure set forth in the Schedule TO and Exhibits thereto remain unchanged.

ITEM 12. EXHIBITS.

Exhibit (a)(23) to this Amendment is hereby filed as Exhibit (a)(23) to the Schedule TO.

- (a)(1) Offer to Amend or Replace, dated February 27, 2007.*
- (a)(2) Email Announcement of Offer to Amend or Replace, dated February 27, 2007.*
- (a)(3) Frequently Asked Questions.***
- (a)(4) Screenshot of Login Page to Offer website at <https://kla.equitybenefits.com>.*
- (a)(5) Screenshot of Welcome Page to Offer website at <https://kla.equitybenefits.com>.*
- (a)(6) Screenshot of Electronic Election Form (screenshots 1-2).**
- (a)(7) Screenshot of Election Amendment Review.**
- (a)(8) Screenshot of Agreement to Terms of Election (screenshots 1-3).*
- (a)(9) Screenshot of Print Confirmation.**
- (a)(10) Screenshot of Election Confirmation Statement.**
- (a)(11) Instructions to Electronic Election Form.*
- (a)(12) Form of Stock Option Amendment and Special Bonus Agreement.***
- (a)(13) Form of Acknowledgement of Receipt of Election Form.**
- (a)(14) Form of Email Reminder of Expiration Date.*
- (a)(15) Paper Election Form.**
- (a)(16) Form of Notice of Expiration of Offer, Amendment of Eligible Option and Commitment to Pay Cash Bonus.***
- (a)(17) Material Income Tax Consequences for Eligible Optionees Resident Outside the United States.***
- (a)(18) KLA-Tencor Corporation Annual Report on Form 10-K for the year ended June 30, 2006, filed with the SEC on January 29, 2007 is incorporated herein by reference.
- (a)(19) KLA-Tencor Corporation Quarterly Report on Form 10-Q for its fiscal quarter ended September 30, 2006, filed with the SEC on January 29, 2007, is incorporated herein by reference.
- (a)(20) Email Containing Hyperlink to Offer to Amend or Replace and Information Regarding Eligible Options, dated March 2, 2007.**
- (a)(21) Email Announcing Change to Scheduled Payment Date of Cash Bonus.***
- (a)(22) Email Notice Regarding Eligibility of Executive Officers.†

-
- (a)(23) Email to Individuals Choosing to Decline the Offer.
 - (b) Not applicable.
 - (d)(1) KLA-Tencor Corporation Restated 1982 Stock Option Plan, as amended November 18, 1996 is incorporated herein by reference from Exhibit 10.74 to Form S-8, filed with the SEC on March 7, 1997.
 - (d)(2) KLA-Tencor Corporation Restated 1982 Stock Option Plan Form of Stock Option Agreement.*
 - (d)(3) KLA-Tencor Corporation 2000 Nonstatutory Stock Option Plan is incorporated herein by reference from Exhibit 10.3 to Form S-8, filed with the SEC on September 27, 2002.
 - (d)(4) KLA-Tencor Corporation 2000 Nonstatutory Stock Option Plan Form of Stock Option Agreement.*
 - (d)(5) KLA-Tencor Corporation 2004 Equity Incentive Plan is incorporated herein by reference from Exhibit 10.1 to Form S-8, filed with the SEC on December 23, 2004.
 - (d)(6) KLA-Tencor Corporation 2004 Equity Incentive Plan Form of Stock Option Agreement.*
 - (g) Not applicable.
 - (h) Not applicable.

* Previously filed with the Schedule TO filed with the SEC on February 27, 2007, and incorporated herein by reference.

** Previously filed with the Schedule TO-I/A filed with the SEC on March 2, 2007, and incorporated herein by reference.

*** Previously filed with the Schedule TO-I/A filed with the SEC on March 13, 2007, and incorporated herein by reference.

† Previously filed with the Schedule TO-I/A filed with the SEC on March 16, 2007, and incorporated herein by reference.

ITEM 13. INFORMATION REQUIRED BY SCHEDULE 13E-3.

- (a) Not applicable.

INDEX OF EXHIBITS

EXHIBIT NUMBER	DESCRIPTION
(a)(1)	Offer to Amend or Replace, dated February 27, 2007.*
(a)(2)	Email Announcement of Offer to Amend or Replace, dated February 27, 2007.*
(a)(3)	Frequently Asked Questions.***
(a)(4)	Screenshot of Login Page to Offer website at https://kla.equitybenefits.com .*
(a)(5)	Screenshot of Welcome Page to Offer website at https://kla.equitybenefits.com .*
(a)(6)	Screenshot of Electronic Election Form (screenshots 1-2).**
(a)(7)	Screenshot of Election Amendment Review.**
(a)(8)	Screenshot of Agreement to Terms of Election (screenshots 1-3).*
(a)(9)	Screenshot of Print Confirmation.**
(a)(10)	Screenshot of Election Confirmation Statement.**
(a)(11)	Instructions to Electronic Election Form.*
(a)(12)	Form of Stock Option Amendment and Special Bonus Agreement.***
(a)(13)	Form of Acknowledgement of Receipt of Election Form.**
(a)(14)	Form of Email Reminder of Expiration Date.*
(a)(15)	Paper Election Form.**
(a)(16)	Form of Notice of Expiration of Offer, Amendment of Eligible Option and Commitment to Pay Cash Bonus.***
(a)(17)	Material Income Tax Consequences for Eligible Optionees Resident Outside the United States.***
(a)(18)	KLA-Tencor Corporation Annual Report on Form 10-K for the year ended June 30, 2006, filed with the SEC on January 29, 2007, is incorporated herein by reference.
(a)(19)	KLA-Tencor Corporation Quarterly Report on Form 10-Q for its fiscal quarter ended September 30, 2006, filed with the SEC on January 29, 2007, is incorporated herein by reference.
(a)(20)	Email Containing Hyperlink to Offer to Amend or Replace and Information Regarding Eligible Options, dated March 2, 2007.**
(a)(21)	Email Announcing Change to Scheduled Payment Date of Cash Bonus.***
(a)(22)	Email Notice Regarding Eligibility of Executive Officers.†
(a)(23)	Email to Individuals Choosing to Decline the Offer.
(b)	Not applicable.
(d)(1)	KLA-Tencor Corporation Restated 1982 Stock Option Plan, as amended November 18, 1996 is incorporated herein by reference from Exhibit 10.74 to Form S-8, filed with the SEC on March 7, 1997.
(d)(2)	KLA-Tencor Corporation Restated 1982 Stock Option Plan Form of Stock Option Agreement.*
(d)(3)	KLA-Tencor Corporation 2000 Nonstatutory Stock Option Plan is incorporated herein by reference from Exhibit 10.3 to Form S-8, filed with the SEC on September 27, 2002.
(d)(4)	KLA-Tencor Corporation 2000 Nonstatutory Stock Option Plan Form of Stock Option Agreement.*

EXHIBIT NUMBER	DESCRIPTION
(d)(5)	KLA-Tencor Corporation 2004 Equity Incentive Plan is incorporated herein by reference from Exhibit 10.1 to Form S-8, filed with the SEC on December 23, 2004.
(d)(6)	KLA-Tencor Corporation 2004 Equity Incentive Plan Form of Stock Option Agreement.*
(g)	Not applicable.
(h)	Not applicable.

* Previously filed with the Schedule TO filed with the SEC on February 27, 2007, and incorporated herein by reference.

** Previously filed with the Schedule TO-I/A filed with the SEC on March 2, 2007, and incorporated herein by reference.

*** Previously filed with the Schedule TO-I/A filed with the SEC on March 13, 2007, and incorporated herein by reference.

† Previously filed with the Schedule TO-I/A filed with the SEC on March 16, 2007, and incorporated herein by reference.

We show that you have elected not to accept or "No" for the Tender Offer.

We want to make sure that you understand that your "No" election means:

1. You agree that you will pay all additional Federal and State tax penalties at vest for the affected options and;
2. You decline the reprice or amendment of your eligible option portion and;
3. You decline the cash bonus payment, if applicable, in January of 2008.

If the above is not your intent, we encourage you to log back into the Tender Offer website before March 27, 2007, <https://kla.equitybenefits.com/>

Your employee id number is the log on and the last 4 digits of your social security number is the password.

Should have questions, please feel free to contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.