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

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

Amount of filing fee**

Transaction valuation*

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. \Box

| | \$141,307,109 | \$4,338.13 |
|----|--|--|
| * | | ck-Scholes option valuation model, and assumes that all outstanding options eligible for tender covering an or Corporation will be amended pursuant to this offer, which may not occur. |
| ** | £ , | ele 0-11 under the Securities Exchange Act of 1934, as amended, as modified by Fee Advisory No. 5 for fiscal on. The transaction valuation set forth above was calculated for the sole purpose of determining the filing se. |
| | Check box if any part of the fee is offset as provided by Rule 0 by registration statement number, or the Form or Schedule and | 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing I the date of its filing. |
| | Amount Previously Paid: Form or Registration No.: Filing party: Date filed: | Not applicable. Not applicable. Not applicable. 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. | |

ITEM 1. SUMMARY TERM SHEET.

The information set forth under "Summary Term Sheet" in the Offer to Amend or Replace Eligible Options, dated February 27, 2007 (the "Offer to Amend or Replace"), attached hereto as Exhibit (a)(1), is incorporated herein by reference.

ITEM 2. SUBJECT COMPANY INFORMATION.

- (a) The name of the issuer is KLA-Tencor Corporation, a Delaware corporation (the "Company"); the address of its principal executive offices is 160 Rio Robles, San Jose, California 95134; and its telephone number is (408) 875-3000. The information set forth in the Offer to Amend or Replace under Section 11 ("Information Concerning KLA-Tencor") is incorporated herein by reference.
- (b) This Tender Offer Statement on Schedule TO relates to an offer by the Company to amend or replace outstanding "Eligible Options" (as defined in the Offer to Amend or Replace attached hereto as Exhibit (a)(1)) held by current employees subject to taxation in the United States so that those options will not be subject to adverse tax consequences under Internal Revenue Code Section 409A. Each eligible participant may elect to amend his or her Eligible Options to increase the exercise price per share of the Company's common stock, par value \$0.001 per share, purchasable thereunder and become eligible to receive a special Cash Bonus (as defined in the Offer to Amend or Replace) from the Company, all upon the terms and subject to the conditions set forth in the Offer to Amend or Replace and the related Election Form attached hereto as Exhibit (a)(6) (the "Election Form") and the Stock Option Amendment and Special Bonus Agreement (the "Amendment Agreement" and, together with the Offer to Amend or Replace and the Election Form, as they may each be amended or supplemented from time to time, the "Offer"). Certain tendered Eligible Options may, in lieu of such amendment, be canceled and replaced with new options that will be exactly the same as the canceled options but will avoid adverse tax consequences under Section 409A. The Offer is currently set to expire at 11:59 p.m. Pacific Time on March 27, 2007 but may be extended (the "Expiration Date"). As of February 26, 2007, Eligible Options to purchase 5,139,344 shares of the Company's common stock were outstanding.

The information set forth in the Offer to Amend or Replace on the introductory pages and under "Summary Term Sheet," Section 1 ("Eligible Optionees; Eligible Options; Amendment of Eligible Options and Cash Bonus; New Options; Expiration Date; Additional Considerations"), Section 3 ("Status of Eligible Options Not Amended or Replaced"), Section 6 ("Acceptance of Eligible Options for Amendment or Replacement and Commitment to Pay Cash Bonus With Respect to Amended Options") and Section 9 ("Source and Amount of Consideration; Terms of Amended Options or New Options") is incorporated herein by reference.

(c) The information set forth in the Offer to Amend or Replace under Section 8 ("Price Range of Common Stock Underlying the Options") is incorporated herein by reference.

ITEM 3. IDENTITY AND BACKGROUND OF FILING PERSON.

(a) The Company is the filing person. The information set forth under Item 2(a) above is incorporated herein by reference. The information set forth in Schedule I to the Offer to Amend or Replace ("Information Concerning the Directors and Executive Officers of KLA-Tencor Corporation") is incorporated herein by reference.

ITEM 4. TERMS OF THE TRANSACTION.

(a) The information set forth in the Offer to Amend or Replace on the introductory pages and under "Summary Term Sheet," Section 1 ("Eligible Optionees; Eligible Options; Amendment of Eligible Options and Cash Bonus; New Options; Expiration Date; Additional Considerations"), Section 3 ("Status of Eligible Options Not Amended or Replaced"), Section 4 ("Procedures for Tendering Eligible Options"), Section 5 ("Withdrawal Rights"), Section 6 ("Acceptance of Eligible Options for Amendment or Replacement and Commitment to Pay Cash Bonus With Respect to Amended Options"), Section 7 ("Conditions of the Offer"), Section 9 ("Source and

Amount of Consideration; Terms of Amended Options or New Options"), Section 10 ("Amended Options and New Options Will Not Differ from Eligible Options"), Section 13 ("Status of Options Accepted by Us in the Offer; Accounting Consequences of the Offer"), Section 14 ("Legal Matters; Regulatory Approvals"), Section 15 ("Material U.S. Federal Income Tax Consequences"), Section 16 ("Extension of the Offer; Termination; Amendment") and Section 19 ("Forward-Looking Statements; Miscellaneous"), is incorporated herein by reference.

(b) The information set forth in the Offer to Amend or Replace under Section 12 ("Interests of Directors and Officers; Transactions and Arrangements Concerning the Options; and Material Agreements with Directors and Officers") is incorporated herein by reference.

ITEM 5. PAST CONTACTS, TRANSACTIONS, NEGOTIATIONS AND ARRANGEMENTS.

(a) The information set forth in the Offer to Amend or Replace under Section 12 ("Interests of Directors and Officers; Transactions and Arrangements Concerning the Options; and Material Agreements with Directors and Officers") is incorporated herein by reference. The KLA-Tencor Instruments Corporation Restated 1982 Stock Option Plan, the KLA-Tencor Corporation 2000 Nonstatutory Stock Option Plan and the KLA-Tencor Corporation 2004 Equity Incentive Plan, pursuant to which the Eligible Options have been granted are attached hereto as Exhibits (d)(1), (d)(3) and (d)(5), respectively, and contain information regarding the subject securities.

ITEM 6. PURPOSES OF THE TRANSACTION AND PLANS OR PROPOSALS.

- (a) The information set forth in the Offer to Amend or Replace under Section 2 ("Purpose of the Offer") is incorporated herein by reference.
- (b) The information set forth in the Offer to Amend or Replace under Section 6 ("Acceptance of Eligible Options for Amendment or Replacement and Commitment to Pay Cash Bonus With Respect to Amended Options") and Section 13 ("Status of Options Accepted by Us in the Offer; Accounting Consequences of the Offer") is incorporated herein by reference.

ITEM 7. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

- (a) The information set forth in the Offer to Amend or Replace under Section 9 ("Source and Amount of Consideration; Terms of Amended Options or New Options") and Section 17 ("Fees and Expenses") is incorporated herein by reference.
 - (b) The information set forth in the Offer to Amend or Replace under Section 7 ("Conditions of the Offer") is incorporated herein by reference.
 - (c) Not applicable.

ITEM 8. INTEREST IN SECURITIES OF THE SUBJECT COMPANY.

- (a) The information set forth in the Offer to Amend or Replace under Section 12 ("Interests of Directors and Officers; Transactions and Arrangements Concerning the Options; and Material Agreements with Directors and Officers") is incorporated herein by reference.
- (b) The information set forth in the Offer to Amend or Replace under Section 12 ("Interests of Directors and Officers; Transactions and Arrangements Concerning the Options; and Material Agreements with Directors and Officers") is incorporated herein by reference.

ITEM 9. PERSONS/ASSETS, RETAINED, EMPLOYED, COMPENSATED OR USED.

(a) Not applicable.

ITEM 10. FINANCIAL STATEMENTS.

- (a) The information set forth in the Offer to Amend or Replace under Section 11 ("Information Concerning KLA-Tencor") and Section 18 ("Additional Information") is incorporated herein by reference. Item 8 ("Financial Statements and Supplementary Data") of the Company's Annual Report on Form 10-K for its fiscal year ended June 30, 2006 is incorporated herein by reference. Item 1 ("Financial Statements (Unaudited)") of the Company's Quarterly Report on Form 10-Q for its fiscal quarter ended September 30, 2006 is incorporated herein by reference.
 - (b) Not applicable.
- (c) Summary Information. The information set forth in the Offer to Amend or Replace under Section 11 ("Information Concerning KLA-Tencor") is incorporated herein by reference.

ITEM 11. ADDITIONAL INFORMATION.

- (a) The information set forth in the Offer to Amend or Replace under Section 12 ("Interests of Directors and Officers; Transactions and Arrangements Concerning the Options; and Material Agreements with Directors and Officers") and Section 14 ("Legal Matters; Regulatory Approvals") is incorporated herein by reference.
 - (b) Not applicable.

ITEM 12. EXHIBITS.

| (a)(1) Offer to Amer | d or Replace, dated | d 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 Securities and Exchange Commission (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. |
| (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. |

(g) Not applicable.

(h) Not applicable.

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

(a) Not applicable.

st To be filed by amendment.

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Schedule TO is true, complete and correct.

KLA-TENCOR CORPORATION

By: /s/ Jeffrey L. Hall

Jeffrey L. Hall Chief Financial Officer

Date: February 27, 2007

INDEX OF EXHIBITS

| EXHIBIT NUMBER | DESCRIPTION |
|-------------------|---|
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| (a)(10) | Screenshot of Election Confirmation Statement. |
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| (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. |
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| (g) | Not applicable. |
| (h) | Not applicable. |
| | |

^{*} To be filed by amendment.

KLA-TENCOR CORPORATION

OFFER TO AMEND OR REPLACE ELIGIBLE OPTIONS

FEBRUARY 27, 2007

THE OFFER AND WITHDRAWAL RIGHTS EXPIRE AT 11:59 P.M., PACIFIC TIME, ON MARCH 27, 2007, UNLESS THE OFFER IS EXTENDED

KLA-Tencor Corporation ("KLA-Tencor", the "Company", "us" or "we") is making this offer to certain individuals to amend or replace certain outstanding stock options to purchase KLA-Tencor common stock previously granted to them under the following stock incentive plans (collectively, the "Plans"):

- the Restated 1982 Stock Option Plan,
- the 2000 Nonstatutory Stock Option Plan, and
- the 2004 Equity Incentive Plan.

A stock option will be subject to this offer only to the extent that option meets each of the following conditions:

- (i) The option was granted under one of the Plans.
- (ii) The option was retroactively priced in that the exercise price per share currently in effect for that option is based on the fair market value per share of KLA-Tencor common stock on a date earlier than the date on which the option was actually granted.
 - (iii) The option was unvested as of December 31, 2004.
- (iv) The option is held by an individual who is, on the expiration of this offer, a current employee of the Company or an affiliated company (such as a subsidiary or joint venture entity) and subject to income taxation in the United States with respect to that option (an "Eligible Optionee").
 - (iv) The option is outstanding on the expiration date of this offer.

An option that satisfies each of the foregoing conditions is designated an Eligible Option for purposes of this offer. If only a portion of the option meets the foregoing conditions, then only that portion will be an Eligible Option, and the balance of that option will not be eligible for amendment or replacement pursuant to this offer.

Unless remedial action is taken to adjust the exercise price of an Eligible Option, that option may be subject to adverse tax consequences under Section 409A of the Internal Revenue Code. Accordingly, the Company is making this offer so that each Eligible Optionee holding one or more Eligible Options will have the opportunity to amend or replace those options to the extent necessary to avoid such adverse taxation. The amendment will adjust the exercise price per share currently in effect for the Eligible 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) the closing selling price per share of such common stock on the date on which the option is amended. The new exercise price per share will be designated the "Adjusted Exercise Price" and will become effective on the first business day following the expiration of the offer (the "Amendment Date"). The option as so amended for the Adjusted Exercise Price will be designated an "Amended Option." However, if the Adjusted Exercise Price as so determined would be the same or lower than the exercise price per share currently in effect for the Eligible Option, then that option will, on the Amendment Date, be canceled and immediately replaced with a new option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date. That replacement option will be designated a "New Option." Such cancellation and re-grant is necessary to evidence the remedial action required under Section 409A with respect to an Eligible Option whose current exercise price is not increased.

If only a portion of an outstanding option is an Eligible Option (i.e., the portion of such option that was unvested as of December 31, 2004), then only that portion may be amended or replaced pursuant to this offer. The balance of such option will not be subject to this offer and will not constitute an Eligible Option for purposes of this offer. That portion (i.e., the portion that was vested as of December 31, 2004) will retain its current exercise price and will not be subject to adverse tax consequences under Section 409A of the Internal Revenue Code.

Each Eligible Optionee whose Eligible Option is amended to increase the exercise price pursuant to this offer will become entitled to a special cash bonus (the *Cash Bonus*) with respect to that option. The amount of the Cash Bonus payable with respect to each Eligible Option that is amended to increase the exercise price to the Adjusted Exercise Price will be determined by multiplying (i) the amount by which the Adjusted Exercise Price exceeds the exercise price per share currently in effect for that Eligible Option by (ii) the number of shares of the Company's common stock purchasable under that option at the Adjusted Exercise Price. The Cash Bonus will be paid on January 2, 2008. Such a delayed payment is required by applicable Internal Revenue Service ("IRS") regulations. The payment when made will be subject to the Company's collection of all applicable withholding taxes and other amounts required to be withheld by the Company. Such Cash Bonus will be paid whether or not you continue in the Company's employ through the payment date.

If you are not in the employ of the Company or any affiliated entity on the expiration date of the offer, then none of your tendered Eligible Options will be amended or replaced, and you will not become entitled to any Cash Bonus with respect to those options. The tendered options will be returned to you and will remain exercisable in accordance with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the Section 409A tax penalties you may subsequently incur in connection with the exercise of those options.

The offer set forth in this document and the related Election Form and Stock Option Amendment and Special Bonus Agreement (collectively, as they may each be amended or supplemented from time to time, constitute the "Offer") will expire on the expiration date, currently set for March 27, 2007, unless extended (the Expiration Date").

If you are an Eligible Optionee, then you will receive on the commencement of the Offer an email announcing the offer and containing a link to the Offer website. Once you have logged onto the Offer website and clicked on the MAKE AN ELECTION button, you will be directed to your Election Form that contains personalized information with respect to each Eligible Option you hold:

- · the grant date indicated for that option on the applicable option agreement or grant notice,
- the current exercise price per share in effect for that option,
- the number of shares of the Company's common stock purchasable under that option,
- · the actual grant date of that option, and
- the fair market value per share of the Company's common stock on the actual grant date.

The exercise price per share for each tendered Eligible Option will be increased to the Adjusted Exercise Price on the Amendment Date. Subject to satisfaction of the conditions to the Offer, we currently intend to accept for amendment on the Expiration Date all Eligible Options tendered by Eligible Optionees who accept the Offer. The amendment will result in a new exercise price per share equal to the Adjusted Exercise Price. No other changes will be made to the tendered Eligible Options. Accordingly, each amended Eligible Option will otherwise continue to be subject to the same vesting schedule, exercise period, option term and other terms and conditions as in effect for that option immediately before the amendment. However, if the Adjusted Exercise Price for any Eligible Option would otherwise be the same or lower than the exercise price per share currently in effect for that option, then that option will, on the Amendment Date, be canceled and immediately replaced with

a New Option that is exactly the same as the canceled option, including the same exercise price per share and with no loss of vesting or change to the expiration date of the option term, but the option will have a new grant date. Such cancellation and re-grant is necessary to evidence the remedial action required under Section 409A with respect to an Eligible Option whose current exercise price is not increased.

If you are not in the employ of the Company or any affiliated entity on the expiration date of the offer, then none of your tendered Eligible Options will be amended or replaced, and you will not be entitled to any Cash Bonus with respect to those options. The tendered options will be returned to you and will remain exercisable in accordance with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the Section 409A tax penalties you may subsequently incur in connection with the exercise of those options.

As of February 26, 2007, options to purchase approximately 29,332,714 shares of our common stock were issued and outstanding under the Plans, including Eligible Options to purchase up to approximately 5,139,344 shares of our common stock.

We are making this Offer upon the terms and subject to the conditions set forth in this Offer, including the conditions described in Section 7. You are not required to accept the Offer. The Offer is not conditioned upon the acceptance of the Offer with respect to a minimum number of Eligible Options.

Although our Board of Directors has approved this Offer, neither we nor our Board of Directors will make any recommendation as to whether you should tender your Eligible Options for amendment or replacement. You must make your own decision whether to tender your Eligible Options after taking into account your own personal circumstances and preferences. You should be aware that adverse tax consequences under Section 409A may apply to your Eligible Options if they are not amended or replaced pursuant to this Offer, and you will be solely responsible for any taxes, interest or penalties you may incur under Section 409A. For that reason, we recommend that you consult with your personal tax advisor to determine the consequences of accepting or declining the Offer.

Shares of our common stock are quoted on the Nasdaq Global Select Market under the symbol "KLAC." On February 26, 2007, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$54.42 per share. The Adjusted Exercise Price to be in effect for each Eligible Option amended pursuant to the Offer will represent the lower of (i) the fair market value of KLA-Tencor common stock on the actual date on which that option was granted and (ii) the closing selling price of KLA-Tencor's common stock on the Amendment Date. If the Adjusted Exercise Price would otherwise be the same or lower than the exercise price per share currently in effect for a tendered Eligible Option, then that option will be replaced with a New Option. Neither the exercise price currently in effect for each Eligible Option nor the Adjusted Exercise Price for each such option is meant to reflect our view of what the trading price of our common stock will be in the short, medium or long-term.

You should direct questions about the Offer or requests for assistance or for additional copies of this document, the related Tender Offer Statement on Schedule TO or the Election Form and accompanying Stock Option Amendment and Special Bonus Agreement to Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

We have not authorized anyone to give you any information or to make any representation in connection with this Offer other than the information and representations contained in this document, the related Tender Offer Statement on Schedule TO or in the related Election Form and Stock Option Amendment and Special Bonus Agreement. If anyone makes any representation or gives you any information that is different from the representations and information contained in this Offer, the related Tender Offer Statement on Schedule TO or in the related Election Form and Stock Option Amendment and Special Bonus Agreement, you must not rely upon that representation or information as having been authorized by us. We have not authorized any person to make

any recommendation on our behalf as to whether you should tender or refrain from tendering your Eligible Options pursuant to the Offer. If anyone makes any recommendation to you, you must not rely upon that recommendation as having been authorized by us. You should rely only on the representations and information contained in this Offer, the related Tender Offer Statement on Schedule TO and in the related Election Form and Stock Option Amendment and Special Bonus Agreement or to which we have referred you.

The Offer has not been approved or disapproved by the United States Securities and Exchange Commission (the "SEC") or any state or foreign securities commission nor has the SEC or any state or foreign securities commission passed upon the accuracy or adequacy of the information contained in this Offer. Any representation to the contrary is a criminal offense. We recommend that you consult with your tax advisor to determine the tax consequences of electing or not electing to participate in the Offer.

IMPORTANT INFORMATION

If you wish to tender one or more of your Eligible Options for amendment or replacement, you must properly complete and sign the Election Form in accordance with the applicable instructions for that form. You can complete this process by accessing the Offer website at https://kla.equitybenefits.com.

As soon as administratively practicable following the Amendment Date, we will return to you a final and complete Stock Option Amendment and Special Bonus Agreement in which the Adjusted Exercise Price for each of your Amended Options and the related Cash Bonus will be set forth in Schedule I to that agreement. You will also receive at that time a stock option agreement for any New Option granted to you in replacement of a tendered Eligible Option with a current exercise price per share the same or lower than the closing selling price per share of our common stock on the Amendment Date. The stock option agreement will be the same as the option agreement in effect for the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but will have a new grant date.

The key dates to remember in connection with the Offer are as follows:

The commencement date of the Offer is February 27, 2007.

The Offer will expire at 11:59 pm Pacific Time on March 27, 2007 (unless we extend it).

The Eligible Options will be amended or replaced on March 28, 2007 (unless we extend the Offer). Please be aware that your option account at your broker may not accurately reflect the amendment or replacement for one to two business days following the Amendment Date.

The Cash Bonus for the Amended Options will become payable on January 2, 2008. Such a delayed payment is required by applicable IRS regulations.

We are not making the Offer to, nor will we accept any tender of Eligible Options on behalf of, option holders in any jurisdiction in which the Offer or the acceptance of any option tender would not be in compliance with the laws of such jurisdiction. However, we may, at our discretion, take any actions necessary for us to legally make the Offer to option holders in any such jurisdiction.

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SUMMARY TERM SHEET

The following are answers to some of the questions that you may have about the Offer. We urge you to read carefully the remainder of this document and the accompanying Election Form and Stock Option Amendment and Special Bonus Agreement (which when taken together, as they may each be amended or supplemented from time to time, constitute the "Offer") because the information in this summary and in the introductory pages preceding this summary is not complete and may not contain all of the information that is important to you. Additional important information is contained in the remainder of this document and the Election Form and accompanying Stock Option Amendment and Special Bonus Agreement. We have included page references to the relevant sections of the document where you can find a more complete description of the topics in this summary term sheet.

WHAT OPTIONS ARE ELIGIBLE FOR AMENDMENT OR REPLACEMENT PURSUANT TO THE OFFER?

Section 409A to the Internal Revenue Code (the "Code") provides that an option granted with a below-market exercise price, to the extent it was not vested as of December 31, 2004, will be subject to adverse income taxation (as described below), unless that option is brought into compliance with Section 409A before exercise. KLA-Tencor has decided to offer eligible persons holding such options the opportunity to amend or replace each such option to avoid adverse taxation under Section 409A.

An outstanding option to purchase shares of KLA-Tencor common stock will be eligible for amendment or replacement pursuant to the Offer if that option meets each of the following conditions:

- (i) The option was granted under one of the following stock incentive plans of the Company (the 'Plans'):
- the Restated 1982 Stock Option Plan;
- the 2000 Nonstatutory Stock Option Plan; or
- the 2004 Equity Incentive Plan.
- (ii) The option was retroactively priced in that the exercise price per share currently in effect for that option is based on the fair market value per share of KLA-Tencor common stock on a date earlier than the date on which the option was actually granted.
 - (iii) The option was unvested as of December 31, 2004.
 - (iv) The option is held by an individual who is, on the expiration of this offer, an Eligible Optionee.
 - (iv) The option is outstanding on the expiration date of this offer.

An option that meets each of the foregoing conditions will constitute an "Eligible Option" for purposes of the Offer. If only a portion of the option meets those conditions, then only that portion will be an Eligible Option, and the balance of that option will not be eligible for amendment pursuant to this offer. (Page 13)

WHAT OTHER DEFINED TERMS ARE IMPORTANT TO UNDERSTAND THE OFFER?

For purposes of this Offer, you also should be familiar with the following additional definitions.

"Adjusted Exercise Price" is the new exercise price per share that will be in effect for any tendered Eligible Option that is amended pursuant to the Offer and will be equal to the lower of (i) the fair market value per share of the Company's common stock on the actual date on which that option was granted and (ii) the closing selling price per share of such common stock on the date on which the option is amended. However, if the Adjusted Exercise Price as so determined would be the same or lower than the exercise price per share currently in effect for the Eligible Option, then that option will, on the Amendment Date, be canceled and immediately replaced with a new option that is exactly the same as the canceled option, including the same exercise price per share and with no loss of vesting or change to the expiration date of the option term, but with a new grant date.

Accordingly, the exercise price for a tendered Eligible Option that we amend or replace pursuant to the Offer will fall within one of the three following categories:

- (i) Full Increase: increased to the fair market value per share of KLA-Tencor common stock on the actual grant of that option,
- (ii) Partial Increase: increased to the lower closing selling price per share of such common stock on the date such option is amended, or
- (iii) No Increase: retained as the exercise price per share for any New Option issued in replacement of that option.
- "Amended Option" will mean an Eligible Option that has been amended pursuant to the Offer to increase the exercise price per share for the KLA-Tencor common stock purchasable under that option to the Adjusted Exercise Price determined for such option.
- "Amendment Agreement" will mean the Stock Option Amendment and Special Bonus Agreement that will document the Adjusted Exercise Price for each of your Amended Options and set forth the terms of the Cash Bonus payable with respect to those Amended Options.
- "Amendment Date" will mean the date on which each Eligible Option is amended to increase the exercise price of that option to the Adjusted Exercise Price and will be March 28, 2007 or, if the Offer is extended, the first business day following the extended expiration date of the Offer.
- "Cash Bonus" is the special cash bonus to which each Eligible Optionee will become entitled if the current exercise price of one or more of his or her Eligible Options is increased pursuant to the Offer.
- "Election Form" is the form that the Eligible Optionee must use to notify the Company as to the particular Eligible Options he or she has elected to tender for amendment or replacement pursuant to the terms of the Offer.
- "Eligible Optionee" is each person who is, on the expiration date of the Offer, a current employee of the Company or any affiliated entity (such as a subsidiary or joint venture entity) and subject to income taxation in the United States with respect to his or her tendered Eligible Options.
- "Fair Market Value" per share of KLA-Tencor common stock on any relevant date will be deemed to be equal to the closing selling price per share of such stock on that date on the Nasdaq Global Select Market.
- "New Option" will mean the option granted on the Amendment Date in replacement of a tendered Eligible Option with a current exercise price per share at or above the closing selling price per share of our common stock on the Amendment Date. The New Option will be exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but will have a new grant date. The New Option will be evidenced by a new option agreement that replaces the option agreement in effect for the canceled option.

WHY IS KLA-TENCOR MAKING THE OFFER?

We are making this Offer to amend or replace the Eligible Options because of potential adverse tax consequences that may apply to those options. As a result of a thorough investigation of the Company's past option grant practices, the Company has determined that each Eligible Option was retroactively priced in that the exercise price per share currently in effect for that option was based on the fair market value per share of KLA-Tencor common stock on a date earlier than the date on which that option was actually granted. Section 409A of the Internal Revenue Code provides that an option granted with a below-market exercise price, to the extent unvested as of December 31, 2004, will be subject to adverse income taxation unless that option is brought into compliance with Section 409A. KLA-Tencor has decided to provide Eligible Optionees with the opportunity to bring the Eligible Options into compliance either by amending the exercise price per share to the

Adjusted Exercise Price determined for each such option or by replacing that option with a New Option. By taking such remedial action, Eligible Optionees can avoid the adverse tax consequences summarized in Section 2 of the Offer. (Page 21)

The following chart provides information concerning the grant date indicated for each Eligible Option in the applicable option agreement and the exercise price per share currently in effect for that option. Your individualized Eligible Option chart in the Election Form that accompanies the Offer will also set forth the actual grant date for each Eligible Option you hold, the fair market value per share of our common stock on that date and the number of shares of common stock subject to each Eligible Option.

| Current Exer | cise Price Per Share |
|--------------|--|
| \$ | 44.69 |
| \$ | 26.25 |
| \$ | 26.25 |
| \$ | 31.81 |
| \$ | 35.88 |
| \$ | 32.75 |
| \$ | 49.58 |
| \$ | 46.67 |
| \$ | 29.31 |
| \$ | 45.84 |
| \$ | 49.92 |
| \$ | 57.91 |
| \$ | 29.96 |
| \$ | 37.05 |
| \$ | 34.67 |
| \$ | 51.23 |
| \$ | 53.86 |
| \$ | 45.16 |
| \$ | 39.34 |
| | Current Exer \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ |

ARE KLA-TENCOR EXECUTIVE OFFICERS AND NON-EMPLOYEE BOARD MEMBERS ELIGIBLE TO PARTICIPATE IN THE OFFER?

The following KLA-Tencor executive officers hold Eligible Options and are eligible to participate in the Offer:

| Name | Title |
|----------------|--|
| Jeffrey Hall | Senior Vice President and Chief Financial Officer |
| Jorge Titinger | Senior Vice President and Chief Administrative Officer |

In addition, Richard Wallace, our Chief Executive Officer holds certain stock options that would have been Eligible Options but for the fact that the exercise prices for those options were amended on terms similar to the terms of this Offer on December 28, 2006. Internal Revenue Service ("IRS") regulations required those particular options to be so amended before January 1, 2007 because they were granted to an individual who was an executive officer at the time of grant, and the remedial period for those options ended on December 31, 2006. Mr. Wallace will also be entitled to a cash bonus in January 2008 that compensates him for the higher exercise prices in effect under those amended options. Two other former executive officers, Neil Richardson and Dennis Fortino also had the exercise prices for certain of their options similarly increased, and they will accordingly receive cash bonuses in January 2008 to cover that increase. John Kispert, our President and Chief Operating Officer, had the exercise prices for certain of his options similarly increased; however, Mr. Kispert will not receive a cash bonus to compensate for the higher prices in effect for those amended options. (Page 32)

No non-employee member of the Board of Directors holds an Eligible Option. (Page 32)

ARE OPTIONEES RESIDENT OUTSIDE THE UNITED STATES ELIGIBLE TO PARTICIPATE IN THE OFFER?

Yes. If you are a current employee of the Company or an affiliated entity holding an Eligible Option and subject to taxation in the United States with respect to that option, then you are eligible to participate in the Offer even if you are not currently residing in the United States. (Page 15)

WHAT ARE THE COMPONENTS OF THE OFFER?

If an Eligible Option is amended pursuant to the Offer, then the exercise price of that option will be increased to the lower of (i) the fair market value per share on the date on which that option was actually granted and (ii) the closing selling price per share of KLA-Tencor's common stock on the Amendment Date. The adjusted exercise price will avoid the potential taxation of that option under Section 409A. The new exercise price in effect for each tendered Eligible Option will be designated the "Adjusted Exercise Price." In addition, each Eligible Optionee whose Eligible Options are so amended will become entitled to a special cash bonus from the Company (the *Cash Bonus**). The amount of the Cash Bonus payable with respect to each Amended Option will be determined by multiplying (i) the amount by which the Adjusted Exercise Price exceeds the exercise price per share currently in effect for that Eligible Option by (ii) the number of shares of the Company's common stock purchasable under that option at the Adjusted Exercise Price. The Cash Bonus will be paid on January 2, 2008. Such a delayed payment is required by applicable IRS regulations. The payment when made will be subject to the Company's collection of all applicable withholding taxes and other payments required to be withheld by the Company. Such Cash Bonus will be paid whether or not you continue in the Company's employ through the payment date. (Page 16)

However, if the Adjusted Exercise Price determined for any tendered Eligible Option would be the same or lower than the exercise price per share currently in effect for that option, then that option will, on the Amendment Date, be canceled and immediately replaced with a New Option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date. Such cancellation and re-grant is necessary to evidence the remedial action required under Section 409A with respect to an Eligible Option whose current exercise price is not increased. (Page 17)

WHAT HAPPENS IF I AM NOT A CURRENT EMPLOYEE ON THE EXPIRATION DATE?

If you are not in the employ of the Company or any affiliated entity on the Expiration Date, then none of your tendered Eligible Options will be amended or replaced, and you will not be entitled to any Cash Bonus with respect to those options. The tendered options will be returned to you and will remain exercisable in accordance with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the Section 409A tax penalties you may subsequently incur in connection with the exercise of those options. (Pages 17-18)

WHAT ARE THE TAX CONSEQUENCES OF AN OPTION SUBJECT TO SECTION 409A?

Section 409A was added to the Code by the American Jobs Creation Act of 2004. The U.S. Treasury Department and IRS have to date provided guidance and issued proposed regulations with respect to certain items of compensation under Section 409A. That guidance and the proposed regulations indicate that a stock option granted with an exercise price per share below the fair market value of the underlying shares on the grant date will, to the extent that option was not vested as of December 31, 2004, be subject to the adverse tax consequences of Section 409A. Unless remedial action is taken to bring that option into compliance before exercise, we believe, on the basis of our understanding and interpretation of the applicable guidance and proposed regulations, that the option will trigger adverse U.S. federal tax consequences under Section 409A as indicated below, although it is not entirely clear at present how that option will actually be taxed under Section 409A.

Taxation in Year of Vesting. To the extent a Section 409A-covered option vested as to one or more shares during the 2005 calendar year, the optionee would recognize taxable income for that year in an amount equal to the fair market value of those shares on December 31, 2005 less the exercise price payable for those shares. The optionee would have to report that income in an amended tax return filed for the 2005 taxable year. To the extent the options vested as to one or more shares during the 2006 calendar year, the optionee would recognize taxable income equal to the fair market value of those shares on December 31, 2006 less the aggregate exercise price payable for the shares, and the Company would have to collect the applicable withholding taxes on that income. Taxation would occur in this manner even though the options remain unexercised.

Tax Penalty. In addition to normal income taxes payable on the spread in effect under each of your options on the applicable December 31, 2005 or December 31, 2006 measurement date, the optionee would also be subject to an additional tax penalty equal to 20% of that spread.

Note: Certain states, including California, have adopted provisions similar to Section 409A under their tax laws, and for optionees subject to income taxation in such states, the total penalty tax could be up to 40% (a 20% federal penalty tax and up to a 20% state penalty tax).

Continued Taxation. The optionee would be subject to additional income taxation, penalty taxes and withholding taxes on any subsequent increases to the year-end value of the vested option shares. Such taxation will continue until the options are exercised. For the option shares that vested in the 2005 calendar year and remained unexercised at the end of the 2006 calendar year, the additional income subject to such taxation would be based on the amount by which the fair market value per share of the Company's common stock on December 31, 2006 exceeds the December 31, 2005 fair market value.

Note: The IRS has not yet provided any guidance as to how the additional taxable income is to be measured over the period the options remain outstanding after the 2006 calendar year.

Interest Penalty. The optionee will also be subject to interest penalties for failure to pay on a timely basis the taxes attributable to the vesting of the options in the 2005 calendar year. The optionee may incur additional interest penalties if he or she does not pay on a timely basis the taxes attributable to the Section 409A income for the 2006 taxable year.

If you exercise an Eligible Option in the 2007 calendar year without first bringing that option into compliance with Section 409A, then it is possible that the 20% penalty tax under Section 409A may be based solely on the amount by which the fair market value of the purchased shares at the time of exercise exceeds the current exercise price, and the interest penalties may be based on the spread (the excess of the fair market value per share over the exercise price) which existed on the vested option shares at the close of the 2005 and 2006 calendar years. However, the applicable IRS guidance to date is not entirely clear on this point.

WHAT ARE THE TAX CONSEQUENCES IF I ACCEPT THE OFFER?

If you tender your Eligible Options, you will not recognize any taxable income for U.S. federal income tax purposes at the time of the tender or at the time your Eligible Options are amended to adjust the exercise price or replaced with a New Option.

By amending the exercise prices of your Eligible Options to the applicable Adjusted Exercise Prices or replacing those options with New Options, you will also avoid the adverse taxation of those options under Section 409A. Accordingly, as your Amended Options or New Options vest in one or more installments, you will **not** recognize taxable income with respect to the option shares that vest each year, and you will **not** be subject to any 20% penalty tax or any interest penalty under Section 409A. You will only be taxed with respect to your Amended Options or New Options when you exercise those options. However, you will recognize taxable income when you receive the Cash Bonus paid with respect to your Amended Options. (Page 21)

If you are subject to the tax laws of other jurisdictions in addition to the United States, there may be additional consequences of participation in the Offer. We will distribute short summaries of some of those

consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should also review the summary applicable to such foreign jurisdiction.

All Eligible Optionees, including those who are subject to taxation in foreign jurisdictions, should consult with their own personal tax advisor as to the tax consequences of accepting the Offer.

HOW WILL MY CASH BONUS BE TAXED?

You will be taxed upon your receipt of the Cash Bonus. The payment will constitute wages for tax withholding purposes. Accordingly, the Company must withhold all applicable U.S. federal, state and local income and employment withholding taxes as well as all applicable foreign taxes and payments required to be withheld with respect to such payment. You will receive only the portion of the payment remaining after all those taxes and payments have been withheld. (Page 17)

If your Eligible Options are not amended pursuant to the Offer, you will not receive any Cash Bonus with respect to those options. No Cash Bonus will be paid with respect to a New Option because the exercise price for that option will be the same as the exercise price in effect for the tendered Eligible Option it replaces. (Page 17)

WHAT ARE THE TAX CONSEQUENCES IF I DO NOT ACCEPT THE OFFER?

If you choose not to tender your Eligible Options and take no other action to bring those options into compliance with Section 409A, then you will be subject to the adverse taxation under Section 409A in the manner discussed above. You will be solely responsible for any taxes, penalties or interest you may incur under Section 409A. An example illustrating the applicable tax consequences may be found on Page 20 of this document.

WHAT SECURITIES ARE SUBJECT TO THE OFFER?

The Offer covers only Eligible Options. Your Election Form accessible on the Offer website at https://kla.equitybenefits.com will contain a personal summary of the Eligible Options that you currently hold, including information relating to the number of shares subject to each Eligible Option, the current exercise price per share in effect for that option, the actual grant date for each Eligible Option and the fair market value per share of the Company's common stock on that date. (Page 22)

AM I REQUIRED TO PARTICIPATE IN THE OFFER?

No. Participation in the Offer is voluntary. You may choose either to tender your Eligible Options for amendment or replacement pursuant to the Offer or to retain those options and seek another alternative to bring those options into compliance with Section 409A. If you decide to accept the Offer, you must submit a properly completed Election Form for your tendered Eligible Options. (Page 22)

If you choose not to tender your Eligible Options and take no other action to bring those options into compliance with Section 409A, then you will be subject to the adverse taxation under Section 409A. You will be solely responsible for any taxes, penalties or interest payable under Section 409A. (Page 22)

DO I HAVE TO ACCEPT THE OFFER WITH RESPECT TO ALL OF MY ELIGIBLE OPTIONS OR MAY I DECIDE TO ACCEPT THE OFFER WITH RESPECT TO ONLY A PORTION OF THE ELIGIBLE OPTIONS?

If you wish to accept this Offer with respect to a particular Eligible Option, you must tender all of that option for amendment or replacement. If you hold more than one Eligible Option, then you may elect to tender one or more of those options and retain the balance. Please remember that not all of a particular outstanding option grant may be an Eligible Option. Only the portion of that grant that was not vested as of December 31, 2004 may constitute an Eligible Option. (Page 22)

WILL THE TERMS AND CONDITIONS OF MY AMENDED OPTIONS OR NEW OPTIONS BE THE SAME AS THOSE CURRENTLY IN EFFECT FOR MY ELIGIBLE OPTIONS?

Except for the adjustment to the exercise price per share, each Eligible Option that is amended pursuant to this Offer will continue to remain subject to the same terms and conditions as in effect for such option immediately before the amendment. Accordingly, each Amended Option will vest in accordance with the same vesting schedule measured from the same vesting commencement date and will have the same exercise period, option term and other conditions currently in effect for that option. No change to the vesting schedule or other terms will occur by reason of the amendment. (Page 30)

Each New Option granted pursuant to this Offer will be exactly the same as the tendered Eligible Option it replaces, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date. (Page 30)

WHEN WILL MY ELIGIBLE OPTIONS BE AMENDED OR REPLACED?

The exercise price for each Eligible Option tendered pursuant to this Offer will be amended to the applicable Adjusted Exercise Price on March 28, 2007, or if the Offer is extended, the first business day following the extended expiration date. The date the exercise price for an Eligible Option is increased to the applicable Adjusted Exercise Price will constitute the Amendment Date, and each Eligible Option that is so amended will be designated an Amended Option. However, tendered Eligible Options with current exercise prices at or above the fair market value per share of our common stock on March 28, 2007 or, if the Offer is extended, the first business day following the extended expiration date will be canceled at that time and immediately replaced with a new option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant. That replacement option will be designated a New Option.

As soon as administratively practicable after the Amendment Date, we will deliver to you a final and complete Amendment Agreement that will reflect the adjustment to the exercise price of each of your Amended Options and the Company's unconditional obligation to pay you on January 2, 2008 the Cash Bonus calculated for each Amended Option. You will also receive at that time a new stock option agreement for any New Option granted in replacement of a tendered Eligible Option with a current exercise price per share that is the same or lower than the closing selling price per share of our common stock on the Amendment Date. (Page 24)

WHAT HAPPENS IF THE FAIR MARKET VALUE OF THE KLA-TENCOR COMMON STOCK ON THE AMENDMENT DATE IS LESS THAN THE FAIR MARKET VALUE PER SHARE OF SUCH COMMON STOCK ON THE ACTUAL GRANT DATE OF THE ELIGIBLE OPTION?

If the fair market value per share of KLA-Tencor common stock on the Amendment Date is less than the fair market value of such common stock on the actual grant date for the Eligible Option, then the Adjusted Exercise Price for that option will be set at the fair market value per share of KLA-Tencor common stock on the Amendment Date. However, if that Adjusted Exercise Price would be the same or lower than the exercise price per share currently in effect for the Eligible Option, then that option will, on the Amendment Date, be canceled and immediately replaced with a New Option with the same exercise price as the canceled option. (Page 14)

WHEN CAN I EXERCISE MY AMENDED OPTIONS OR NEW OPTIONS?

You may exercise an Amended Option for vested option shares at any time following its amendment to the Adjusted Exercise Price and before its termination. You may exercise a New Option for vested option shares at any time after grant and before termination. Neither an Amended Option nor a New Option may be exercised for more than the number of vested shares for which it is at the time exercisable.

CAN I EXERCISE MY ELIGIBLE OPTIONS AFTER I ACCEPT THE OFFER BUT BEFORE AMENDMENT OR REPLACEMENT?

You cannot exercise your Eligible Options before the Amendment Date without voiding your acceptance of the Offer. You may exercise your Eligible Options before the Amendment Date, provided such exercise complies with the existing terms of your Eligible Options, KLA-Tencor's insider trading policy and any interim blackout periods during which cashless exercises and sales to cover are prohibited. However, if you exercise your Eligible Options before the Amendment Date, any election you have made to accept the Offer as to the exercised options will be null and void. Consequently, you may personally incur adverse tax consequences under Section 409A with respect to any Eligible Options you exercise before the Amendment Date on which they are amended or replaced pursuant to the Offer. You will be solely responsible for any taxes, penalties or interest payable under Section 409A.

WILL MY AMENDED OPTIONS OR NEW OPTIONS BE INCENTIVE STOCK OPTIONS OR NON-STATUTORY OPTIONS?

Because your Eligible Options were granted with exercise prices below the fair market value of the option shares on the actual dates on which those options were granted, the options are non-statutory options under the U.S. federal income tax laws, and they will remain non-statutory options after the amendment to the applicable Adjusted Exercise Prices. Therefore, when you subsequently exercise your Amended Options, you will recognize immediate taxable income equal to the excess of (i) the fair market value of the purchased shares at the time of exercise over (ii) the Adjusted Exercise Price paid for those shares, and KLA-Tencor must collect the applicable withholding taxes with respect to such income. All New Options will also be taxable as non-statutory options. (Page 34)

If you are subject to the tax laws of other jurisdictions in addition to the United States, there may be additional or different consequences in that jurisdiction of exercising your options. We will distribute short summaries of some of those consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should also review the summary applicable to such foreign jurisdictions.

WHEN MAY I EXERCISE THE PORTION OF MY OPTIONS THAT WAS VESTED AS OF DECEMBER 31, 2004?

You may exercise the portion of each of your options that was vested as of December 31, 2004 at any time before the termination or expiration of that option. Such portion is not subject to the Offer and will not be subject to adverse taxation under Section 409A.

WHAT ARE THE CONDITIONS TO THE OFFER?

The Offer is subject to a number of conditions, including the conditions described in Section 7. The Offer is not conditioned upon the tender of a minimum number of Eligible Options for amendment. (Page 25)

WHEN DOES THE OFFER EXPIRE? CAN THE OFFER BE EXTENDED, AND IF SO, HOW WILL I BE NOTIFIED IF IT IS EXTENDED?

The Offer will expire on March 27, 2007, at 11:59 p.m. Pacific Time, unless we extend the Offer.

Although we do not currently intend to do so, we may, in our discretion, extend the Offer at any time. If the Offer is extended, we will send you an email or other communication informing you of the extension no later than 9:00 a.m. Eastern Time on the next business day following the previously scheduled expiration of the Offer period. (Page 35)

HOW AND WHEN DO I TENDER MY ELIGIBLE OPTIONS?

In order to tender one or more of your Eligible Options for amendment or replacement pursuant to the Offer, you must log on to the Offer website at https://kla.equitybenefits.com and click on the MAKE AN ELECTION button to proceed with your election. You will be redirected to the first page of the Election Form. You will need to check the appropriate boxes next to each of your Eligible Options to indicate whether you elect to tender your Eligible Options in accordance with the terms of the Offer. After completing the Election Form, you will be allowed to review your elections you have made with respect to your Eligible Options. If you are satisfied with your elections, you will proceed to the Agreement to Terms of Election page. Only after you agree to the Agreement to the Terms of Election will you be directed to the Election Confirmation Statement page. Please print and keep a copy of the Election Confirmation Statement for your records. You will then be deemed to have completed the election process for tendering your Eligible Options.

If you are not able to submit your election electronically via the Offer website as a result of technical failures inherent to the website, such as the website being unavailable or the website not accepting your election, or if you do not otherwise have access to the Offer website for any reason (including lack of internet services), you must complete a paper Election Form and return it to the Company via facsimile to Tracy Laboy at (408) 875-6677. To obtain a paper Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

You must complete the tender and election process in the foregoing manner by 11:59 p.m. Pacific Time on March 27, 2007. If we extend the Offer beyond March 27, 2007, you must complete the process before the extended expiration date of the Offer.

We will not accept delivery of any Election Form after expiration of the Offer. If we do not receive a properly completed and duly executed Election Form from you before the expiration of the Offer, we will not accept your Eligible Options for amendment or replacement. Those options will not be amended or replaced pursuant to this Offer, and no Cash Bonus will be paid with respect to those options.

We reserve the right to reject any or all tenders of Eligible Options that we determine are not in appropriate form or that we determine are unlawful to accept. Otherwise, we intend to accept all properly and timely tendered Eligible Options that are not validly withdrawn. Subject to our rights to extend, terminate or amend the Offer, we currently expect that we will accept all properly tendered Eligible Options upon the expiration of the Offer, and we will amend or replace those options on the next business day thereafter. (Pages 22-23; Page 24)

DURING WHAT PERIOD OF TIME MAY I CHANGE MY ELECTION WITH RESPECT TO MY ELIGIBLE OPTIONS?

You may change your previously submitted election at any time before 11:59 p.m. Pacific Time on March 27, 2007 (or any extended expiration date of the Offer). If you would like to change your election, you must log on to the Offer website at https://kla.equitybenefits.com, complete and submit a new Election Form. You should print a copy of your revised Election Form and updated Election Confirmation Statement and keep those documents with your other records for this Offer.

Alternatively, you may change your existing election by completing a new paper Election Form and returning it to the Company via facsimile to Tracy Laboy at (408) 875-6677. To obtain a paper Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

You may change your previously submitted elections as many times as you would like before the expiration of the Offer. (Page 24)

WHAT DOES KLA-TENCOR THINK OF THE OFFER?

Although our Board of Directors has approved the Offer, neither we nor our Board of Directors make any recommendation as to whether you should tender or refrain from tendering your Eligible Options for amendment or replacement. You must make your own decision whether to tender your Eligible Options, after taking into account your own personal circumstances and preferences. (Page 21) KLA-Tencor recommends that you consult with your personal tax advisor when deciding whether or not you should tender your Eligible Options.

Two of our executive officers hold Eligible Options, and are accordingly eligible to participate in the Offer. None of the non-employee members of our Board of Directors hold Eligible Options. (Pages 31-32)

WHAT ARE SOME OF THE KEY DATES TO REMEMBER?

The commencement date of the Offer is February 27, 2007.

The Offer will expire at 11:59 pm Pacific Time on March 27, 2007 (unless we extend it).

The Eligible Options will be amended or replaced on March 28, 2007 (unless we extend the Offer). Please be aware that your option account at your broker may not accurately reflect the amendment or replacement for one to two business days following the Amendment Date.

The Cash Bonus for the Amended Options will be paid on January 2, 2008.

TO WHOM CAN I TALK IF I HAVE QUESTIONS ABOUT THE OFFER?

For additional information or assistance, you should contact Tracy Laboy at (408) 875-7131.

CERTAIN RISKS OF PARTICIPATING IN THE OFFER

Participating in the Offer involves risks discussed in this Offer and described below. In addition, information concerning risk factors included in our Annual Report on Form 10-K for the year ended June 30, 2006 is incorporated by reference herein and may be inspected at, and copies may be obtained from, the places and in the manner described in Section 18 "Additional Information." You should carefully consider these risks and are encouraged to consult your investment, tax and legal advisor before deciding to participate in the Offer.

Tax-Related Risks.

The IRS Could Change the Expected Section 409A Tax Consequences. As described above and in Section 2 below, based on the current guidance and proposed regulations under Section 409A, your Eligible Options will be subject to adverse tax consequences under Section 409A, unless they are brought into compliance with Section 409A before December 31, 2007 or any earlier exercise of those options. We believe that we have complied in good faith with the current guidance and proposed regulations under Section 409A in structuring the Offer in a manner which you will provide you with the opportunity to avoid the taxation of your Eligible Options under Section 409A. However, you should be aware that the IRS has not yet issued final regulations under Section 409A. Such final regulations could be different from the current guidance. There is a possibility that final regulations may provide relief with respect to certain Eligible Options so that those options would not be subject to adverse tax consequences under Section 409A. We cannot guarantee the effect of any future IRS guidance.

Tax-related Risks for Residents of Multiple Countries. If you are subject to the tax laws in more than one jurisdiction, you should be aware that tax consequences of more than one country may apply to you as a result of your participation in the Offer. You should be certain to consult your personal tax advisor to discuss these consequences. We will distribute short summaries of some of those consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should also review the summary applicable to such foreign jurisdiction.

State and Local Taxes. The discussion in Section 2 and Section 15 of the Offer describes the material U.S. federal income tax consequences if you participate in the Offer or if you elect not to participate. State and local laws may provide different tax treatment. In addition, certain states, including California, have adopted provisions similar to Section 409A. If you are subject to income taxation in those states, you may incur additional taxes, interest and penalties under such provisions if you do not bring your Eligible Options into compliance.

Eligible Optionees should consult with their own personal tax advisors as to the tax consequences of their participation in the Offer.

Procedural Risks.

You are responsible for making sure that your initial Election Form and any subsequent changes to your Election Form pursuant to which you withdraw or re-tender your Eligible Options are received by us before the Expiration Date. We intend to confirm the receipt of your initial Election Form and any subsequent changes to your Election Form by emailing an Election Confirmation Statement to your KLA-Tencor email address within one business day after receipt. If you have not received an Electronic Confirmation Statement in the timeframe prescribed, it is your responsibility to confirm that we have received your complete submission by emailing a copy of the Confirmation Statement that you will have printed from the Offer website at the time you submit your Election Form online.

THE OFFER

1. ELIGIBLE OPTIONES; ELIGIBLE OPTIONS; AMENDMENT OF ELIGIBLE OPTIONS AND CASH BONUS; NEW OPTIONS; EXPIRATION DATE; ADDITIONAL CONSIDERATIONS.

Section 409A ("Section 409A") to the Internal Revenue Code (the "Code") provides that an option granted with a below-market exercise price, to the extent it was not vested as of December 31, 2004, will be subject to adverse income taxation (as described below), unless that option is brought into compliance with Section 409A before exercise. KLA-Tencor Corporation ("KLA-Tencor", the "Company", "we" or "us") has decided to offer Eligible Optionees holding Eligible Options the opportunity to amend or replace each such option and thereby avoid taxation of that option under Section 409A.

Eligible Options

An outstanding option to purchase shares of KLA-Tencor common stock will be eligible for amendment or replacement pursuant to the Offer if that option meets each of the following conditions:

- (i) The option was granted under one of the following stock incentive plans of the Company (the 'Plans''):
 - the Restated 1982 Stock Option Plan,
- the 2000 Nonstatutory Stock Option Plan, or
- the 2004 Equity Incentive Plan.
- (ii) The option was retroactively priced in that the exercise price per share currently in effect for that option is based on the fair market value per share of KLA-Tencor common stock on a date earlier than the date on which the option was actually granted.
 - (iii) The option was unvested as of December 31, 2004.
 - (iv) The option is held by an individual who is, on the expiration of this offer, an Eligible Optionee.
 - (v) The option is outstanding on the expiration date of this offer.

An option that meets each of the foregoing conditions will constitute an "Eligible Option" for purposes of the Offer. If only a portion of the option meets those conditions, then only that portion will be an Eligible Option, and the balance of that option will not be eligible for amendment pursuant to this Offer.

The following chart provides information concerning the grant date indicated for each Eligible Option in the applicable option agreement and the exercise price per share currently in effect for that option. Your individualized Eligible Option chart in the Election Form that accompanies the Offer will also set forth the actual grant date for each Eligible Option you hold, the fair market value per share of our common stock on that date and the number of shares of common stock subject to each Eligible Option.

| Indicated Grant Date | Current Exerc | ise Price Per Share |
|----------------------|---------------|---------------------|
| August 13, 2000 | \$ | 44.69 |
| November 10, 2000 | \$ | 26.25 |
| November 20, 2000 | \$ | 26.25 |
| December 22, 2000 | \$ | 31.81 |
| February 9, 2001 | \$ | 35.88 |
| April 4, 2001 | \$ | 32.75 |
| May 30, 2001 | \$ | 49.58 |
| July 10, 2001 | \$ | 46.67 |
| October 2, 2001 | \$ | 29.31 |
| November 20, 2001 | \$ | 45.84 |
| January 18, 2002 | \$ | 49.92 |
| February 28, 2002 | \$ | 57.91 |
| September 5, 2002 | \$ | 29.96 |
| November 8, 2002 | \$ | 37.05 |
| January 28, 2003 | \$ | 34.67 |
| July 30, 2003 | \$ | 51.23 |
| October 27, 2003 | \$ | 53.86 |
| April 26, 2004 | \$ | 45.16 |
| September 16, 2004 | \$ | 39.34 |

Additional Definitions

You should also be familiar with the following additional definitions that are important to the understanding of the terms of the Offer.

"Adjusted Exercise Price" is the new exercise price per share that will be in effect for any tendered Eligible Option that is amended pursuant to the Offer and will be equal to the lower of (i) the fair market value per share of the Company's common stock on the actual date on which that option was granted and (ii) the closing selling price per share of such common stock on the date on which the option is amended. However, if the Adjusted Exercise Price as so determined would be the same or lower than the exercise price per share currently in effect for the Eligible Option, then that option will, on the Amendment Date, be canceled and immediately replaced with a new option that is exactly the same as the canceled option including the same exercise price per share and with no loss of vesting or change to the expiration date of the option term, but with a new grant date.

Accordingly, the exercise price for a tendered Eligible Option that we amend or replace pursuant to the Offer will fall within one of the three following categories:

- (i) Full Increase: increased to the fair market value per share of KLA-Tencor common stock on the actual grant of that option,
- (ii) Partial Increase: increased to the lower closing selling price per share of such common stock on the date such option is amended, or
- (iii) No Increase: retained as the exercise price per share for any New Option issued in replacement of that option.

For example, if the current exercise price of a tendered Eligible Option is \$45.00 per share and the fair market value per share of the Company's common stock on the actual grant date of that option was \$52.00 per

share, then the Adjusted Exercise Price for that option would be fully increased to \$52.00. However, if the fair market value per share of the Company's common stock is \$50.00 on the Amendment Date, then the Adjusted Exercise Price would be set at \$50.00. If the fair market value per share on the Amendment Date is \$42.00, then that Eligible Option would be canceled on the Amendment Date and the New Option would be immediately granted with the same terms as the canceled option, including the current \$45.00 exercise price, but with the Amendment Date as the new grant date.

- "Amended Option" will mean an Eligible Option that has been amended pursuant to the Offer to increase the exercise price per share for the KLA-Tencor common stock purchasable under that option to the Adjusted Exercise Price determined for such option.
- "Amendment Agreement" will mean the Stock Option Amendment and Special Bonus Agreement that will evidence the Adjusted Exercise Price for each of your Amended Options and set forth the terms of the Cash Bonus payable with respect to those Amended Options. A form of the Amendment Agreement is filed as an exhibit to the Offer and is available for review on the Offer website.
- "Amendment Date" will mean the date on which the Eligible Options is amended to increase the exercise price of that option to the Adjusted Exercise Price and will be March 28, 2007 or, if the Offer is extended, the first business day following the extended expiration date of the Offer.
- "Cash Bonus" is the special cash bonus to which each Eligible Optionee will become entitled if the current exercise price of one or more of his or her Eligible Options is increased pursuant to the Offer.
- "Election Form" is the form that the Eligible Optionee must use to notify the Company as to the particular Eligible Options he or she has elected to tender for amendment or replacement pursuant to the terms of the Offer.
- "Fair Market Value" per share of KLA-Tencor common stock on any relevant date will be deemed to be equal to the closing selling price per share of such stock on that date on the Nasdaq Global Select Market.
- "New Option" will mean the option granted on the Amendment Date in replacement of a tendered Eligible Option with a current exercise price per share at or above the closing selling price per share of our common stock on the Amendment Date. The New Option will be exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but will have a new grant date. The New Option will be evidenced by a new option agreement that replaces the option documentation in effect for the canceled option.

Upon the terms and subject to the conditions of the Offer, we will amend or replace all Eligible Options tendered by Eligible Optionees in accordance with Section 4 that are not otherwise validly withdrawn in accordance with Section 5 before the Expiration Date. For each Amended Option, the exercise price per share will be increased to the applicable Adjusted Exercise Price (as defined below), and that option will thereby avoid taxation under Section 409A. If the tendered Eligible Option is canceled and replaced with a New Option, the New Option will not be not subject to taxation under Section 409A.

Eligible Optionees

Individuals to whom Eligible Options have been granted by KLA-Tencor will be Eligible Optionees for purposes of the Offer if they are, on the expiration date of the Offer, a current employee of the Company or any affiliated entity (such as a subsidiary or joint venture) and subject to income taxation in the United States with respect to those options.

The following KLA-Tencor executive officers hold Eligible Options and are eligible to participate in the Offer:

 Name
 Title

 Jeffrey Hall
 Senior Vice President and Chief Financial Officer

 Jorge Titinger
 Senior Vice President and Chief Administrative Officer

No non-employee member of the Board of Directors holds an Eligible Option.

Amendment of Eligible Options and Cash Bonus

Upon the terms and subject to the conditions of the Offer, we will amend or replace each Eligible Option that is properly tendered by an Eligible Optionee in accordance with Section 4, and not validly withdrawn in accordance with Section 5, before the Expiration Date (as defined below). The exercise price of each Eligible Option that is amended pursuant to the Offer will be increased to the Adjusted Exercise Price determined for that option. To the extent a retroactively-priced option was vested as of December 31, 2004, that portion of the option would not be subject to taxation under Section 409A and will not be an Eligible Option for purposes of the Offer. Accordingly, the Adjusted Exercise Price would not be in effect for the portion of a retroactively-priced option that was vested as of December 31, 2004. The Adjusted Exercise Price will apply only to the portion of a retroactively-priced option that was not vested as of December 31, 2004, and that portion thereby qualifies as an Eligible Option.

Each Amended Option will continue to vest in accordance with the same vesting schedule measured from the same vesting commencement date currently in effect for that option. No change to the vesting schedule will occur by reason of the amendment. In addition, except for the Adjusted Exercise Price, the other terms and provisions of each Amended Option will be identical to the terms and provisions in effect for each such Eligible Option immediately before the amendment to the exercise price.

Each Eligible Optionee whose Eligible Options are amended pursuant to the Offer will become entitled to a special Cash Bonus from the Company. The amount of the Cash Bonus payable with respect to each Amended Option will be determined by multiplying (i) the amount by which the Adjusted Exercise Price exceeds the exercise price per share currently in effect for that Eligible Option by (ii) the number of shares of the Company's common stock purchasable under that option at the Adjusted Exercise Price. The Cash Bonus will be paid on January 2, 2008. Such a delayed payment is required by applicable Internal Revenue Service ("IRS") regulations. The payment when made will be subject to the Company's collection of all taxes and payments required to be withheld by the Company. Such Cash Bonus will be paid whether or not the Eligible Optionee continues in the Company's employ through the payment date.

EXAMPLE: Assume that (1) you were granted an option to purchase 2,000 shares that had a recorded grant date of October 17, 2001 and an exercise price per share of \$35.21, (2) that option vests in four successive equal annual installments over the four-year period measured from October 17, 2001, so there were 500 shares unvested as of December 30, 2004, and (3) it was determined that the actual grant date of that option was October 25, 2001 when the fair market value per share was \$45.25. Further assume that (1) you were also granted an option to purchase 3,000 shares that had a recorded grant date of July 2, 2002 and an exercise price per share of \$40.20, (2) that option vests in four successive equal annual installments over the four-year period measured from July 2, 2002, so there were 1,500 shares unvested as of December 30, 2004, and (3) it was determined that the actual grant date of that option was July 15, 2002 when the fair market value per share was \$46.30. Further assume that the fair market value of KLA-Tencor's common stock on the Amendment Date is \$52.00 per share.

The portions of your October 17, 2001 and July 2, 2002 grants that were unvested as of December 31, 2004 constitute Eligible Options for purposes of this Offer. No other portions of those options may be tendered pursuant to this Offer. If you tender the portions constituting your Eligible Options, then those Eligible Options will be amended to increase the exercise prices to \$45.25 per share for the 500 shares eligible under the

October 17, 2001 grant and to \$46.30 per share for the 1,500 shares eligible under the July 2, 2002 grant. No other changes will be made to your October 17, 2001 and July 2, 2002 options. In addition, you will be eligible to receive a Cash Bonus in an amount of \$14,170.00 determined as follows:

- multiplying (i) the 500 shares eligible under the October 17, 2001 option by (ii) \$10.04 (the amount by which the \$45.25 Adjusted Exercise Price for that option exceeds the \$35.21 per share exercise price previously in effect for that option), yielding \$5,020.00;
- multiplying (i) the 1,500 shares eligible under the July 2, 2002 option by (ii) \$6.10 (the amount by which the \$46.30 Adjusted Exercise Price for that option exceeds the \$40.20 per share exercise price previously in effect for that option, yielding \$9,150.00; and
- adding the two amounts resulting from the above calculations, yielding \$14,170.00.

Your Cash Bonus will be paid on January 2, 2008, subject to the Company's collection of all applicable withholding taxes.

Cancellation of Eligible Options and Grant of New Options.

If the Adjusted Exercise Price determined for any tendered Eligible Option would be the same or lower than the exercise price per share currently in effect for that option, then that option will, on the Amendment Date, be canceled and immediately replaced with a New Option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date. Such cancellation and re-grant is necessary to evidence the remedial action required under Section 409A with respect to an Eligible Option whose current exercise price is not increased. No Cash Bonus will be paid with respect to a New Option, because there will be no change to the exercise price.

EXAMPLE: Assume that (1) you were granted an option to purchase 1,000 shares that had an indicated grant date of February 7, 2002 and an exercise price per share of \$54.41, (2) that option vests in four successive equal annual installments over the four-year period measured from February 7, 2002, so there were 500 shares unvested as of December 30, 2004, and (3) it was determined that the actual grant date of that option was February 14, 2002 when the fair market value per share was \$61.29. Further assume that (1) you were also granted an option to purchase 2,000 shares that had an indicated grant date of May 3, 2002 and an exercise price per share of \$52.78, (2) that option vests in four successive equal annual installments over the four-year period measured from May 3, 2002, so there were 1,000 shares unvested as of December 30, 2004, and (3) it was determined that the actual grant date of that option was May 13, 2002 when the fair market value per share was \$57.47. Further assume that the fair market value of KLA-Tencor's common stock on the Amendment Date is \$52.00 per share.

The portions of your February 7, 2002 and May 3, 2002 grants that were unvested as of December 31, 2004 constitute Eligible Options for purposes of this Offer. No other portions of those options may be tendered pursuant to this Offer. If you tender the portions constituting your Eligible Options then your tendered Eligible Options will be canceled on the Amendment Date, and you will be immediately issued two New Options: one New Option with an exercise price of \$54.41 per share for the 500 shares eligible under the February 7, 2002 grant; and a second New Option with an exercise price or \$52.78 per share for the 1,000 shares eligible under the May 3, 2002 grant. Except for the new grant date, each of the New Options will be the same as the canceled Eligible Option it replaces, with no loss of vesting or change to the expiration date of the option term. Because the exercise prices under the New Options will be the same as under the canceled options, no Cash Bonus will be payable to you with respect to your New Options.

Former Employees

If you are not in the employ of the Company or any affiliated entity on the Expiration Date, then none of your tendered Eligible Options will be amended or replaced, and you will not be entitled to any Cash Bonus with respect to those options. The tendered options will be returned to you and will remain exercisable in accordance

with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the Section 409A tax penalties you may subsequently incur in connection with the exercise of those options.

Expiration Date

The term "Expiration Date" means 11:59 p.m. Pacific Time on March 27, 2007, unless we decide to extend the period of time during which the Offer will remain open, in which event the term "Expiration Date" will refer to the latest time and date at which the Offer, as so extended, expires. See Section 16 for a description of our rights to extend, delay, terminate and amend the Offer, and Section 7 for a description of conditions to the Offer.

Additional Considerations

In deciding whether to tender one or more Eligible Options pursuant to the Offer, you should know that KLA-Tencor continually evaluates and explores strategic opportunities as they arise, including business combination transactions, strategic partnerships, capital infusions, and the purchase or sale of assets. At any given time, we may be engaged in discussions or negotiations with respect to various corporate transactions. We also grant options, restricted stock units and other equity awards in the ordinary course of business to our current and new employees, including our executive officers. Our employees, including our executive officers, from time to time acquire or dispose of our securities. Subject to the foregoing, and except as otherwise disclosed in the Offer or in our filings with the Securities and Exchange Commission ("SEC"), we presently have no plans or proposals that relate to or would result in:

- (a) any extraordinary corporate transaction, such as a material merger, reorganization or liquidation, involving us or any of our subsidiaries;
- (b) any purchase, sale or transfer of a material amount of our assets or the assets of any of our subsidiaries;
- (c) any material change in our present dividend policy or our indebtedness or capitalization, other than an accelerated share repurchase of \$750 million of KLA-Tencor common stock as announced in a current report on Form 8-K dated February 22, 2007;
- (d) any change in our present Board of Directors or executive management team, including any plans to change the number or term of our directors or to fill any existing board vacancies or to change the material terms of any executive officer's employment, other than the nomination of Robert M. Calderoni by the Board of Directors for election as a Class I Director of KLA-Tencor at the Company's 2007 annual stockholders meeting;
 - (e) any other material change in our corporate structure or business;
 - (f) our common stock not being authorized for quotation in an automated quotation system operated by a national securities association;
 - (g) our common stock becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act;
 - (h) the suspension of our obligation to file reports pursuant to Section 15(d) of the Securities Exchange Act;
- (i) the acquisition by any person of any of our securities or the disposition of any of our securities, other than in the ordinary course or pursuant to existing options or other rights; or
 - (j) any change in our articles of incorporation or bylaws, or any actions that may impede the acquisition of control of us by any person.

2. PURPOSE OF THE OFFER.

We are making this Offer to amend or replace the Eligible Options because of potential adverse tax consequences that may apply. As a result of a thorough investigation of the Company's past option grant practices, we have determined that each Eligible Option was retroactively priced in that the exercise price per share currently in effect for that option was based on the fair market value per share of our common stock on a date earlier than the date on which that option was actually granted.

Section 409A of the Code provides that an option granted with a below-market exercise price, to the extent unvested as of December 31, 2004, will be subject to adverse income taxation unless that option is brought into compliance with Section 409A. KLA-Tencor has decided to provide Eligible Optionees with the opportunity to bring the Eligible Options into compliance either by amending the exercise price per share to the Adjusted Exercise Price determined for each such option or by replacing that option with a New Option.

Section 409A was added to the Code by the American Jobs Creation Act of 2004. The U.S. Treasury Department and IRS provided guidance and issued proposed regulations with respect to certain items of compensation under Section 409A. The guidance and proposed regulations indicate that a stock option granted with an exercise price per share below the fair market value of the underlying shares on the grant date will, to the extent that option was not vested as of December 31, 2004, be subject to the adverse tax consequences of Section 409A. Unless remedial action is taken to bring that option into compliance, we believe, on the basis of our understanding and interpretation of the applicable guidance and proposed regulations, that the option will trigger adverse U.S. federal tax consequences under Section 409A as indicated below, although it is not entirely clear at present how that option will actually be taxed under Section 409A.

Taxation in Year of Vesting. To the extent the a Section 409A-covered option vested as to one or more shares during the 2005 calendar year, the optionee would recognize taxable income for that year in an amount equal to the fair market value of those shares on December 31, 2005 less the aggregate exercise price payable for those shares. The optionee would have to report that income in an amended tax return filed for the 2005 taxable year. To the extent the options vested as to one or more shares during the 2006 calendar year, the optionee would recognize taxable income equal to the fair market value of those shares on December 31, 2006 less the aggregate exercise price payable for the shares, and the Company would have to collect the applicable withholding taxes on that income. Taxation would occur in this manner even though the options remain unexercised.

Tax Penalty. In addition to normal income taxes payable on the spread in effect under each of your options on the applicable December 31, 2005 or December 31, 2006 measurement date, the optionee would also be subject to an additional tax penalty equal to 20% of that spread.

Note: Certain states, including California, have adopted provisions similar to Section 409A under their tax laws, and for optionees subject to income taxation in such states, the total penalty tax could be up to 40% (a 20% federal penalty tax and up to a 20% state penalty tax).

Continued Taxation. The optionee would be subject to additional income taxation, penalty taxes and withholding taxes on any subsequent increases to the year-end value of the vested option shares. Such taxation will continue until the options are exercised. For the option shares that vested in the 2005 calendar year and remain unexercised at the end of the 2006 calendar year, the additional income subject to such taxation would be based on the amount by which the fair market value per share of the Company's common stock on December 31, 2006 exceeds the December 31, 2005 fair market value.

Note: The IRS has not yet provided any guidance as to how the additional taxable income is to be measured over the period the options remain outstanding after the 2006 calendar year.

Interest Penalty. The optionee will also be subject to interest penalties for failure to pay on a timely basis the taxes attributable to the vesting of the options in the 2005 calendar year. The optionee may incur additional interest penalties if he or she does not pay on a timely basis the taxes attributable to the Section 409A income for the 2006 taxable year.

The following is an example of the adverse U.S. federal income taxes that may occur under Section 409A if remedial action is not taken to bring the below-market options into compliance with Section 409A:

EXAMPLE. Assume that (1) an optionee was granted an option to purchase 2,000 shares that had a recorded grant date of July 2, 2002 with an exercise price per share of \$40.20, (2) that option vests in five successive equal annual installments over the five-year period measured from July 2, 2002, and (3) it was determined that the actual grant date of that option was July 15, 2002 when the fair market value per share was \$46.30. Unless remedial action under Section 409A is taken before December 31, 2007 (or before any earlier exercise of the option for the shares vesting after December 31, 2004), the option shares vesting after December 31, 2004 would be taxed as follows under Section 409A:

Taxation in Year of Vesting for the Shares Vesting in 2005. For the 400 shares that vested during the 2005 calendar year, the optionee would recognize taxable income in that year equal to the amount by which the fair market value of those shares on December 31, 2005 (\$49.33 per share) exceeded the exercise price payable for those shares (\$40.20). Therefore, the optionee would have recognized \$3,652.00 of taxable wages (400 x [\$49.33 - \$40.20]) in 2005. In addition to ordinary income taxes on this amount, the optionee would have incurred a 20% penalty tax in the amount of \$730.40 for federal tax purposes. There would also be an interest penalty assessed for late payment of those 2005 taxes.

Taxation in Year of Vesting for the Shares Vesting in 2006 For the 400 shares that vested during the 2006 calendar year, the optionee would recognize taxable income in that year equal to the amount by which the fair market value of those shares on December 31, 2006 (\$49.75 per share) exceeded the exercise price payable for those shares (\$40.20). Therefore, the optionee would have recognized \$3,820.00 of taxable wages (400 x [\$49.75 - \$40.20]) in 2006. In addition to ordinary income taxes on this amount, the optionee would have incurred a 20% penalty tax in the amount of \$764.00 for federal tax purposes. If these taxes are not paid on a timely basis in connection with the optionee's 2006 tax return, there also would be interest penalties for late payment of those taxes.

The optionee may also be subject to tax penalties under the tax laws of the State in which he or she resides. For example, if the optionee resides in California, there would be additional tax penalties for both the 2005 and 2006 calendar years equal to the federal tax penalties imposed for those years under Section 409A.

Continued Taxation of Shares Vested in 2005 or 2006. If the option continues to remain outstanding, then there will be additional taxation in the manner explained above (normal taxable income, the 20% penalty tax and potential interest penalties) on any appreciation in value of the vested shares over their previous year-end value. For the 400 shares that vested in 2005, the additional income subject to such taxation in the 2006 taxable year would be in the amount of \$168.00 (400 x [\$49.75 - \$49.33]). No guidance has yet been issued as to when or how often in each taxable year after 2006 the appreciation is to be measured and what impact a decline in value of the shares will have upon the taxation of those shares.

Shares Vesting in 2007: It is anticipated that the final 400 shares that vests in the 2007 calendar year will be subject to taxation under Section 409A in substantially the same manner as described above for the earlier installments.

If you elect not to amend your Eligible Options pursuant to the Offer, then you will be solely responsible for any taxes, penalties or interest payable under Section 409A and comparable state tax laws. If you exercise an Eligible Option in the 2007 calendar year without first bringing that option into compliance with Section 409A, then it is possible that the 20% penalty tax under Section 409A with respect to that exercised option may be based solely on the amount by which the fair market value of the purchased shares at the time of exercise exceeds the current exercise price, and the interest penalties may be based on the spread (the excess of the fair market value per share over the exercise price) which existed on the vested option shares at the close of the 2005 and 2006 calendar years. However, the applicable IRS guidance to date is not entirely clear on this point.

Section 409A applies only to below-market options that were not vested as of December 31, 2004. The portion of any below-market option granted before October 4, 2004 that was vested as of December 31, 2004 is grandfathered and is therefore not subject to Section 409A.

Pursuant to the transitional relief that the Treasury Department provided under Section 409A, if you exercised the portion of your stock options that vested in the 2005 calendar year before the end of that year, you would have avoided any adverse tax consequences under Section 409A with respect to that portion. To avoid any adverse tax consequences under Section 409A with respect to the portion of your stock options that vested after December 31, 2004 (but were not exercised in 2005), you must take remedial action to bring that portion of your options (the "409A Portion") into compliance with the requirements of Section 409A. Basically, two courses of remedial action are available as described below. KLA-Tencor is now offering you the opportunity to bring the 409A Portion of your stock options into compliance with Section 409A only through the amendment alternative described in paragraph (ii) below.

- (i) You could designate a specific schedule for the exercise of the 409A Portion of each of your stock options. Accordingly, you would have to designate the particular calendar year or years in which that portion is to be exercised and the number of shares to be exercised in each such year. As part of your designated exercise schedule, you could provide for immediate exercise of the vested shares subject to the 409A Portion of your options upon the earlier of your termination of employment with KLA-Tencor or a change in control or ownership of KLA-Tencor. However, this alternative will not be available if you exercised any Section 409A-covered option for KLA-Tencor shares during the 2006 calendar year.
- (ii) The 409A Portion of each of your stock options could be amended to increase the exercise price to the Adjusted Exercise Price determined for that portion. Such an amendment to the exercise price would bring the 409A Portion of each option into compliance with Section 409A, and you could exercise that 409A-compliant portion as you choose, subject only to the existing exercise provisions and option term in effect for each such option. A New Option granted in replacement of the 409A Portion of an option with a current exercise price at or above the fair market value of the underlying shares on the new grant date will also avoid taxation under Section 409A.

Accordingly, pursuant to the Offer, you may tender each of your Eligible Options to KLA-Tencor for amendment or replacement. The exercise price per share for each Amended Option will be increased to the Adjusted Exercise Price determined for that option, and that Amended Option would not be subject to adverse tax consequences under Section 409A described above. Each New Option granted in replacement of a tendered Eligible Option with a current exercise price at or above the fair market value of the Company's common stock on the Amendment Date will also avoid taxation under Section 409A.

If you are subject to the tax laws in more than one jurisdiction, you should be aware that tax consequences of more than one country may apply to you as a result of your participation in the Offer. You should be certain to consult your personal tax advisor to discuss these consequences. We will distribute short summaries of some of those consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should also review the summary applicable to such foreign jurisdiction.

Neither we nor our Board of Directors will make any recommendation as to whether you should tender your Eligible Options for amendment or replacement, nor have we authorized any person to make any such recommendation. You must make your own decision whether to tender your Eligible Options, after taking into account your own personal circumstances and preferences. You should be aware that adverse tax consequences under Section 409A may apply to your Eligible Options if they are not amended or replaced pursuant to the Offer, and you will be solely responsible for any taxes, interest or penalties you may incur under Section 409A. You are urged to evaluate carefully all of the information in the Offer, and we recommend that you consult your own tax advisor.

3. STATUS OF ELIGIBLE OPTIONS NOT AMENDED OR REPLACED.

If you choose not to tender your Eligible Options for amendment or replacement, those options will continue to remain outstanding in accordance with their existing terms, including the below-market exercise price component that violates Section 409A. Accordingly, if you take no other action to bring those options into compliance with Section 409A, you may be subject to the adverse U.S. federal tax consequences described in Section 2 above. You will be solely responsible for any taxes, penalties or interest you may incur under Section 409A.

4. PROCEDURES FOR TENDERING ELIGIBLE OPTIONS.

If you are an Eligible Optionee, you will receive on the commencement of the Offer an email announcing the Offer with a link to the Offer website. Once you have logged onto the Offer website and clicked on the MAKE AN ELECTION button, you will be directed to your Election Form that contains the following personalized information with respect to each Eligible Option you hold:

- · the grant date indicated for that option on the applicable option agreement,
- the current exercise price per share in effect for that option,
- · the number of shares of the Company's common stock purchasable under that option,
- · the actual grant date of that option, and
- the fair market value per share of the Company's common stock on the actual grant date.

You will need to check the appropriate box next to each of your Eligible Options to indicate whether you elect to tender that option for amendment or replacement in accordance with the terms of the Offer. After completing the Election Form, you will be allowed to review the elections you have made with respect to your Eligible Options. If you are satisfied with your elections you will proceed to the Agreement to Terms of Election page. Only after you agree to the Agreement to the Terms of Election will you be directed to the Election Confirmation Statement page. Please print and keep a copy of the Election Confirmation Statement for your records. You will then be deemed to have completed the election process.

If you are not able to submit your election electronically via the Offer website as a result of technical failures inherent to the website, such as the website being unavailable or the website not accepting your election, or if you do not otherwise have access to the Offer website for any reason (including lack of internet services), you must complete a paper Election Form and return it to the Company via facsimile to Tracy Laboy at (408) 875-6677. To obtain a paper Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

If you decide to accept the Offer with respect to your Eligible Options, you must properly complete and submit the Election Form by logging onto the Offer website at https://kla.equitybenefits.com by 11:59 p.m. Pacific Time on March 27, 2007. If we extend the Offer beyond March 27, 2007, you must deliver those documents before the extended expiration date of the Offer.

We will not accept any Election Form after the expiration of the Offer. If you do not complete and submit the Election Form on the Offer website before the expiration of the Offer, your Eligible Options will not be amended or replaced pursuant to the Offer, and you will not be eligible for any Cash Bonus.

You cannot tender only a portion of an Eligible Option, and we will not accept such a partial tender for amendment or replacement. If you hold more than one Eligible Option, then you may elect to tender one or more of those options and retain the remaining options. Please remember that not all of a particular option grant may be an Eligible Option. Only the portion of that grant that was not vested as of December 31, 2004 may constitute an Eligible Option.

If your Election Form includes any option that is not an Eligible Option or includes only a portion of your outstanding Eligible Option, then we will not accept the tendered option or portion for amendment or replacement, but we do intend to accept for amendment or replacement each Eligible Option properly designated for tender in the Election Form

Determination of Validity; Rejection of Option Shares; Waiver of Defects; No Obligation to Give Notice of Defects We will determine, in our discretion, all questions as to form of documents and the validity, form, eligibility (including time of receipt), and acceptance of any option tender, and we will decide, in our sole discretion, all questions as to (i) the portion of each outstanding option that comprises an Eligible Option for purposes of this Offer; (ii) the Adjusted Exercise Price to be in effect under each Amended Option, (iii) the number of shares of our common stock purchasable under the Amended Option at the Adjusted Exercise Price, (iv) the amount of the Cash Bonus payable with respect to each Amended Option and (v) the cancellation of tendered Eligible Options with exercise prices at or above the fair market value of our common stock on the Amendment Date and the replacement of those canceled options with New Options. Our determination as to those matters will be final and binding on all parties. We reserve the right to reject any or all option tenders that we determine do not comply with the conditions of the Offer, that we determine are not in appropriate form or that we determine are unlawful to accept. Otherwise, we intend to accept for amendment or replacement each properly and timely tendered Eligible Option that is not validly withdrawn. We also reserve the right to waive any of the conditions of the Offer or any defect or irregularity in any tender with respect to any particular Eligible Option or any particular Eligible Option e. No tender of an Eligible Option will be deemed to have been properly made until all defects or irregularities have been cured by the tendering Eligible Optionee or waived by us. Neither we nor any other person is obligated to give notice of any defects or irregularities in tenders, nor will anyone incur any liability for failure to give any such notice.

Our Acceptance Constitutes an Agreement. Your tender of an Eligible Option pursuant to the procedures described above constitutes your acceptance of the terms and conditions of the Offer. Subject to our rights to extend, terminate or amend the Offer, we currently expect that we will, promptly upon the expiration of the Offer, accept for amendment all properly tendered Eligible Options that have not been validly withdrawn, and on the next business day we will increase the exercise price per share to the Adjusted Exercise Price determined for that option. However, if the Adjusted Exercise Price determined for any tendered Eligible Option would be the same or lower than the exercise price per share currently in effect for that option, then that option will, on the Amendment Date, be canceled and immediately replaced with a New Option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date.

Our acceptance of your tendered Eligible Options for amendment or replacement pursuant to the Offer will constitute a binding agreement between us and you upon the terms and subject to the conditions of the Offer. Accordingly, as soon as administratively practicable after the Amendment Date, we will deliver to you a final and complete Amendment Agreement, a form of which is filed as an exhibit to the Offer and is available for review on the Offer website. Schedule I to that agreement will indicate the Adjusted Exercise Price in effect for each of your Amended Options and the Company's unconditional obligation to pay you on January 2, 2008 the Cash Bonus calculated for each Amended Option. You will also receive at that time a new stock option agreement for any New Option granted in replacement of a tendered Eligible Option with a current exercise price per share at or above the fair market value per share of our common stock on the Amendment Date.

5. WITHDRAWAL RIGHTS.

You may only withdraw your tendered Eligible Options in accordance with the provisions of this Section 5.

(i) You may withdraw your tendered Eligible Options at any time before 11:59 p.m., Pacific Time, on the Expiration Date of the Offer. In addition, unless we accept and amend or replace your Eligible Options before 12:00 midnight, Pacific Time, on April 24, 2007 (the 40th business day after the February 27, 2007 commencement date of the Offer), you may withdraw your tendered options at any time thereafter.

(ii) To validly withdraw your tendered Eligible Options, you must use the Offer website at https://kla.equitybenefits.com to revise your Election Form to indicate the Eligible Options that you no longer wish to tender for amendment or replacement. Alternatively, you may change your existing election by completing a new paper Election Form and returning it to the Company via facsimile to Tracy Laboy at (408) 875-6677. To obtain a paper Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

You may only revise your Election Form to withdraw your Eligible Options from the Offer while you still have the right to withdraw the tendered options in accordance with the subparagraph (i) above.

YOU MAY NOT WITHDRAW ONLY A PORTION OF A TENDERED ELIGIBLE OPTION. IF YOU CHOOSE TO WITHDRAW A TENDERED ELIGIBLE OPTION, YOU MUST WITHDRAW THE ENTIRE OPTION.

Any Eligible Option you withdraw will no longer be deemed tendered for amendment or replacement pursuant to the Offer, unless you properly re-tender that option before the Expiration Date by following the election and tender procedures described in Section 4.

Neither KLA-Tencor nor any other person is obligated to give notice of any defects or irregularities in any revised Election Form submitted to us for purposes of withdrawing tendered Eligible Options from the Offer, nor will anyone incur any liability for failure to give any such notice. We will determine, in our sole discretion, all questions as to the form and validity, including time of receipt, of revised Election Forms purporting to withdraw tendered Eligible Options from the Offer. Our determination of these matters will be final and binding.

6. ACCEPTANCE OF ELIGIBLE OPTIONS FOR AMENDMENT OR REPLACEMENT AND COMMITMENT TO PAY CASH BONUS WITH RESPECT TO AMENDED OPTIONS.

Upon the terms and subject to the conditions of the Offer, we will, upon the Expiration Date, accept for amendment or replacement all Eligible Options that have been properly tendered and not validly withdrawn before the Expiration Date. For each Amended Option, we will increase the exercise price per share to the applicable Adjusted Exercise Price on the next business day, currently scheduled to be March 28, 2007. For each tendered Eligible Option that is canceled pursuant to the Offer, we will grant a New Option in replacement on March 28, 2007. If we extend the Expiration Date, then the accepted Eligible Option will be amended or replaced as soon as practicable after the extended Expiration Date.

We will provide written or electronic notice of our acceptance to each Eligible Optionee whose tendered Eligible Options we have accepted for amendment or replacement. Such notice may be by email, press release or other means. In addition, we will, as soon as administratively practicable after the Amendment Date, deliver electronically a final and complete Amendment Agreement to each Eligible Optionee whose Eligible Options have been amended pursuant to the Offer. Schedule I to that agreement will reflect the increases to the exercise prices of the Amended Options and the Company's unconditional obligation to pay such Eligible Optionee the applicable Cash Bonus for each of his or her Amended Options on January 2, 2008. Such Cash Bonus will be paid whether or not an Eligible Optionee continues in the Company's employ through the payment date. For each New Option to which a tendering Eligible Optionee becomes entitled, we will deliver a new stock option agreement to that person as soon as administratively practicable after the grant date.

However, if you are not in the employ of the Company or any affiliated entity on the Expiration Date, then none of your tendered Eligible Options will be amended or replaced, and you will not be entitled to any Cash Bonus with respect to those options. The tendered options will be returned to you and will remain exercisable in accordance with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the Section 409A tax penalties you may subsequently incur in connection with the exercise of those options.

7. CONDITIONS OF THE OFFER.

We will not accept any Eligible Options tendered to us for amendment or replacement, and we may terminate or amend the Offer or postpone our acceptance of any Eligible Options tendered to us for amendment or replacement, in each case, subject to Rule 13e-4(f)(5) under the Securities Exchange Act of 1934, as amended (the "1934 Act"), if at any time on or after February 27, 2007, and before the Expiration Date, any of the following events has occurred, or has been reasonably determined by us to have occurred and, in our reasonable judgment in any such case and regardless of the circumstances giving rise thereto (including any action or omission by us), the occurrence of such event or events makes it inadvisable for us to proceed with the Offer or with our acceptance of the Eligible Options tendered to us for amendment or replacement:

- (a) there shall have been threatened or instituted or be pending any action or proceeding by any government or governmental, regulatory or administrative agency, authority or tribunal or by any other person, domestic or foreign, before any court, authority, agency or tribunal that directly or indirectly challenges the making of the Offer, the amendment of the existing exercise price in effect for some or all of the tendered Eligible Options pursuant to the Offer, the payment of the applicable Cash Bonuses, the cancellation of tendered options and the grant of New Options in replacement or otherwise relates in any manner to the Offer or that, in our judgment, could materially and adversely affect our business, condition (financial or other), operating results, operations or prospects, or otherwise materially impair in any way the contemplated future conduct of our business or the business of any of our subsidiaries or materially impair the contemplated benefits of the Offer to us;
- (b) we shall have been unable to obtain exemptive relief from the prompt payment provisions of Rules 13e-4(f)(5) and 14e-1(c) under the 1934 Act, as they may apply to the January 2, 2008 payment date of the Cash Bonuses;
- (c) there shall have been any action threatened, pending or taken, or approval withheld, or any statute, rule, regulation, judgment, order or injunction threatened, proposed, sought, promulgated, enacted, entered, amended, enforced or deemed to be applicable to the Offer or us or any of our subsidiaries or other affiliated entities, by any court or any authority, agency or tribunal that, in our reasonable judgment, would or might directly or indirectly:
 - make the amendment of the tendered Eligible Options or payment of the Cash Bonuses or the cancellation of tendered options and the grant of New Options in replacement thereof illegal or otherwise restrict or prohibit consummation of the Offer or otherwise relates in any manner to the Offer;
 - delay or restrict our ability, or render us unable, to accept for amendment or replacement some or all of the tendered Eligible Options;
 - materially impair the benefits we hope to convey as a result of the Offer, that we believe would occur only as a result of further changes to Section 409A
 of the Code, the regulations thereunder or other tax laws that would affect the Offer or the Eligible Options; or
 - materially and adversely affect our business, condition (financial or other), operating results, operations or prospects or otherwise materially impair in any
 way the contemplated future conduct of our business or the business of any of our subsidiaries;

(d) there shall have occurred:

- any general suspension of trading in, or limitation on prices for, securities on any national securities exchange or in the over-the-counter market;
- any significant change in the market price of the shares of our common stock or any change in the general political, market, economic or financial
 conditions in the United States or abroad that could, in our reasonable judgment, have a material adverse effect on our business, condition (financial or
 other), operating results, operations or prospects or on the trading in our common stock, or that, in our reasonable judgment, makes it inadvisable to
 proceed with the Offer;

- · in the case of any of the foregoing existing at the time of the commencement of the Offer, a material acceleration or worsening thereof; or
- any decline in either the Dow Jones Industrial Average, the Nasdaq Global Select Market or the Standard and Poor's Index of 500 Companies by an
 amount in excess of 10% measured during any time period after the close of business on February 27, 2007;
- (e) there shall have occurred any change in generally accepted accounting standards or the application or interpretation thereof that could or would require us for financial reporting purposes to record compensation expenses against our operating results in connection with the Offer that would be in excess of any compensation expenses that we would be required to record under generally accepted accounting standards in effect at the time we commence the Offer;
- (f) a tender or exchange offer with respect to some or all of our outstanding common stock, or a merger or acquisition proposal for us, shall have been proposed, announced or made by another person or entity or shall have been publicly disclosed, or we shall have learned that:
 - any person, entity or "group," within the meaning of Section 13(d)(3) of the 1934 Act, shall have acquired or proposed to acquire beneficial ownership of more than 5% of the outstanding shares of our common stock, or any new group shall have been formed that beneficially owns more than 5% of the outstanding shares of our common stock, other than any such person, entity or group that has filed a Schedule 13D or Schedule 13G with the SEC before February 27, 2007;
 - any such person, entity or group that has filed a Schedule 13D or Schedule 13G with the SEC before February 27, 2007 shall have acquired or proposed to acquire beneficial ownership of an additional 2% or more of the outstanding shares of our common stock; or
 - any person, entity or group shall have filed a Notification and Report Form under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 or made a public announcement reflecting an intent to acquire us or any of our subsidiaries or any of the assets or securities of us or any of our subsidiaries;
- (f) any change or changes shall have occurred in our business, condition (financial or other), assets, operating results, operations, prospects or stock ownership or that of our subsidiaries that, in our judgment, is or may be material to us or our subsidiaries or other affiliated entities or otherwise makes it inadvisable for us to proceed with the Offer; or
- (g) any rules, regulations or actions by any governmental authority, the Nasdaq Global Select Market, or other regulatory or administrative authority of any national securities exchange have been enacted, enforced or deemed applicable to KLA-Tencor that makes it inadvisable for us to proceed with the Offer.

The conditions to the Offer are for our benefit. We may assert them in our discretion regardless of the circumstances giving rise to them before the Expiration Date. We may waive them, in whole or in part, at any time and from time to time before the Expiration Date, in our discretion, whether or not we waive any other condition to the Offer. Our failure at any time to exercise any of these rights will not be deemed a waiver of any such rights. The waiver of any of these rights with respect to particular facts and circumstances will not be deemed a waiver with respect to any other facts and circumstances. Any determination we make concerning the events described in this Section 7 will be final and binding upon all persons.

8. PRICE RANGE OF COMMON STOCK UNDERLYING THE OPTIONS.

There is no established trading market for the Eligible Options or any other options granted under our Plans.

Our common stock is quoted on the Nasdaq Global Select Market under the symbol "KLAC." The following table shows, for the periods indicated, the high and low sales prices per share of our common stock on the Nasdaq Global Select Market.

| QUARTER ENDED | HIGH | LOW |
|--------------------|----------|----------|
| December 31, 2006 | \$ 52.43 | \$ 43.85 |
| September 30, 2006 | \$ 46.29 | \$ 39.05 |
| June 30, 2006 | \$ 50.39 | \$ 39.07 |
| March 31, 2006 | \$ 54.18 | \$ 48.20 |
| December 31, 2005 | \$ 54.09 | \$ 45.52 |
| September 30, 2005 | \$ 51.70 | \$ 43.60 |
| June 30, 2005 | \$ 46.87 | \$ 38.86 |
| March 31, 2005 | \$ 50.81 | \$ 42.25 |
| December 31, 2004 | \$ 48.99 | \$ 40.23 |

On February 26, 2007 the last reported sale price of our common stock on the Nasdaq Global Select Market was \$54.42 per share.

The price of our common stock has been, and in the future may be, volatile and could decline. The trading price of our common stock has fluctuated in the past and is expected to continue to do so in the future, as a result of a number of factors, many of which are outside our control. In addition, the stock market has experienced extreme price and volume fluctuations that have affected the market prices of many companies, and that have often been unrelated or disproportionate to the operating performance of these companies.

9. SOURCE AND AMOUNT OF CONSIDERATION: TERMS OF AMENDED OPTIONS OR NEW OPTIONS.

Consideration. If we accept the tender of your Eligible Options for amendment, the exercise price per share will be increased to the Adjusted Exercise Price determined for each such option. Except for such Adjusted Exercise Price, all the terms and provisions in effect for the Eligible Option at the time of tender will continue in effect after the amendment. Accordingly, each Amended Option will continue to vest in accordance with the same vesting schedule measured from the same vesting commencement date currently in effect for each such option, and the exercise period and expiration date for each option will also remain unchanged. However, if the Adjusted Exercise Price as so determined would be the same or lower than the exercise price per share currently in effect for the Eligible Option, then that option will, on the Amendment Date, be canceled and immediately replaced with a new option that is exactly the same as the canceled option, including the current exercise price per share and no loss of vesting or change to the expiration date of the option term, but with a new grant date.

If you are not in the employ of the Company or any affiliated entity on the Amendment Date, then none of your tendered Eligible Options will be accepted for amendment or replacement. The tendered options will be returned to you and will remain exercisable in accordance with the terms in effect for them at the time of tender, including the current exercise price per share. You will receive a separate communication from the Company regarding your tax situation and any financial assistance the Company may provide with respect to the 409A tax penalties you may subsequently incur in connection with the exercise of those options.

Should you accept this Offer, then with respect to each of your Eligible Options that is amended to increase the exercise price per share to the Adjusted Exercise Price determined for that option, you will be eligible to receive the special Cash Bonus. The Cash Bonus will be paid from KLA-Tencor's general assets on January 2, 2008, and you will be a general creditor of KLA-Tencor with respect to the Cash Bonus. No Cash Bonuses will be paid with respect to New Options granted in replacement of tendered Eligible Options, because the exercise price will be the same as in effect for the canceled option it replaces.

If all Eligible Options tendered pursuant to the Offer are amended, then the resulting Amended Options and New Options will cover approximately 5,139,344 shares of our common stock in the aggregate, which represents approximately 0.03% of the total number of shares of our common stock outstanding as of December 31, 2006. The Cash Bonuses payable pursuant to this Offer will be in the total maximum dollar amount of approximately \$21,500,000, assuming the exercise price of each tendered Eligible Option is increased to the fair market value per share on the actual grant date of that option.

Terms of Amended Options or New Options. The amendment or replacement of the tendered Eligible Options pursuant to the Offer will not create any contractual or other right of the tendering Eligible Optionees to receive any future grants of stock options, restricted stock units or other stock-based compensation. This Offer does not change the "at-will" nature of an Eligible Optionee's employment with us, and an Eligible Optionee's employment may be terminated by us or by the optionee at any time, for any reason, with or without cause. The employment of Eligible Optionees outside the United States may be terminated subject to the requirements of local law and the terms of any employment agreement.

The Eligible Options have all been granted pursuant to the Plans. Each Amended Option will continue to remain outstanding under the Plan under which it was originally granted, and each New Option will be granted under the Plan under the canceled option was granted, except that Eligible Options canceled under the Restated 1982 Stock Option Plan or 2000 Nonstatutory Stock Option Plan will be re-granted as New Options under the 2004 Equity Incentive Plan.

The following is a description of the principal features of the Restated 1982 Stock Option Plan under which the majority of the Eligible Options are outstanding. The principal features to the other two Plans under which the remainder of the Eligible Options are outstanding are substantially the same to the extent they apply to option grants, except where otherwise noted in the description below. The description of each Plan is subject to, and qualified in its entirety by reference to, all the provisions of the applicable Plan and the form of stock option agreement in effect for the Eligible Options granted under that Plan. The complete documents for the Restated 1982 Stock Option Plan, the 2000 Nonstatutory Stock Option Plan and the 2004 Equity Incentive Plan have been filed as Exhibits to our Forms S-8 filed with the SEC on March 7, 1997, September 27, 2002 and December 23, 2004, respectively. Please contact us at 160 Rio Robles, San Jose, California 95134, Attn: Tracy Laboy, (telephone: (408) 875-7131), to receive a copy of each Plan document and the form of stock option agreement for each Plan. We will promptly furnish you copies of those documents at our expense. Both the Amendment Agreement to be used to evidence the increase to the exercise price of each Eligible Option amended pursuant to the Offer and the stock option agreement to be used to evidence each New Option granted in replacement of an Eligible Option canceled pursuant to the Offer have been filed with the SEC as exhibits to the Schedule TO.

Restated 1982 Stock Option Plan. The following is a description of the principal provisions of our Restated 1982 Stock Option Plan (the "1982 Plan") that apply to option grants made under that Plan, including the Eligible Options.

General. The Compensation Committee of our Board of Directors has the authority to administer each of the Plans. However, the 1982 Plan and the 2000 Nonstatutory Stock Option Plan (the "2000 Plan") terminated on October 18, 2004 and no new option grants can be made under those plans. However, outstanding options granted pursuant to the 1982 Plan and 2000 Plan, including the Eligible Options, remain in effect in accordance with their terms, and the Eligible Options will continue to do so after the amendment to their exercise prices pursuant to the Offer.

Share Reserve. As of December 31, 2006 options to purchase 16,241,477 shares of common stock were outstanding under the 1982 Plan. As of December 31, 2006 options to purchase 5,019,254 shares of common stock were outstanding under the 2004 Equity Incentive Plan (the "2004 Plan") and an additional 1,160,882 shares remained available for future grant. As of December 31, 2006 options to purchase 5,613,102 shares of common stock were outstanding under the 2000 Plan. The shares of common stock issuable under each of the Plans may be drawn from shares of our authorized but unissued common stock or from shares of our common stock that we reacquire, or a combination thereof.

Eligibility. Officers, employees, non-employee members of the Board of Directors and independent consultants in our service or in the service of our parent and subsidiary companies were eligible to receive option grants under each of the Plans.

Option Terms. Each granted option has an exercise price per share determined by the plan administrator, but that price may not be less than the fair market value of the option shares on the grant date, except that options

may be granted under the 2000 Plan with an exercise price below such fair market value. No granted option may have a term in excess of ten (10) years. The shares subject to each option will generally vest in one or more installments over a specified period of service measured from the grant date.

Upon cessation of service, the optionee will have a limited period of time in which to exercise his or her outstanding options to the extent exercisable for vested shares. In general, that limited period will expire one (1) month (or three (3) months for options outstanding under the 2004 and 2000 Plans) following the optionee's cessation of service, unless such cessation of service occurs by reason of the optionee's death or permanent disability. In that event, the limited exercise period will expire twelve (12) months after such cessation of service. In no event, however, may any option be exercised after the expiration of the ten (10)-year or shorter maximum term in effect for that option.

Vesting Acceleration. In the event we should undergo a change in control, outstanding options under the Plans will become vested and exercisable on an accelerated basis unless the acquiring or successor corporation elects to assume the options or substitute substantially equivalent options for the successor corporation's stock. To the extent that the options outstanding under the Plans are not assumed, replaced or exercised before the change in control, they will terminate as of the effective date of that change in control.

A change in control will be deemed to occur in the event we are acquired by merger, consolidation or asset sale or in event securities representing more than fifty percent (50%) of the total combined voting power of our outstanding voting stock is acquired by any person or group of related persons.

Stockholder Rights and Option Transferability. No optionee will have any stockholder rights with respect to the option shares until such optionee has exercised the option and paid the exercise price for the purchased shares. Options are not assignable or transferable other than by will or the laws of inheritance following optionee's death, and during the optionee's lifetime, the option may only be exercised by the optionee; provided, however, that non-statutory options are assignable or transferable to the extent permitted by our Board of Directors.

Changes in Capitalization. In the event of any increase or decrease in the number of issued shares of our common stock resulting from a stock dividend, stock split, reverse stock split, recapitalization, combination, reclassification or any other similar event resulting in an increase or decrease in the number of issued shares of our common stock, appropriate adjustments will be made to (i) the maximum number of securities issuable under each of the Plans and (ii) the number of securities and the exercise price per share in effect under each outstanding option.

Amendment. Our Board of Directors may amend or modify any outstanding options under the Plans, but any amendment or modification that would adversely affect the rights of the option holder will require the consent of that person.

Taxation of Non-Statutory Stock Options. An optionee will not recognize taxable income for U.S. federal income tax purposes upon the grant of a non-statutory option. In general, an optionee will recognize ordinary income, in the year in which the option is exercised, equal to the excess of the fair market value of the purchased shares on the exercise date over the exercise price paid for the shares, and the optionee will be required to satisfy the tax withholding requirements applicable to such income.

We will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the optionee with respect to the exercised non-statutory option. The deduction will in general be allowed for our taxable year in which ends the calendar year in which such ordinary income is recognized by the optionee.

If you are subject to the tax laws in more than one jurisdiction, you should be aware that consequences of more than one country may apply to you as a result of your receipt, vesting or exercise of a KLA-Tencor option grant. You should be certain to consult your personal tax advisor to discuss these consequences. We will

distribute short summaries of some of those consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should also review the summary applicable to such foreign jurisdiction.

Accounting Treatment.

In accordance with the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 123R (revised 2004) (*FAS 123R**), effective with our July 1, 2006 fiscal year, the stock options that we grant to our employees under the Plans must be valued, under an appropriate valuation formula, at their fair value as of the grant date, and that fair value must then be charged as a direct compensation expense against our reported earnings over the designated vesting period of the award. Similar option expensing will be required for any unvested options that were outstanding on the July 1, 2006 effective date of FAS 123R, with the grant date fair value of those unvested options to be expensed against our earnings over the remaining vesting period.

Please see Section 13 for a discussion of the accounting treatment of the Offer.

10. AMENDED OPTIONS AND NEW OPTIONS WILL NOT DIFFER FROM ELIGIBLE OPTIONS.

Except for the Adjusted Exercise Price, all the terms and provisions in effect for the Eligible Option at the time of tender will continue in effect if that option is amended pursuant to the Offer. Accordingly, each Amended Option will continue to vest in accordance with the vesting schedule currently in effect for that option at the time of the amendment, and the exercise period and option term for that Amended Option will also remain unchanged.

Each New Option will be exactly the same as the canceled Eligible Option it replaces, including the current exercise price for the canceled option and no loss of vesting or change to the expiration date of the option term, but it will have a new grant date.

11. INFORMATION CONCERNING KLA-TENCOR.

KLA-Tencor is the world's leading supplier of process control and yield management solutions, for the semiconductor and related microelectronics industries. Our comprehensive portfolio of products, services, analysis, software, and expertise is designed to help integrated circuit ("IC") manufacturers manage yield throughout the entire fabrication process—from research and development to final mass-production yield analysis.

We offer a broad spectrum of products and services that are used by virtually every major wafer, IC and photomask manufacturer in the world. These customers turn to us for inline wafer defect monitoring; reticle and photomask defect inspection; critical dimension metrology; wafer overlay; film and surface measurement; and overall yield and fab-wide data analysis. Our advanced products, coupled with our unique yield technology services, allow us to deliver the yield management solutions our customers need to accelerate their yield learning rates, reduce their yield excursion risks and adopt industry-leading yield management practices.

KLA-Tencor Corporation was formed in April 1997 through the merger of KLA Instruments Corporation and Tencor Instruments, two long-time leaders in the semiconductor equipment industry, each with over 20 years of experience. KLA Instruments Corporation was incorporated in Delaware in 1975; Tencor Instruments was incorporated in California in 1976. Effective April 30, 1997, Tencor Instruments merged into a wholly owned subsidiary of KLA Instruments Corporation. Immediately following this merger, KLA Instruments Corporation changed its name to KLA-Tencor Corporation.

We are incorporated in Delaware. Our principal executive offices are located at 160 Rio Robles, San Jose, California 95134, and our telephone number at that address is (408) 875-3000.

Financial Information. The following table sets forth selected consolidated financial operating data for KLA-Tencor. The selected historical statement of operations data for the fiscal years ended June 30, 2006 and

2005 and the selected historical balance sheet data as of June 30, 2006 and 2005 have been derived from the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2006 that have been audited by PricewaterhouseCoopers LLP, independent auditors, and our Quarterly Report on Form 10-Q for the period ended September 30, 2006.

The information presented below should be read together with the complete financial statements and notes related thereto as well as the section of these reports entitled Management's Discussion and Analysis of Financial Condition and Results of Operations. We have presented the following data in thousands, except per share data.

| | YEAR ENDED JUNE 30, | | | THREE MONTHS ENDED SEPTEMBER 30, | | | |
|---|------------------------|-----------|-------------------|----------------------------------|-------------|----------|-----------|
| | _ | 2006 | 2005 | | 2006 | | 2005 |
| | | | | | | audited) | |
| COMMON ID A TED OT A TEMENT OF ODED A TIONIC DATA | | | (in thousands, ex | xcept per | share data) | | |
| CONSOLIDATED STATEMENT OF OPERATIONS DATA: | | | • • • • • • • • | | | | 101051 |
| Revenue | \$ | 2,070,627 | \$ 2,081,878 | \$ | 629,363 | \$ | 484,261 |
| Operating income | \$ | 309,791 | \$ 545,120 | \$ | 153,990 | \$ | 74,990 |
| Net income | \$ | 380,452 | \$ 445,049 | \$ | 135,922 | \$ | 75,487 |
| Net income per share (basic) | \$ | 1.92 | \$ 2.27 | \$ | 0.68 | \$ | 0.38 |
| Net income per share (diluted) | \$ | 1.86 | \$ 2.21 | \$ | 0.67 | \$ | 0.37 |
| Weighted average shares (basic) | | 198,625 | 196,364 | | 199,416 | | 197,408 |
| Weighted average shares (diluted) | | 204,097 | 201,126 | | 203,323 | | 203,292 |
| CONSOLIDATED BALANCE SHEET DATA | | | | | | | |
| (AT PERIOD END): | | | | | | | |
| Cash and cash equivalents | \$ | 1,129,191 | \$ 663,163 | \$ | 1,199,969 | \$ | 748,522 |
| Working capital | \$ | 2,540,762 | \$ 2,265,202 | \$ | 2,707,074 | \$ | 2,361,073 |
| Goodwill and purchased intangible assets, net | \$ | 70,341 | \$ 58,670 | \$ | 69,644 | \$ | 70,855 |
| Total assets | \$ | 4,575,911 | \$ 4,040,603 | \$ | 4,691,183 | \$ | 4,083,886 |
| Total liabilities | \$ | 1,002,481 | \$ 936,689 | \$ | 941,957 | \$ | 862,218 |
| Total shareholders' equity | \$ | 3,567,991 | \$ 3,096,670 | \$ | 3,745,140 | \$ | 3,213,591 |
| Book value per common share | \$ | 17.96 | \$ 15.77 | \$ | 18.78 | \$ | 16.28 |

See Section 18 for instructions on how you can obtain copies of our SEC reports that contain the audited financial statements we have summarized above.

12. INTERESTS OF DIRECTORS AND OFFICERS; TRANSACTIONS AND ARRANGEMENTS CONCERNING THE OPTIONS; AND MATERIAL AGREEMENTS WITH DIRECTORS AND OFFICERS.

A list of the current members of our Board of Directors and executive officers is attached as Schedule I to this document. As of December 31, 2006 our current executive officers and directors as a group beneficially owned outstanding options under our various stock option plans to purchase a total of 819,155 shares of our common stock and restricted stock units under those plans covering an additional 445,794 shares of our common stock in the aggregate. That number represented approximately 4.62% of the shares of our common stock subject to all options and restricted stock units outstanding under our various stock option plans as of that date.

The following KLA-Tencor executive officers hold Eligible Options:

| Name | Title | Grant Date | Number of Option Shares |
|----------------|---|--------------------|-------------------------|
| Jeffrey Hall | Senior Vice President and | July 10, 2001 | 3,192 |
| | Chief Financial Officer | October 2, 2001 | 9,400 |
| | | November 8, 2002 | 1,896 |
| Jorge Titinger | Senior Vice President and Chief Administrative Officer | September 16, 2004 | 19,500 |

In addition, Richard Wallace, our Chief Executive Officer holds certain stock options that would have been Eligible Options but for the fact that the exercise prices for those options were amended on December 28, 2006 on terms similar to the terms of this Offer. IRS regulations required those particular options to be so amended before January 1, 2007 because they were granted to an individual who was an executive officer at the time of grant and the remedial period for those options ended on December 31, 2006. Mr. Wallace will also be entitled to a cash bonus in January 2008 that compensates him for the higher exercise prices in effect under those amended options. The following chart sets forth the options that were so amended:

| Grant Date | Number of Affected Option Shares | Prior Exercise Price | Increased Exercise Price | Total Increase in Exercise Price |
|------------|--|----------------------|-----------------------------|-------------------------------------|
| 11/10/02 | 3,209 | \$ 26.25 | \$ 32.88 | \$ 21,575.67 |
| 04/04/01 | 4,667 | \$ 32.75 | \$ 50.82 | \$ 84,332.69 |
| 10/02/01 | 16,500 | \$ 29.31 | \$ 45.25 | \$ 263,010.00 |

Two other former KLA-Tencor executive officers, Neil Richardson and Dennis Fortino, also had the exercise prices for certain of their outstanding options similarly increased. For Mr. Richardson, the increase was in an aggregate dollar amount of \$195,812.50 and covered 11,000 option shares in total. For Mr. Fortino, the increase was in an aggregate dollar amount of \$104,013.75 and covered 6,375 option shares in total.

John Kispert, our President and Chief Operating Officer, had the exercise prices for certain of his options similarly increased; however, Mr. Kispert will not be receiving a cash bonus to compensate him for the higher prices in effect for those amended options.

No non-employee members of our Board of Directors hold Eligible Options.

Schedule II attached to this document sets forth a table indicating the beneficial ownership of our common stock by our executive officers and non-employee members of our Board of Directors as of December 31, 2006.

During the 60-day period ended February 26, 2007:

- we granted options under all of our various stock plans to purchase 15,625 shares of our common stock, of which options to purchase 15,625 shares were granted
 to our directors and executive officers:
- individuals exercised options to acquire 1,951,456 shares of our common stock with exercise prices per share ranging from \$5.95 to \$51.23, of which 0 shares were acquired by our directors and executive officers;
- options to purchase an aggregate of 845,928 shares of common stock under all of our various stock plans were canceled, of which options for 0 shares were held by our directors and executive officers; and
- our directors and executive officers sold an aggregate of 0 shares of our common stock.

The following non-employee Board members and executive officers were parties to the foregoing transactions involving KLA-Tencor common stock conducted during the 60-day period ended February 26, 2007:

- On February 14, 2007, H. Raymond Bingham was granted options to purchase 2,500 shares of our common stock at an exercise price of \$50.39 per share.
- On February 14, 2007, Robert T. Bond was granted options to purchase 2,500 shares of our common stock at an exercise price of \$50.39 per share.
- On February 14, 2007, Stephen P. Kaufman was granted options to purchase 2,500 shares of our common stock at an exercise price of \$50.39 per share.
- On February 14, 2007, Lida Urbanek was granted options to purchase 2,500 shares of our common stock at an exercise price of \$50.39 per share.

- On February 14, 2007, Edward W. Barnholt was granted options to purchase 3,125 shares of our common stock at an exercise price of \$50.39 per share.
- On February 14, 2007, David Wang was granted options to purchase 2,500 shares of our common stock at an exercise price of \$50.39 per share.
- On February 14, 2007 David Wang was issued restricted stock units covering 496 shares of our common stock.
- On February 13, 2007, Benjamin Tsai was issued restricted stock units covering 50,000 shares of our common stock.

There are no other persons controlling KLA-Tencor.

Except as otherwise described above and other than stock option grants, restricted stock unit awards and other stock-based awards in the ordinary course to employees who are not executive officers, there have been no transactions in any outstanding options to purchase our common stock or in our common stock that were effected during the 60-day period ended February 26, 2007 by KLA-Tencor or by any current executive officer, director, affiliate or subsidiary of KLA-Tencor.

13. STATUS OF OPTIONS ACCEPTED BY US IN THE OFFER; ACCOUNTING CONSEQUENCES OF THE OFFER.

The terms and provisions of each Amended Option will not differ from the terms and provisions in effect for that option at the time of tender, except that the Amended Option will have an exercise price equal to the Adjusted Exercise Price determined for that option. Accordingly, each Amended Option will continue to remain an outstanding option under the particular Plan under which it was originally granted. Each New Option will be exactly the same as the canceled Eligible Option it replaces, including the current exercise price for the canceled option and no loss of vesting or change to the expiration date of the option term, but will have a new grant date.

Pursuant to the accounting standards in effect under FAS 123R, we will not recognize a compensation expense for financial reporting purposes with respect to the amendment of the Eligible Options to increase the exercise price per share to the applicable Adjusted Exercise Prices. We will recognize a compensation expense for financial reporting purposes in the amount of the Cash Bonuses that become payable pursuant to the terms of the Offer. That expense will be accrued for the fiscal quarter in which we accept the tendered Eligible Options for amendment. We will not recognize any additional compensation expense for financial reporting purposes with respect to the cancellation of tendered Eligible Options and the grant of New Options in replacement.

14. LEGAL MATTERS: REGULATORY APPROVALS.

Except as noted in the paragraph below, we are not aware of any license or regulatory permit that appears to be material to our business that might be adversely affected by our increasing the exercise prices of the Eligible Options to the applicable Adjusted Exercise Prices, paying the applicable Cash Bonuses or canceling tendered options and granting New Options in replacement, or of any approval or other action by any government or governmental, administrative or regulatory authority or agency, domestic or foreign, that would be required for such amendment to those options, the payment of the Cash Bonuses or the cancellation of tendered options and grant of New Options as contemplated herein. Should any such approval or other action be required, we presently contemplate that we will seek such approval or take such other action. We are unable to predict whether we may determine that we are required to delay the acceptance of the tendered Eligible Options for amendment or replacement or the payment of the applicable Cash Bonuses pending the outcome of any such matter. We cannot assure you that any such approval or other action, if needed, would be obtained or would be obtained without substantial conditions or that the failure to obtain any such approval or other action might not result in adverse consequences to our business. Our obligation to amend or replace Eligible Options is subject to certain conditions, including the conditions described in Section 7.

We will not be able to complete the Offer unless we obtain exemptive relief from the prompt payment provisions of Rules 13e-4(f)(5) and 14e-1(c) under the 1934 Act, as they may apply to the January 2, 2008

payment date of the Cash Bonuses. Such a delayed payment is required by IRS regulations. We have filed a request for such exemptive relief with the SEC, but we cannot provide any assurances that we will succeed in obtaining such relief.

15. MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES.

The following is a general summary of the material U.S. federal income tax consequences applicable to the amendment of the Eligible Options and the payment of the Cash Bonuses or the cancellation of tendered options and the grant of New Options in replacement. Foreign, state and local tax consequences are not addressed.

Acceptance of Offer. If you tender your Eligible Options, you will not recognize any taxable income for U.S. federal income tax purposes at the time of your tender.

Amendment of Option. The amendment of your Eligible Option to increase the exercise price per share to the Adjusted Exercise Price determined for that option is not a taxable event for U.S. federal income tax purposes.

Cancellation and Grant of New Options. The cancellation of a tendered Eligible Option and the grant of a New Option in replacement will not be a taxable event for U.S. federal income tax purposes.

Exercise of Amended Option or New Option. Your Amended Option or New Option will be taxable as a non-statutory stock option for U.S. federal income tax purposes. Accordingly, upon each exercise of such option, you will recognize immediate taxable income equal to the excess of (i) the fair market value of the purchased shares at the time of exercise over (ii) the exercise price paid for those shares, and KLA-Tencor must collect the applicable withholding taxes with respect to such income.

Sale of Acquired Shares. The subsequent sale of the shares acquired upon the exercise of your Amended Option or New Option will give rise to a capital gain to the extent the amount realized upon that sale exceeds the sum of the (i) exercise price paid for the shares plus (ii) the taxable income recognized in connection with the exercise of such option for those shares. A capital loss will result to the extent the amount realized upon such sale is less than such sum. The gain or loss will be long-term if the shares are not sold until more than one (1) year after the date the Amended Option or New Option is exercised for those shares.

Cash Bonus. You will be immediately taxed upon receipt of the Cash Bonus. The payment will constitute wages for tax withholding purposes. Accordingly, KLA-Tencor must withhold all applicable federal, state and local income and employment withholding taxes, and you will receive only the portion of the payment remaining after those taxes have been withheld.

Foreign Taxation. If you are subject to the tax laws of jurisdictions in addition to the Untied States, you should be aware that tax consequences of more than one country may apply to you as a result of your receipt, vesting or exercise of a KLA-Tencor option grant and/or your participation in the Offer. You should consult your personal tax advisor to discuss these consequences. We will distribute short summaries of some of those consequences with respect to some of the countries where Eligible Optionees are located. If you are subject to the tax laws of jurisdictions outside of the United States, you should review the summary applicable to such foreign jurisdiction.

WE RECOMMEND THAT YOU CONSULT YOUR OWN TAX ADVISOR WITH RESPECT TO THE FOREIGN AND U.S. FEDERAL, STATE AND LOCAL TAX CONSEQUENCES OF PARTICIPATING IN THE OFFER.

16. EXTENSION OF THE OFFER; TERMINATION; AMENDMENT.

We expressly reserve the right, in our discretion, at any time and from time to time, and regardless of whether or not any event set forth in Section 7 has occurred or is deemed by us to have occurred, to extend the

period of time during which the Offer is open and thereby delay the acceptance of any Eligible Options for amendment or replacement by giving notice of such extension to the tendering Eligible Optionees and making a public announcement thereof.

We also expressly reserve the right, in our judgment, at any time before the Expiration Date, to terminate or amend the Offer and to postpone our acceptance of any tendered Eligible Options for amendment or replacement upon the occurrence of any of the conditions specified in Section 7, by giving written or electronic notice of such termination or postponement to the tendering Eligible Optionees and making a public announcement thereof. Our reservation of the right to delay our acceptance of the tendered Eligible Options for amendment or replacement is limited by Rule 13e-4(f)(5) promulgated under the 1934 Act, which requires that we must pay the consideration offered or return the tendered Eligible Options promptly after termination or withdrawal of the Offer.

Amendments to the Offer may be made at any time and from time to time by public announcement of the amendment. In the case of an extension, the amendment will be issued no later than 9:00 a.m. Eastern Time on the next business day after the last previously scheduled or announced Expiration Date. Any public announcement made pursuant to the Offer will be disseminated promptly to Eligible Optionees in a manner reasonably designated to inform option holders of such change.

If we materially change the terms of the Offer or the information concerning the Offer, or if we waive a material condition of the Offer, we will extend the Offer to the extent required by Rules 13e-4(d)(2) and 13e-4(e)(3) under the 1934 Act. Those rules require that the minimum period during which an Offer must remain open following material changes in the terms of the Offer or information concerning the Offer, other than a change in price or a change in percentage of securities sought, will depend on the facts and circumstances, including the relative materiality of such terms or information.

If we decide to take any of the following actions, we will give notice of such action and keep the Offer open for at least ten business days after the date of such notification:

- (1) we increase or decrease the amount of consideration offered for the Eligible Options, or
- (2) we decrease the number of Eligible Options eligible to be tendered in the Offer.

17. FEES AND EXPENSES.

We will not pay any fees or commissions to any broker, dealer or other person for soliciting submissions of Eligible Options for amendment or replacement pursuant to this Offer.

18. ADDITIONAL INFORMATION.

We have filed with the SEC a Tender Offer Statement on Schedule TO, of which this document is a part, with respect to the Offer. This document does not contain all of the information contained in the Schedule TO and the exhibits to the Schedule TO. We recommend that you review the Schedule TO, including its exhibits, and the following materials that we have filed with the SEC before making a decision on whether to tender your Eligible Options for amendment or replacement:

- (a) our Annual Report on Form 10-K for our fiscal year ended June 30, 2006, filed with the SEC on January 29, 2007;
- (b) our Quarterly Report on Form 10-Q for our fiscal quarter ended September 30, 2006 filed with the SEC on January 29, 2007;
- (c) all other reports filed pursuant to section 13(a) or 15(d) of the 1934 Act since the end of the fiscal year covered by its Annual Report referred to in (a) above; and
- (d) the description of our common stock included in our registration statement on Form 8-A/A, which was filed with the SEC on February 2, 2006, including any amendments or reports we file for the purpose of updating that description.

The SEC file number for these filings is 000-09992. These filings, our other annual, quarterly and current reports, our proxy statements and our other SEC filings are available to the public on the SEC's website at www.sec.gov. These filings may also be examined, and copies may be obtained, at the following SEC public reference room:

100 F Street, N.E. Washington, D.C. 20549

You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330.

We will also provide without charge to each person to whom a copy of this document is delivered, upon the written or oral request of any such person, a copy of any or all of the documents to which we have referred you, other than exhibits to such documents (unless such exhibits are specifically incorporated by reference into such documents). Requests should be directed to:

KLA-Tencor Corporation 160 Rio Robles San Jose, California 95134 Attn: Tracy Laboy

or by contacting Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

As you read the foregoing documents, you may find some inconsistencies in information from one document to another. If you find inconsistencies between the documents, or between a document and this document, you should rely on the statements made in the most recent document.

The information relating to KLA-Tencor in this document should be read together with the information contained in the documents to which we have referred you.

19. FORWARD-LOOKING STATEMENTS; MISCELLANEOUS.

This document and our SEC reports referred to above contain certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the 1934 Act. All statements other than statements of historical fact may be forward-looking statements. You can identify these and other forward-looking statements by the use of words such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "relies," "believes," "estimates," "predicts," "intends," "potential," "continue," or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. Such forward-looking statements include, among others, those statements regarding the future impact of the restatement of our historical financial statements, shareholder litigation, negative tax implications and other related matters arising from the discovery that we had retroactively priced stock options (primarily from July 1, 1997 to June 30, 2002) and had not accounted for them correctly; forecasts of the future results of our operations; the percentage of spending that our customers allocate to process control; orders for our products and capital equipment generally; sales of semiconductors; the allocation of capital spending by our customers; growth of revenue in the semiconductor industry, the semiconductor capital equipment industry and business; technological trends in the semiconductor industry; our future product offerings and product features; the success and market acceptance of new products; timing of shipment of backlog; the future of our product shipments and our product and service revenues; our future gross margins; the future of our selling, general and administrative expenses; international sales and operations; maintenance of our competitive advantage; success of our product offerings; creation and funding of programs for research and development; attraction and retention of employees; resul

from customers; our future income tax rate; dividends; the completion of any acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; sufficiency of our existing cash balance, investments and cash generated from operations to meet our operating and working capital requirements; and the adoption of new accounting pronouncements.

Our actual results may differ significantly from those projected in the forward-looking statements in this document. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in Item 1A, "Risk Factors" as well as in Item 1, "Business" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report on Form 10-K for the 2006 fiscal year filed with the SEC on January 29, 2007. You should carefully review these risks and also review the risks described in other documents we file from time to time with the SEC, including the Quarterly Reports on Form 10-Q that we will file in fiscal year 2007, recent Current Reports on Form 8-K and 8-K/A, and other SEC filings. You are cautioned not to place undue reliance on these forward-looking statements, and we expressly assume no obligations to update the forward-looking statements in this document that occur after the date hereof.

We are not aware of any jurisdiction where the making of the Offer is not in compliance with applicable law. If we become aware of any jurisdiction where the making of the Offer is not in compliance with any valid applicable law, we intend to make a good faith effort to comply with such law. If, after such good faith effort, we cannot comply with such law or we determine that further efforts to comply are not advisable, the Offer will not be made to, nor will tenders be accepted from or on behalf of, the holders of Eligible Options residing in such jurisdiction.

We have not authorized anyone to give you any information or to make any representations in connection with the Offer other than the information and representations contained in this document, the related Tender Offer Statement on Schedule TO or in the related Election Form and accompanying Stock Option Amendment and Special Bonus Agreement. If anyone makes any representation to you or gives you any information different from the representations and information contained in this document, the related Tender Offer Statement on Schedule TO or in the related Election Form and accompanying Stock Option Amendment and Special Bonus Agreement, you must not rely upon that representation or information as having been authorized by us.

We have not authorized any person to make any recommendation on our behalf as to whether you should tender or refrain from tendering your Eligible Options pursuant to the Offer. You should rely only on the representations and information contained in this document, the related Tender Offer Statement on Schedule TO or in the related Election Form and accompanying Stock Option Amendment and Special Bonus Agreement or to which we have referred you.

KLA-Tencor Corporation February 27, 2007

SCHEDULE I

INFORMATION CONCERNING THE DIRECTORS AND EXECUTIVE OFFICERS OF KLA-TENCOR CORPORATION

The members of the KLA-Tencor board of directors and the KLA-Tencor executive officers and their respective positions and offices as of February 27, 2007, are set forth in the following table:

| NAME | POSITION AND OFFICES HELD |
|--------------------|--|
| Richard P. Wallace | Chief Executive Officer and Director |
| John H. Kispert | President and Chief Operating Officer |
| Jeffrey L. Hall | Senior Vice President and Chief Financial Officer |
| Lawrence A. Gross | Executive Vice President—Legal and Interim General Counsel |
| Jorge L. Titinger | Senior Vice President and Chief Administrative Officer |
| Benjamin Tsai | Executive Vice President and Chief Technology Officer |
| H. Raymond Bingham | Director |
| Robert T. Bond | Director |
| David C. Wang | Director |
| Lida Urbanek | Director |
| Edward W. Barnholt | Director |
| Stephen P. Kaufman | Director |
| | |

The address of each board member and executive officer is c/o KLA-Tencor Corporation, 160 Rio Robles, San Jose, California 95134.

SCHEDULE II

BENEFICIAL OWNERSHIP OF KLA-TENCOR SECURITIES BY KLA-TENCOR DIRECTORS AND EXECUTIVE OFFICERS

The following table shows the holdings of KLA-Tencor common stock as of December 31, 2006 by each director and each executive officer of KLA-Tencor. Shares that become issuable under outstanding restricted stock units upon satisfaction of applicable vesting requirements are not included in the table but are indicated in footnote 16 to such table:

| Name of Beneficial Owner (1)(15) | Amount and Nature of Beneficial Ownership | Percent of Class (14) |
|---|--|-----------------------|
| Richard P. Wallace (2) | 231,919 | * |
| Edward W. Barnholt (3) | 72,832 | * |
| H. Raymond Bingham (4) | 61,000 | * |
| Robert T. Bond (5) | 58,000 | * |
| Stephen P. Kaufman (6) | 37,000 | * |
| Lida Urbanek (7) | 1,385,581 | * |
| David C. Wang | _ | _ |
| John H. Kispert (8) | 167,941 | * |
| Jeffrey L. Hall (9) | 62,828 | * |
| Kenneth Schroeder(10)(13) | 215,104 | * |
| Avi Cohen(11)(13) | 175,177 | * |
| Lance Glasser(12)(13) | 171,090 | * |
| All Directors and executive officers as a group (12 persons) (15) | 2,147,924 | 1.07% |

- Does not exceed 1% of the outstanding shares.
- (1) Correspondence to all executive officers and directors of the Company may be mailed to KLA-Tencor Corporation, 160 Rio Robles, San Jose, California 95134.
- (2) Includes 227,794 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (3) Includes 70,832 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (4) Includes 60,000 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (5) Includes 55,000 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (6) Includes 35,000 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- Includes 81,666 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006, 1,271,414 shares of which are held in trust for the benefit of Ms. Urbanek's family, and 29,555 shares of which are held by the Urbanek Family Foundation.
- (8) Includes 160,700 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006 and 7,241 shares which are held in trust for the benefit of Mr. Kispert's family.
- (9) Includes 60,603 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (10) Includes 82,446 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (11) Includes 172,581 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (12) Includes 166,965 shares subject to options which are presently exercisable or will become exercisable within 60 days after December 31, 2006.
- (13) No longer an executive of the Company as of December 31, 2006.
- (14) As of December 31, 2006, there were 199,725,388 shares of common stock outstanding.

- (15) Includes 44,535 shares subject to options held by Jorge Titinger which are presently exercisable or will become exercisable within 60 days after December 31, 2006. Pursuant to Rule 3b-7 under the Securities Exchange Act of 1934, executive officers include the Company's chief executive officer, all group vice presidents, and all senior vice presidents.
- (16) As of December 31, 2006, the executive officers listed below each held restricted stock units. Each restricted stock unit will entitle that officer to one share of the Company's common stock upon satisfaction of the applicable service or performance vesting requirement in effect for that unit.

| Name | Number of Shares Subject to Restricted Stock Units |
|--------------------|--|
| Richard P. Wallace | 203,611 |
| John H. Kispert | 160,833 |
| Jeffrey L. Hall | 43,750 |
| Jorge Titinger | 37,600 |

FORM OF ANNOUNCEMENT REGARDING COMMENCEMENT OF OFFER

February 27, 2007

We are pleased to announce that KLA-Tencor's Tender Offer is officially launching today, February 27, 2007 and will remain open until March 27, 2007 at 11:59 p.m. Pacific Time (unless we extend it).

The Tender Offer will provide you with the opportunity to avoid the unfavorable tax consequences under Section 409A of the Internal Revenue Code you may otherwise incur with respect to your retroactively priced options. The specifics of the program are described in the Offer to Amend or Replace and the exhibits thereto. You may obtain a copy of the relevant documents by logging on to the Tender Offer website at https://kla.equitybenefits.com. We urge you to read the Offer to Amend or Replace and the exhibits thereto very carefully.

Options will remain subject to adverse tax consequences under Section 409A until the close of the Tender Offer and the official amendment or replacement of such options on the first business day following the expiration of the Tender Offer. Therefore, we remind you that should you exercise your tendered options prior to the amendment of your tendered options, you will be solely responsible for any taxes, penalties or interest you may incur under Section 409A.

Below is an easy checklist that outlines how and when to tender affected Options.

- 1. You must log on to the Tender Offer website at https://kla.equitybenefits.com use your employee ID and the last four digits of your Social Security Number for entry into the site. If the site does not recognize you, please send an e-mail to 401k.stock@kla-tencor.com with your name and employee ID number.
- 2. Click on the *MAKE AN ELECTION* button to proceed with your election. You will be redirected to the first page of the Election Form. You will need to check the appropriate boxes next to each of your Eligible Options to indicate whether or not you are tendering your Eligible Options for amendment or replacement in accordance with the terms of the Offer.
- 3. After completing the Election Form, you will be allowed to review the elections you have made with respect to your Eligible Options. If you are satisfied with your elections, you will proceed to the Agreement to Terms of Election page. Only after you agree to the Agreement to the Terms of Election will you be directed to the Election Confirmation Statement page.
 - 4. Please print and keep a copy of the Election Confirmation Statement for your records. You will then be deemed to have completed the election process.

KEY DATES TO REMEMBER

The commencement date of the Offer is February 27, 2007.

The Offer will expire at 11:59 pm Pacific Time on March 27, 2007 (unless we extend it).

The Eligible Options will be amended or replaced on March 28, 2007 (unless we extend the Offer). Please be aware that your option account at your broker may not accurately reflect the amendment or replacement for one to two business days following the amendment date.

The cash bonus will be paid on January 2, 2008.

KLA-TENCOR CORPORATION OFFER TO AMEND OR REPLACE ELIGIBLE OPTIONS FREQUENTLY ASKED QUESTIONS

The following are answers to some of the questions that you may have about the Offer to Amend or Replace and the accompanying Election Form (which, together with the Stock Option Amendment and Special Bonus Agreement, as they may each be amended or supplemented from time to time, constitute the "Offer"). We urge you to read carefully the Offer because the information in this summary is not complete and does not contain all of the information that is important to you.

1. WHEN DOES THE OFFER COMMENCE?

The commencement date of the Offer is February 27, 2007.

2. WHEN DOES THE OFFER EXPIRE?

The Offer will expire on March 27, 2007, at 11:59 p.m. Pacific Time, unless we extend the Offer. If the Offer is extended, we will make a public announcement of the extension no later than 9:00 a.m. Eastern Time on the next business day following the previously scheduled expiration of the Offer.

3. HOW AND WHEN DO I TENDER MY ELIGIBLE OPTIONS?

You must log on to the Offer website at https://kla.equitybenefits.com and click on the MAKE AN ELECTION button to proceed with your election. You will be redirected to the first page of the Election Form. You will need to check the appropriate boxes next to each of your Eligible Options to indicate whether or not you are tendering your Eligible Options for amendment or replacement in accordance with the terms of the Offer. After completing the Election Form, you will be allowed to review the elections you have made with respect to your Eligible Options. If you are satisfied with your elections, you will proceed to the Agreement to Terms of Election page. Only after you agree to the Agreement to the Terms of Election will you be directed to the Election Confirmation Statement page. Please print and keep a copy of the Election Confirmation Statement for your records. You will then be deemed to have completed the election process.

If you are not able to submit your election electronically via the Offer website as a result of technical failures inherent to the website, such as the website being unavailable or the website not accepting your election, or if you do not otherwise have access to the Offer website for any reason (including lack of internet services), you must complete a paper Election Form and return it to the Company via facsimile to Tracy Laboy at (408) 875-6677.

If you decide to participate in the Offer, you must complete the election process in the foregoing manner by 11:59 p.m. Pacific Time on March 27, 2007. If we extend the Offer beyond March 27, 2007, you must complete the process before the extended expiration date of the Offer.

4. DURING WHAT PERIOD OF TIME MAY I CHANGE MY ELECTION WITH RESPECT TO MY ELIGIBLE OPTIONS?

You may change your previously submitted election at any time prior to 11:59 p.m. Pacific Time on March 27, 2007 (or any extended expiration date of the Offer). If you would like to change your election, you must log on to the Offer website at https://kla.equitybenefits.com, complete and submit a new Election Form. You should print a copy of your revised Election Form and updated Election Confirmation Statement and keep those documents with your other records for this Offer. Alternatively, you may change your existing election by completing a new paper Election Form and returning it to the Company via facsimile to Tracy Laboy at (408) 875-6677.

You may change your previously submitted elections as many times as you would like prior to the expiration of the Offer.

5. WHAT DO I DO IF I FIND AN ERROR REGARDING MY ELIGIBLE OPTIONS IN THE ELECTION FORM?

If you think there is an error in the information contained on your Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

6. WHERE CAN I OBTAIN A COPY OF THE ELECTION FORM AND STOCK OPTION AMENDMENT AND SPECIAL BONUS AGREEMENT?

To obtain a copy of the Election Form and Stock Option Amendment and Special Bonus Agreement, please log onto the Offer website at https://kla.equitybenefits.com. If you would like paper copies of the Election Form and Stock Option Amendment and Special Bonus Agreement, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

7. WHAT WILL HAPPEN TO MY TENDERED OPTIONS?

If KLA-Tencor accepts your tendered options pursuant to the terms of the Offer, then each of those options will be amended to increase the exercise price per share to the lower of (i) the fair market value per share of KLA-Tencor common stock on the actual date on which that option was granted and (ii) the closing selling price per share of such common stock on the date on which the option is amended.

However, if an Eligible Option you tender for amendment has an exercise price per share at or above the closing selling price per share of KLA-Tencor common stock on the amendment date, that option will be canceled on that date and immediately replaced with a new option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date, but with a new grant date. Such cancellation and re-grant is necessary in order to avoid adverse taxation of that option under IRC Section 409A.

8. WHAT ARE SOME OF THE KEY DATES TO REMEMBER?

The commencement date of the Offer is February 27, 2007.

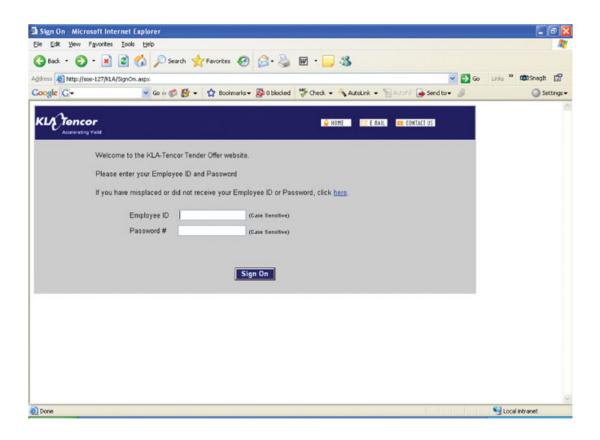
The Offer will expire at 11:59 pm Pacific Time on March 27, 2007 (unless we extend it).

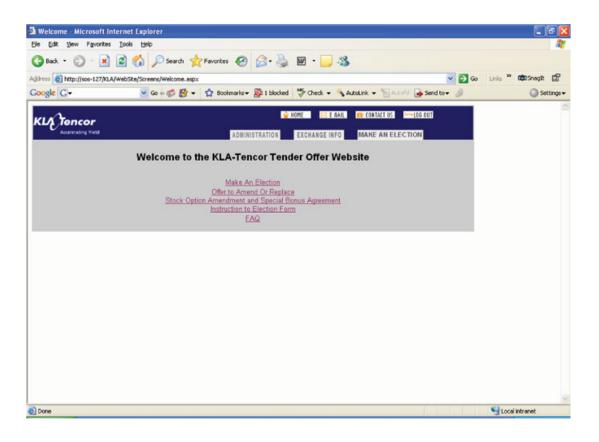
The Eligible Options will be amended or replaced on March 28, 2007 (unless we extend the Offer).

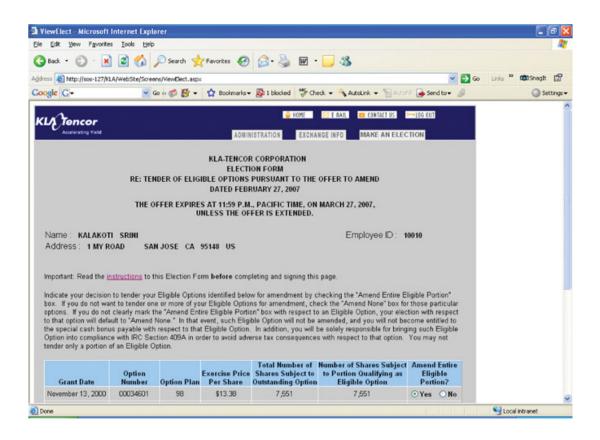
The cash bonus will be payable on January 2, 2008.

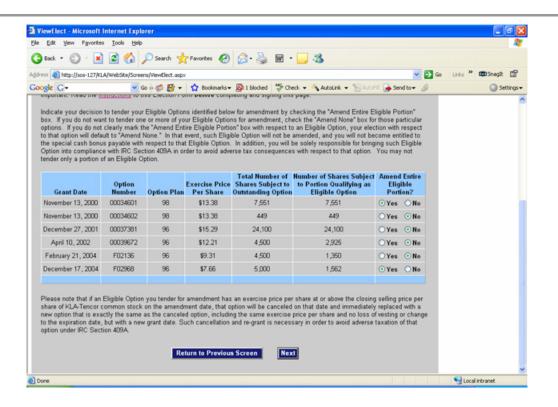
9. WHO CAN I TALK TO IF I HAVE QUESTIONS ABOUT THE OFFER?

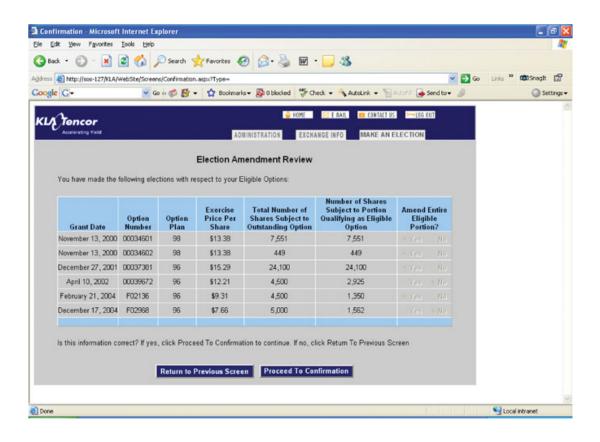
For additional information or assistance, you should contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

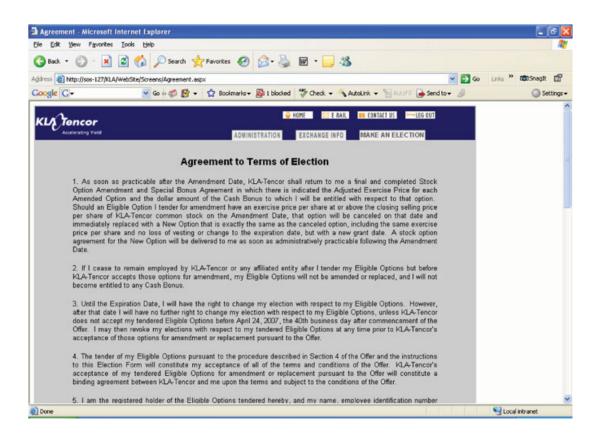


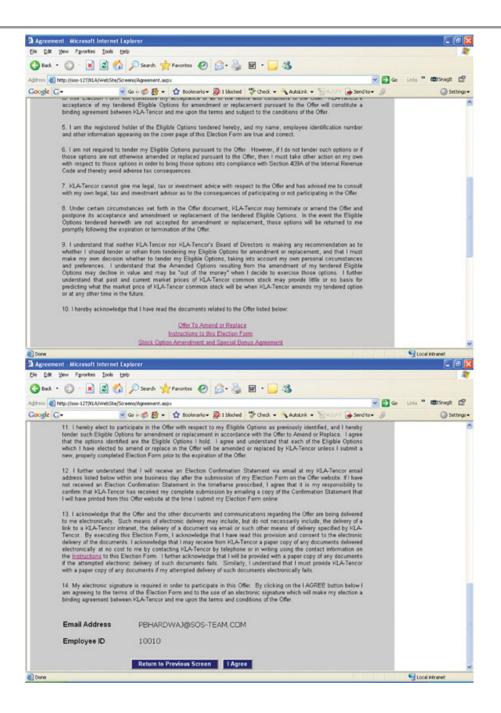


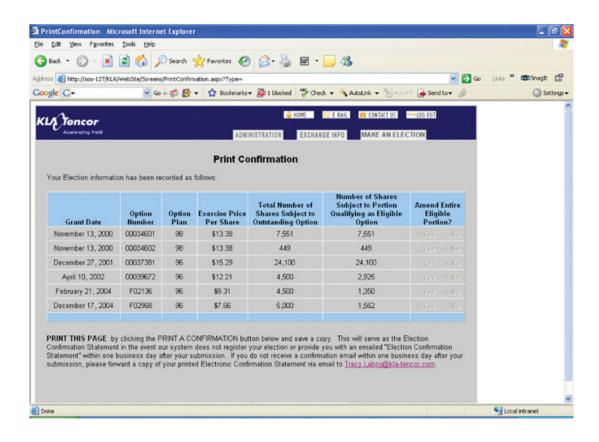


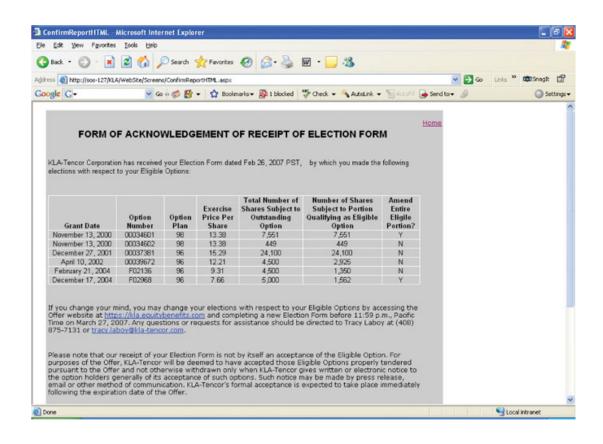












INSTRUCTIONS FORMING PART OF THE TERMS AND CONDITIONS OF THE OFFER

1. Delivery of Election Form. A properly completed and duly executed Election Form must be received by KLA-Tencor by 11:59 p.m. Pacific Time on the Expiration Date

KLA-Tencor intends to disseminate an Election Confirmation Statement via email to your KLA-Tencor email address within one business day after your submission of your Election Form on the Offer website at https://kla.equitybenefits.com. If you have not received an Election Confirmation Statement in the timeframe prescribed, KLA-Tencor recommends you email a copy of your Election Confirmation Statement to Tracy Laboy at tracy.laboy@kla-tencor.com prior to the expiration of the Offer.

You may change your election with respect to your Eligible Options at any time up to 11:59 p.m. Pacific Time on the Expiration Date. If the Offer is extended by KLA-Tencor beyond that time, you may change your election with respect to your tendered Eligible Options at any time until the extended expiration of the Offer. In addition, if KLA-Tencor does not accept your tendered option by 11:59 p.m. Pacific Time on April 24, 2007, you may revoke your election with respect to your tendered options at any time thereafter until those options are accepted for amendment or replacement. To validly change or revoke your election, you must access the Offer website at https://kla.equitybenefits.com and complete and deliver a new Election Form to KLA-Tencor prior to the expiration of the Offer. You should print a copy of your revised Election Form and updated Election Confirmation Statement and keep those documents with your other records for the Offer. You may change your previously submitted elections as many times as you would like prior to the expiration of the Offer.

KLA-Tencor will not accept any alternative, conditional or contingent tenders. All persons tendering Eligible Options will, by completing and executing the Election Form, waive any right to receive any notice of the acceptance of their tender, except as provided for in the Offer.

- 2. Tenders. If you intend to tender your Eligible Options for amendment or replacement pursuant to the Offer, you must access your account at the Offer website https://kla.equitybenefits.com, properly complete and duly execute the Election Form. If you decide to tender a particular Eligible Option, you must tender all of that option for amendment or replacement. If you hold more than one Eligible Option, you may elect to tender one or more of those options and retain the balance.
 - 3. Signatures on This Election Form. You must electronically sign this Election Form.
- 4. Requests for Assistance or Additional Copies. Any questions or requests for assistance, as well as requests for paper copies of the Offer document, this Election Form or the Stock Option Amendment and Special Bonus Agreement, may be directed to Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com. Copies will be furnished promptly at KLA-Tencor's expense.
- 5. Irregularities. KLA-Tencor will determine, in its discretion, all questions as to the form of documents and the validity, form, eligibility (including time of receipt), and acceptance of any tendered option. KLA-Tencor will also decide, in its discretion, all questions as to (i) the portion of each retroactively priced option which comprises an Eligible Option for purposes of the Offer; (ii) the number of shares of common stock purchasable under each Amended Option at the Adjusted Exercise Price to be in effect under each Amended Option, (iv) the amount of the Cash Bonus payable with respect to each Amended Option with an Adjusted Exercise Price in excess of the exercise price per share in effect for that option immediately prior to the amendment and (v) the cancellation of tendered Eligible Options with exercise prices above the fair market value of KLA-Tencor common stock on the Amendment Date and the replacement of those canceled options with New Options. KLA-Tencor's determination of such matters will be final and binding on all parties. KLA-Tencor reserves the right to reject any or all tenders which it determines do not comply with the conditions of the Offer, are not in proper form or the acceptance of which would be unlawful. KLA-Tencor also reserves the right to waive any of the conditions of the Offer or any defect or irregularity in the tender with respect to

any particular Eligible Option or any particular Eligible Optionee, and KLA-Tencor's interpretation of the terms of the Offer (including these instructions) will be final and binding on all parties. No tender of an Eligible Option will be deemed to be properly made until all defects and irregularities have been cured by the tendering Eligible Optionee or waived by KLA-Tencor. Unless waived, any defects or irregularities in connection with the tender of an Eligible Option must be cured within such time as KLA-Tencor shall determine. Neither KLA-Tencor nor any other person is or will be obligated to give notice of any defects or irregularities with respect to the tendered options, and no person will incur any liability for failure to give any such notice. If the table on the cover page of this Election Form includes options that are not eligible for the Offer, KLA-Tencor will not accept those options for amendment or replacement, but KLA-Tencor does intend to accept for amendment or replacement any properly tendered Eligible Option set forth in that table.

- 6. Important Tax Information. You should refer to Section 15 of the Offer, which contains important U.S. federal tax information concerning the Offer. All Eligible Optionees with Eligible Options are strongly encouraged to consult with their own tax advisors as to the consequences of their participation in the Offer.
 - 7. Copies. You should print a copy of this Election Form, after you have completed and electronically signed it, and retain it for your records.
- 8. Paper Delivery. If you are not able to submit your election electronically via the Offer website as a result of technical failures inherent to the website, such as the website being unavailable or the website not accepting your election, or if you do not otherwise have access to the Offer website for any reason (including lack of internet services), you must complete a paper Election Form and return it to KLA-Tencor via facsimile to Tracy Laboy at (408) 875-6677. To obtain a paper Election Form, please contact Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

IMPORTANT: THE COMPLETED AND SIGNED ELECTION FORM MUST BE RECEIVED BY KLA-TENCOR BY 11:59 P.M. PACIFIC TIME ON THE EXPIRATION DATE.

STOCK OPTION AMENDMENT AND SPECIAL BONUS AGREEMENT

AGREEMENT made by KLA-Tencor Corporation (the "Company") which shall be effective on the date executed by a validly-authorized officer of the Company.

WHEREAS, the Company previously granted to (the "Optione") the options identified on attached *Schedule I* (the "Options") to purchase shares of the Company's common stock under one or more of the Company's employee stock incentive plans (individually, a "Plan").

WHEREAS, the Company and Optionee entered into a formal Stock Option Agreement (the "Option Agreement") evidencing each such Option.

WHEREAS, in order to avoid adverse tax consequences under section 409A of the Internal Revenue Code, Optionee desires to amend each of the Options to increase the exercise price per share to be in effect for the unexercised portion of that Option which is subject to section 409A and identified as such on *Schedule I* (the "Covered Portion") to the higher exercise price per share indicated for that portion of such Option on *Schedule I*.

WHEREAS, in order to compensate Optionee for the increased exercise prices to be in effect for the Covered Portions of the Options, the Company is willing to pay Optionee a special cash bonus in a dollar amount equal to the aggregate increase in the exercise prices for the Covered Portions of the Options listed on *Schedule I*, with the actual dollar of that bonus indicated as the Total Special Bonus on *Schedule I*.

NOW THEREFORE, the parties hereby agree as follows:

- 1. Increased Exercise Price. The exercise price per share set forth in the Option Agreement for each of the Options listed on Schedule I is hereby increased, with respect to the shares subject to the Covered Portion of that Option, to the higher exercise price per share set forth for that Option on Schedule I.
- 2. Special Bonus. Optionee shall become entitled to receive a cash bonus from the Company (the "Special Bonus") in the gross dollar amount indicated as his or her Total Special Bonus on attached Schedule I. Payment shall be made on January 15, 2008, or as soon as practicable thereafter, but in no event later than January 31, 2008. However, the Special Bonus shall be subject to the Company's collection of all applicable federal, state and local income and employment withholding taxes, and Optionee shall be paid only the net amount of such bonus remaining after such taxes have been collected. Optionee need not remain in the Company's employ to receive the Special Bonus.
- 3. Entire Agreement. This Agreement, together with the Option Agreements (to the extent not expressly amended hereby) and the applicable Plan under which each Option is outstanding, represents the entire agreement of the parties with respect to the Options, the Covered Portions thereof and the Special Bonus and supersedes any and all previous contracts, arrangements or understandings between the parties with respect to such Options and the Special Bonus. This Agreement may be amended at any time only by means of a writing signed by Optionee and an authorized officer of the Company.
- **5.** Continuation of Option Agreements. Except for the foregoing increases to the exercise prices per share for the Covered Portions of the Options, no other terms or provisions of the Option Agreements for such Options or the applicable Plans have been modified as a result of this Agreement, and those terms and provisions shall continue in full force and effect.

IN WITNESS WHEREOF, this Agreement has been executed on behalf of KLA-Tencor Corporation by a duly-authorized officer on the date indicated below.

| KLA-TENCOR CORPORATION | | | |
|------------------------|--------|--|--|
| By: | | | |
| TITLE: | | | |
| DATED: | , 2007 | | |

SCHEDULE I

AMENDED OPTION AND RETENTION BONUS

| | | | | | Number of | |
|------------|--------------|----------------|--------------|----------------|----------------|------------|
| | | | | Number of | Outstanding | |
| | Total Number | | New Exercise | Outstanding | Option Shares | |
| | of Shares | Exercise Price | Price Per | Option Shares | Not Subject | Special |
| | Subject to | Per Share | Share | Subject to | to | Bonus |
| | Outstanding | Prior to | Following | Amended | Amended | Payable in |
| Grant Date | Option | Amendment | Amendment | Exercise Price | Exercise Price | 2008 |
| | | \$ | \$ | | | \$ |

Total Special Bonus: \$

 $Note: This \ schedule \ will \ be \ completed \ by \ the \ Company \ and \ sent \ to \ you \ at \ your \ KLA-Tencor \ email \ address \ as \ soon \ as \ practicable \ following \ the \ Amendment \ Date.$

FORM OF ACKNOWLEDGEMENT OF RECEIPT OF ELECTION FORM

KLA-Tencor Corporation has received your Election Form dated

, 2007, by which you made the following elections with respect to your Eligible Options:

| | | | | Total | | | |
|-------|--------|--------|--------------|-------------|------------------|----------|-------|
| | | | | Number | Number of Shares | | |
| | | | | of Shares | Subject to | Amend | |
| | | | Exercise | Subject to | Portion | Entire | |
| Grant | Option | Option | Price Per | Outstanding | Qualifying as | Eligible | Amend |
| Date | Number | Plan | Share | Option | Eligible Option | Portion | None |
| [] | | [] | <u>[\$]</u> | | | | |

If you change your mind, you may change your elections with respect to your Eligible Options by accessing the Offer website at https://kla.equitybenefits.com and completing a new Election Form before 11:59 p.m., Pacific Time on March 27, 2007. Any questions or requests for assistance should be directed to Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com.

Please note that our receipt of your Election Form is not by itself an acceptance of the Eligible Option. For purposes of the Offer, KLA-Tencor will be deemed to have accepted those Eligible Options properly tendered pursuant to the Offer and not otherwise withdrawn only when KLA-Tencor gives written or electronic notice to the option holders generally of its acceptance of such options. Such notice may be made by press release, email or other method of communication. KLA-Tencor's formal acceptance is expected to take place immediately following the expiration date of the Offer.

FORM OF REMINDER OF EXPIRATION DATE

REMINDER

DEADLINE: 11:59 P.M. (PDT) MARCH 27, 2007

To all Option Holders Eligible to Participate in the Option Amendment Program:

The Offer to Amend or Replace your Eligible Options will expire at 11:59 p.m. (PDT) on March 27, 2007 unless we extend the Offer.

According to our records you have not yet submitted an Election Form for any of your Eligible Options. Participation in the Offer is voluntary. However, all individuals holding Eligible Options who wish to tender them for amendment or replacement must access the Offer website at https://kla.equitybenefits.com to complete the required Election Form in accordance with the instructions posted on that website. The submission of those required documents must be made by the deadline indicated above. We cannot accept late submissions, and we therefore urge you to respond early to avoid any last minute problems.

If you do not want to accept the Offer with respect to your Eligible Options, please disregard this reminder. However, you will have to take other action on your own to bring your Eligible Options into compliance with Section 409A of the Internal Revenue Code if you are to avoid adverse tax consequences.

KLA-TENCOR CORPORATION ELECTION FORM RE: TENDER OF ELIGIBLE OPTIONS PURSUANT TO THE OFFER TO AMEND OR REPLACE DATED FEBRUARY 27, 2007

THE OFFER EXPIRES AT 11:59 P.M., PACIFIC TIME, ON MARCH 27, 2007, UNLESS THE OFFER IS EXTENDED.

Name Employee ID: Address

Important: Read the *instructions* to this Election Form **before** completing and signing this page.

Indicate your decision to tender your Eligible Options identified below for amendment by checking the "Amend Entire Eligible Portion" box. If you do not want to tender one or more of your Eligible Options for amendment, check the "Amend None" box for those particular options. If you do not clearly mark the "Amend Entire Eligible Portion" box with respect to an Eligible Option, your election with respect to that option will default to "Amend None." In that event, such Eligible Option will not be amended, and you will not become entitled to the special cash bonus payable with respect to that Eligible Option. In addition, you will be solely responsible for bringing such Eligible Option into compliance with IRC Section 409A in order to avoid adverse tax consequences with respect to that option. You may not tender only a portion of an Eligible Option.

| | | | | Total | | | |
|-------|----------|--------|--------------|-------------|--------------------|----------|-------|
| | | | | Number of | | | |
| | | | | Shares | Number of Shares | Amend | |
| | | | Exercise | Subject to | Subject to Portion | Entire | |
| Grant | Option | Option | Price Per | Outstanding | Qualifying as | Eligible | Amend |
| Date | Number | Plan | Share | Option | Eligible Option | Portion | None |
| [] | <u> </u> | [] | <u>[\$]</u> | | | П | |

Please note that if an Eligible Option you tender for amendment has an exercise price per share at or above the closing selling price per share of KLA-Tencor common stock on the amendment date, that option will be canceled on that date and immediately replaced with a new option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date, but with a new grant date. Such cancellation and re-grant is necessary in order to avoid adverse taxation of that option under IRC Section 409A.

Agreement to Terms of Election

- 1. As soon as practicable after the Amendment Date, KLA-Tencor shall return to me a final and completed Stock Option Amendment and Special Bonus Agreement in which there is indicated the Adjusted Exercise Price for each Amended Option and the dollar amount of the Cash Bonus to which I will be entitled with respect to that option. Should an Eligible Option I tender for amendment have an exercise price per share at or above the closing selling price per share of KLA-Tencor common stock on the Amendment Date, that option will be canceled on that date and immediately replaced with a New Option that is exactly the same as the canceled option, including the same exercise price per share and no loss of vesting or change to the expiration date, but with a new grant date. A stock option agreement for the New Option will be delivered to me as soon as administratively practicable following the Amendment Date.
- 2. If I cease to remain employed by KLA-Tencor or any affiliated entity after I tender my Eligible Options but before KLA-Tencor accepts those options for amendment, my Eligible Options will not be amended or replaced, and I will not become entitled to any Cash Bonus.
- 3. Until the Expiration Date, I will have the right to change my election with respect to my Eligible Options. However, after that date I will have no further right to change my election with respect to my Eligible Options, unless KLA-Tencor does not accept my tendered Eligible Options before April 24, 2007, the 40th business day after commencement of the Offer. I may then revoke my elections with respect to my tendered Eligible Options at any time prior to KLA-Tencor's acceptance of those options for amendment or replacement pursuant to the Offer.
- 4. The tender of my Eligible Options pursuant to the procedure described in Section 4 of the Offer and the instructions to this Election Form will constitute my acceptance of all of the terms and conditions of the Offer. KLA-Tencor's acceptance of my tendered Eligible Options for amendment or replacement pursuant to the Offer will constitute a binding agreement between KLA-Tencor and me upon the terms and subject to the conditions of the Offer.
- 5. I am the registered holder of the Eligible Options tendered hereby, and my name, employee identification number and other information appearing on the cover page of this Election Form are true and correct.
- 6. I am not required to tender my Eligible Options pursuant to the Offer. However, if I do not tender such options or if those options are not otherwise amended or replaced pursuant to the Offer, then I must take other action on my own with respect to those options in order to bring those options into compliance with Section 409A of the Internal Revenue Code and thereby avoid adverse tax consequences.
- 7. KLA-Tencor cannot give me legal, tax or investment advice with respect to the Offer and has advised me to consult with my own legal, tax and investment advisor as to the consequences of participating or not participating in the Offer.
- 8. Under certain circumstances set forth in the Offer document, KLA-Tencor may terminate or amend the Offer and postpone its acceptance and amendment or replacement of the tendered Eligible Options. In the event the Eligible Options tendered herewith are not accepted for amendment or replacement, those options will be returned to me promptly following the expiration or termination of the Offer.
- 9. I understand that neither KLA-Tencor nor KLA-Tencor's Board of Directors is making any recommendation as to whether I should tender or refrain from tendering my Eligible Options for amendment or replacement, and that I must make my own decision whether to tender my Eligible Options, taking into account my own personal circumstances and preferences. I understand that the Amended Options resulting from the amendment of my tendered Eligible Options may decline in value and may be "out of the money" when I decide to exercise those options. I further understand that past and current market prices of KLA-Tencor common stock may provide little or no basis for predicting what the market price of KLA-Tencor common stock will be when KLA-Tencor amends my tendered option or at any other time in the future.

10. I hereby acknowledge that I have read the documents related to the Offer listed below:

Offer to Amend or Replace
Instructions to this Election Form

Stock Option Amendment and Special Bonus Agreement

- 11. I hereby elect to participate in the Offer with respect to my Eligible Options as previously identified, and I hereby tender such Eligible Options for amendment or replacement in accordance with the Offer to Amend or Replace. I agree that the options identified are the Eligible Options I hold. I agree and understand that each of the Eligible Options which I have elected to amend or replace in the Offer will be amended or replaced by KLA-Tencor unless I submit a new, properly completed Election Form prior to the expiration of the Offer.
- 12. I understand that I must fully complete, sign and deliver this Election Form and return it to KLA-Tencor via facsimile to Tracy Laboy at (408) 875-6677 prior to the expiration of the Offer.
- 13. I further understand that I will receive an Election Confirmation Statement via email at my KLA-Tencor email address listed below within one business day after the submission of my Election Form on the Offer website. If I have not received an Election Confirmation Statement in the timeframe prescribed, I agree that it is my responsibility to confirm that KLA-Tencor has received my complete submission by emailing a copy of the Confirmation Statement that I will have printed from this Offer website at the time I submit my Election Form online.
- 14. I acknowledge that the Offer and the other documents and communications regarding the Offer are being delivered to me electronically. Such means of electronic delivery may include, but do not necessarily include, the delivery of a link to a KLA-Tencor intranet, the delivery of a document via email or such other means of delivery specified by KLA-Tencor. By executing this Election Form, I acknowledge that I have read this provision and consent to the electronic delivery of the documents. I acknowledge that I may receive from KLA-Tencor a paper copy of any documents delivered electronically at no cost to me by contacting KLA-Tencor by telephone or in writing using the contact information on the *Instructions* to this Election Form. I further acknowledge that I will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, I understand that I must provide KLA-Tencor with a paper copy of any documents if my attempted delivery of such documents electronically fails.

| Email address: | |
|---------------------|------|
| Employee ID number: | |
| | |
| Signature | Date |

INSTRUCTIONS FORMING PART OF THE TERMS AND CONDITIONS OF THE OFFER

1. Delivery of Election Form. A properly completed and duly executed Election Form must be received by KLA-Tencor by 11:59 p.m. Pacific Time on the Expiration Date.

KLA-Tencor intends to disseminate an Election Confirmation Statement via email to your KLA-Tencor email address within one business day after your submission of your Election Form on the Offer website at https://kla.equitybenefits.com. If you have not received an Election Confirmation Statement in the timeframe prescribed, KLA-Tencor recommends you email a copy of your Election Confirmation Statement to Tracy Laboy at tracy.laboy@kla-tencor.com prior to the expiration of the Offer.

You may change your election with respect to your Eligible Options at any time up to 11:59 p.m. Pacific Time on the Expiration Date. If the Offer is extended by KLA-Tencor beyond that time, you may change your election with respect to your tendered Eligible Options at any time until the extended expiration of the Offer. In addition, if KLA-Tencor does not accept your tendered option by 11:59 p.m. Pacific Time on April 24, 2007, you may revoke your election with respect to your tendered options at any time thereafter until those options are accepted for amendment or replacement. To validly change or revoke your election, you must access the Offer website at https://kla.equitybenefits.com and complete and deliver a new Election Form to KLA-Tencor prior to the expiration of the Offer. You should print a copy of your revised Election Form and updated Election Confirmation Statement and keep those documents with your other records for the Offer. You may change your previously submitted elections as many times as you would like prior to the expiration of the Offer.

KLA-Tencor will not accept any alternative, conditional or contingent tenders. All persons tendering Eligible Options will, by completing and executing the Election Form, waive any right to receive any notice of the acceptance of their tender, except as provided for in the Offer.

- 2. Tenders. If you intend to tender your Eligible Options for amendment or replacement pursuant to the Offer, you must access your account at the Offer website https://kla.equitybenefits.com, properly complete and duly execute the Election Form. If you decide to tender a particular Eligible Option, you must tender all of that option for amendment or replacement. If you hold more than one Eligible Option, you may elect to tender one or more of those options and retain the balance.
 - 3. Signatures on This Election Form. You must sign this Election Form.
- 4. Requests for Assistance or Additional Copies. Any questions or requests for assistance, as well as requests for paper copies of the Offer document, this Election Form or the Stock Option Amendment and Special Bonus Agreement, may be directed to Tracy Laboy at (408) 875-7131 or tracy.laboy@kla-tencor.com. Copies will be furnished promptly at KLA-Tencor's expense.
- 5. Irregularities. KLA-Tencor will determine, in its discretion, all questions as to the form of documents and the validity, form, eligibility (including time of receipt), and acceptance of any tendered option. KLA-Tencor will also decide, in its discretion, all questions as to (i) the portion of each retroactively priced option which comprises an Eligible Option for purposes of the Offer, (ii) the number of shares of common stock purchasable under each Amended Option at the Adjusted Exercise Price, (iii) the Adjusted Exercise Price to be in effect under each Amended Option, (iv) the amount of the Cash Bonus payable with respect to each Amended Option with an Adjusted Exercise Price in excess of the exercise price per share in effect for that option immediately prior to the amendment and (v) the cancellation of tendered Eligible Options with exercise prices above the fair market value of KLA-Tencor common stock on the Amendment Date and the replacement of those canceled options with New Options. KLA-Tencor's determination of such matters will be final and binding on all parties. KLA-Tencor reserves the right to reject any or all tenders which it determines do not comply with the conditions of the Offer, are not in proper form or the acceptance of which would be unlawful. KLA-Tencor also reserves the right to waive any of the conditions of the Offer or any defect or irregularity in the tender with respect to

any particular Eligible Option or any particular Eligible Optionee, and KLA-Tencor's interpretation of the terms of the Offer (including these instructions) will be final and binding on all parties. No tender of an Eligible Option will be deemed to be properly made until all defects and irregularities have been cured by the tendering Eligible Optionee or waived by KLA-Tencor. Unless waived, any defects or irregularities in connection with the tender of an Eligible Option must be cured within such time as KLA-Tencor shall determine. Neither KLA-Tencor nor any other person is or will be obligated to give notice of any defects or irregularities with respect to the tendered options, and no person will incur any liability for failure to give any such notice. If the table on the cover page of this Election Form includes options that are not eligible for the Offer, KLA-Tencor will not accept those options for amendment or replacement, but KLA-Tencor does intend to accept for amendment or replacement any properly tendered Eligible Option set forth in that table.

- 6. Important Tax Information. You should refer to Section 15 of the Offer, which contains important U.S. federal tax information concerning the Offer. All Eligible Optionees with Eligible Options are strongly encouraged to consult with their own tax advisors as to the consequences of their participation in the Offer.
 - 7. Copies. You should print a copy of this Election Form, after you have completed and signed it, and retain it for your records.

IMPORTANT: THE COMPLETED AND SIGNED ELECTION FORM MUST BE RECEIVED BY KLA-TENCOR BY 11:59 P.M. PACIFIC TIME ON THE EXPIRATION DATE.

FORM OF NOTICE OF EXPIRATION OF OFFER, AMENDMENT OR REPLACEMENT OF ELIGIBLE OPTIONS AND COMMITMENT TO PAY CASH BONUS

To:

We are pleased to announce that we have completed our Offer to Amend or Replace Eligible Options. As a result of the Offer, we have amended outstanding Eligible Options covering 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) \$, the closing selling price per share of such common stock on the March 28, 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 \$ to compensate them for the higher exercise prices per share in effect for their amended options.

In addition, we canceled tendered Eligible Options covering shares of KLA-Tencor common stock because the adjusted exercise price would have been the same or lower than the exercise price in effect for those options prior to the amendment. In replacement of each such canceled option, we immediately granted a New Option that is exactly the same, including the same exercise price per share, but with a new grant date of March 28, 2007.

The chart below lists each of your tendered Eligible Options that have been amended. The information in the chart confirms that the listed Eligible Options were validly submitted for amendment pursuant to the Offer and not otherwise withdrawn prior to the expiration date of the Offer. Accordingly, the adjusted exercise price per share now in effect for each of your amended Eligible Options is indicated below. Each of your amended options will continue to vest in accordance with the same vesting schedule measured from the same vesting commencement date currently in effect for that option. The amendment has no effect on the option's vesting schedule, exercise period, option term or any other term of the option.

| | | | | Number of | Number of | |
|------------|-------------|-------------|-----------|-------------|-------------|------------|
| | | | | Outstanding | Outstanding | |
| | Total | | New | Option | Option | |
| | Number of | Exercise | Exercise | Shares | Shares Not | |
| | Shares | Price Per | Price Per | Subject to | Subject to | Special |
| | Subject to | Share Prior | Share | Amended | Amended | Bonus |
| | Outstanding | to | Following | Exercise | Exercise | Payable in |
| Grant Date | Option | Amendment | Amendment | Price | Price | 2008 |
| | | \$ | \$ | | | \$ |

Total Special Bonus Amount:

In exchange for your agreement to amend your outstanding Eligible Option to the Adjusted Exercise Prices determined for those options, KLA-Tencor hereby irrevocably commits to pay you a special cash bonus in the amount of \$\). Current guidance under Section 409A requires that the cash bonus not be paid in the same year in which the Eligible Options are amended. Therefore, the cash bonus will be paid on January 2, 2008. KLA-Tencor must withhold all applicable U.S. federal, state and local income and employment withholding taxes and other required payments, and you will receive only the portion of the payment remaining after those taxes and payments have been withheld. You will receive your cash bonus even if your employment with KLA-Tencor terminates prior to the date on which the cash bonus is paid.

This commitment to pay you the special cash bonus is governed by the terms and conditions of the Offer as set forth in the Offer to Amend or Replace, the Election Form and the Stock Option Amendment and Special Bonus Agreement (collectively, the "Offer Documents"), all of which are incorporated herein by reference. Accordingly, this commitment and the Offer Documents reflect the entire agreement between you and KLA-Tencor with respect to the amendment of your tendered Eligible Options.

Each New Option granted pursuant to you pursuant to the Offer is exactly the same as the tendered Eligible Option it replaced, including the same exercise price per share and no loss of vesting or change to the expiration date, but with a new grant date of March 28, 2007. The chart below indicates which tendered Eligible Options were canceled and replaced with a New Option:

| | Total Number | Exercise Price | Same Exercise |
|---------------|--------------|----------------|---------------|
| Grant Date of | of Shares | Per Share | Price Per |
| Canceled | Subject to | Prior to | Share under |
| Option | New Option | Cancellation | New Option |
| | | \$ | \$ |

KLA-TENCOR CORPORATION

By: Title: Date:

Option Grant Notification

To: «FIRST_NAME» «LAST_NAME»

«EMAIL_ADDRESS» Employee ID: «ID»

Subject: Option Grant

Congratulations! We are pleased to inform you that the Board of Directors has granted to you a Non-Qualified Stock Option Number «NUM» for «SHARES_GRANTED» shares of KLA-Tencor Corporation common stock at XXXX per share. The date of grant of the option is XXXXX

Shares under this option become exercisable based upon your continuous full-time service as follows: 20% of the total shares granted become exercisable one year from XXXX. The remainder of the shares becomes exercisable at the rate of 1/48 of the remainder for each full month of continuous service thereafter. The option will be fully vested 60 months from XXXX, subject to your continued full-time service.

The vesting under this option for current or future continuous part-time service follows the schedule above and is pro rated based on your regular approved schedule of record, as follows:

| £ 4 hours | = 10% | 21-24 hours | = 60% |
|-------------|-------|-------------|--------|
| 5-8 hours | = 20% | 25-28 hours | = 70% |
| 9-12 hours | = 30% | 29-32 hours | = 80% |
| 13-16 hours | = 40% | 33-36 hours | = 90% |
| 17-20 hours | = 50% | > 36 hours | = 100% |

Should you go on a leave of absence, your vesting will cease on the 1st day of your leave (unless otherwise required by law or as determined in writing by the Plan Administrator, in its sole discretion) and will recommence upon your return to work. Vesting will also cease on your termination of employment for any reason, including pursuant to a reduction-in-force.

The option will expire on XXXXXX. Any unvested options due to either part-time status or leave of absence and/or vested options not exercised on or prior to the expiration date shall expire. Vested options may be exercised up to 30 days after terminating employment with KLA-Tencor. After that date, all options will be cancelled.

The grant of an Option and the issuance of Shares upon exercise of the Option are subject to compliance with all of the applicable requirements of all laws or regulations with respect to such options. Neither the grant of this option nor the vesting schedule alter the terms of your employment, which remain at-will and subject to termination by KLA-Tencor or you at any time, with or without cause or notice.

For the other terms and conditions relating to your stock option, please see the Restated 1982 Stock Option Plan Document on the Employee Stock Services Web-site. Both of these can be accessed through the KLA-Tencor Intranet site:

XXXXXXXX

Ouestions should be directed to XXXXXXX or via e-mail at XXXXXXX

THIS MEMO IS YOUR OFFICIAL NOTIFICATION OF THIS STOCK GRANT. NO ADDITIONAL DOCUMENTATION WILL BE SENT TO YOU CONCERNING THIS GRANT.

Option Grant Notification

To: «FIRST NAME» «LAST NAME»

«EMAIL_ADDRESS»

Employee ID: «ID»

Subject: Option Grant

Congratulations! We are pleased to inform you that the Board of Directors has granted to you a Non-Qualified Stock Option Number «NUM» for «SHARES GRANTED» shares of KLA-Tencor Corporation common stock at XXXX per share. The date of grant of the option is XXXXX

Shares under this option become exercisable based upon your continuous full-time service as follows: 20% of the total shares granted become exercisable one year from XXXX. The remainder of the shares becomes exercisable at the rate of 1/48 of the remainder for each full month of continuous service thereafter. The option will be fully vested 60 months from XXXX, subject to your continued full-time service.

The vesting under this option for current or future continuous part-time service follows the schedule above and is pro rated based on your regular approved schedule of record, as follows:

| £ 4 hours | = 10% | 21-24 hours | = 60% |
|-------------|-------|-------------|--------|
| 5-8 hours | = 20% | 25-28 hours | = 70% |
| 9-12 hours | = 30% | 29-32 hours | = 80% |
| 13-16 hours | =40% | 33-36 hours | = 90% |
| 17-20 hours | = 50% | > 36 hours | = 100% |

Should you go on a leave of absence, your vesting will cease on the 1st day of your leave (unless otherwise required by law or as determined in writing by the Plan Administrator, in its sole discretion) and will recommence upon your return to work. Vesting will also cease on your termination of employment for any reason, including pursuant to a reduction-in-force.

The option will expire on XXXXXX. Any unvested options due to either part-time status or leave of absence and/or vested options not exercised on or prior to the expiration date shall expire. Vested options may be exercised up to 3 months after terminating employment with KLA-Tencor. After that date, all options will be cancelled.

The grant of an Option and the issuance of Shares upon exercise of the Option are subject to compliance with all of the applicable requirements of all laws or regulations with respect to such options. Neither the grant of this option nor the vesting schedule alter the terms of your employment, which remain at-will and subject to termination by KLA-Tencor or you at any time, with or without cause or notice.

For the other terms and conditions relating to your stock option, please see the 2000 Nonstatutory Stock Option Plan Document on the Employee Stock Services Website. Both of these can be accessed through the KLA-Tencor Intranet site:

XXXXXXXX

Questions should be directed to XXXXXXX or via e-mail at XXXXXXX

THIS MEMO IS YOUR OFFICIAL NOTIFICATION OF THIS STOCK GRANT. NO ADDITIONAL DOCUMENTATION WILL BE SENT TO YOU CONCERNING THIS GRANT.

Option Grant Notification

To: «FIRST NAME» «LAST NAME»

«EMAIL_ADDRESS»

Employee ID: «ID»

Subject: Option Grant

Congratulations! We are pleased to inform you that the Board of Directors has granted to you a Non-Qualified Stock Option Number «NUM» for «SHARES GRANTED» shares of KLA-Tencor Corporation common stock at XXXX per share. The date of grant of the option is XXXXX

Shares under this option become exercisable based upon your continuous full-time service as follows: 20% of the total shares granted become exercisable one year from XXXX. The remainder of the shares becomes exercisable at the rate of 1/48 of the remainder for each full month of continuous service thereafter. The option will be fully vested 60 months from XXXX, subject to your continued full-time service.

The vesting under this option for current or future continuous part-time service follows the schedule above and is pro rated based on your regular approved schedule of record, as follows:

| £ 4 hours | = 10% | 21-24 hours | = 60% |
|-------------|-------|-------------|--------|
| 5-8 hours | = 20% | 25-28 hours | = 70% |
| 9-12 hours | = 30% | 29-32 hours | = 80% |
| 13-16 hours | =40% | 33-36 hours | = 90% |
| 17-20 hours | = 50% | > 36 hours | = 100% |

Should you go on a leave of absence, your vesting will cease on the 1st day of your leave (unless otherwise required by law or as determined in writing by the Plan Administrator, in its sole discretion) and will recommence upon your return to work. Vesting will also cease on your termination of employment for any reason, including pursuant to a reduction-in-force.

The option will expire on XXXXXX. Any unvested options due to either part-time status or leave of absence and/or vested options not exercised on or prior to the expiration date shall expire. Vested options may be exercised up to 3 months after terminating employment with KLA-Tencor. After that date, all options will be cancelled.

The grant of an Option and the issuance of Shares upon exercise of the Option are subject to compliance with all of the applicable requirements of all laws or regulations with respect to such options. Neither the grant of this option nor the vesting schedule alter the terms of your employment, which remain at-will and subject to termination by KLA-Tencor or you at any time, with or without cause or notice.

For the other terms and conditions relating to your stock option, please see the EIP4 Stock Option Plan Document on the Employee Stock Services Web-site. Both of these can be accessed through the KLA-Tencor Intranet site:

XXXXXXXX

Questions should be directed to XXXXXXX or via e-mail at XXXXXXX

THIS MEMO IS YOUR OFFICIAL NOTIFICATION OF THIS STOCK GRANT. NO ADDITIONAL DOCUMENTATION WILL BE SENT TO YOU CONCERNING THIS GRANT.