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**Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934 (Amendment No.)**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
 Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
 Definitive Proxy Statement
 Definitive Additional Materials
 Soliciting Material Pursuant to Rule §240.14a-12

KLA-Tencor Corporation

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
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SEC 1913 (04-05)

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NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
November 4, 2005

To the Stockholders:

YOUR VOTE IS IMPORTANT

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of KLA-Tencor Corporation (the "Company"), a Delaware corporation, will be held on Friday, November 4, 2005 at 1:00 p.m., local time, at the Company's offices located at Three Technology Drive, Milpitas, California 95035, for the following purposes:

1. To elect three Class I Directors to each serve for a three-year term and until their successors are duly elected.
2. To approve the Company's Internal Revenue Code Section 162(m) Performance Bonus Plan.
3. To ratify the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2006.
4. To consider a stockholder proposal regarding majority voting for Directors.
5. To transact such other business as may properly come before the Annual Meeting or any adjournment thereof.

The foregoing items of business are more fully described in the Proxy Statement accompanying this Notice.

Only stockholders of record at the close of business on September 6, 2005 are entitled to notice of, and to vote at, the Annual Meeting and any adjournment or postponement thereof.

Sincerely,

A handwritten signature in black ink, appearing to read "Stuart J. Nichols". The signature is fluid and cursive, written over a white background.

Stuart J. Nichols
Assistant Secretary
San Jose, California

September 23, 2005

All stockholders are cordially invited to attend the Annual Meeting in person; however, to assure your representation at the Annual Meeting, you are requested to complete, sign and date the enclosed proxy card and return it in the enclosed envelope or follow the instructions on the enclosed proxy card to vote by telephone or via the Internet. Any stockholder attending the Annual Meeting may vote in person even if he or she returned a proxy card.

**OF
KLA-TENCOR CORPORATION**

To be held on November 4, 2005

PROXY STATEMENT

QUESTIONS AND ANSWERS REGARDING PROXY SOLICITATION AND VOTING

Why am I receiving these materials?

The Board of Directors of KLA-Tencor Corporation (“KLA-Tencor,” the “Company” or “we”) is providing these proxy materials to you in connection with KLA-Tencor’s Annual Meeting of Stockholders to be held on Friday, November 4, 2005 at 1:00 p.m. local time. As a stockholder of record, you are invited to attend the Annual Meeting, which will be held at our offices at Three Technology Drive, Milpitas, California 95035. The purposes of the Annual Meeting are set forth in the accompanying Notice of Annual Meeting of Stockholders and this Proxy Statement.

These proxy solicitation materials and the enclosed Annual Report on Form 10-K for the fiscal year ended June 30, 2005, including financial statements, were first mailed on or about September 23, 2005 to all stockholders entitled to vote at the Annual Meeting. KLA-Tencor’s principal executive offices are located at 160 Rio Robles, San Jose, California 95134, and our telephone number is (408) 875-3000.

How may I obtain KLA-Tencor’s Annual Report?

A copy of our Annual Report on Form 10-K was delivered with this Proxy Statement. It is also available free of charge on the Internet from the Securities and Exchange Commission’s website at www.sec.gov, as well as on our website at <http://ir.kla-tencor.com>.

QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING

Who may vote at the Annual Meeting?

You may vote if our records showed that you owned shares of KLA-Tencor Common Stock as of September 6, 2005 (the “Record Date”). At the close of business on that date, we had a total of 197,626,388 shares of Common Stock issued and outstanding, which were held of record by approximately 885 stockholders. As of the Record Date, we had no shares of Preferred Stock outstanding. You are entitled to one vote for each share that you own.

The Annual Meeting will be held if a majority of the outstanding Common Stock entitled to vote is represented at the Annual Meeting. If you have returned valid proxy instructions or attend the Annual Meeting in person, your Common Stock will be counted for the purpose of determining whether there is a quorum, even if you wish to abstain from voting on some or all matters at the Annual Meeting.

What proposals are being voted on at the Annual Meeting?

In addition to such other business as may properly come before the Annual Meeting or any adjournment thereof, the following four proposals will be presented at the Annual Meeting:

1. Election of three Class I Directors to each serve for a three-year term and until their successors are duly elected;

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2. Approval of the Company’s Internal Revenue Code Section 162(m) Performance Bonus Plan;
3. Ratifying the appointment of PricewaterhouseCoopers LLP as the Company’s independent registered public accounting firm for the fiscal year ending June 30, 2006; and
4. A stockholder proposal regarding majority voting for Directors.

How can I vote if I own shares directly?

If your shares are registered directly in your name with our transfer agent, you are considered, with respect to those shares, the stockholder of record, and these proxy materials are being sent directly to you. You may vote in accordance with the instructions described below. If you hold your shares in your own name as a holder of record, you may

instruct the proxy holders how to vote your Common Stock in the following ways:

1. **By Telephone:** Use the toll free telephone number provided on the proxy card (specific instructions for using the telephone voting system are on the proxy card);
2. **By Internet:** Use the Internet voting site listed on the proxy card (specific instructions for using the Internet voting system are on the proxy card);
3. **By Mail:** Complete, sign, date and mail the proxy card in the postage paid envelope that we have provided; or
4. **In Person:** Attend the Annual Meeting and vote your shares in person.

Whichever of these methods you select to transmit your instructions, the proxy holders will vote your shares in accordance with those instructions.

If you sign and return a proxy card or vote by telephone or Internet without giving specific voting instructions, your shares will be voted FOR the election of the nominees listed herein for the Board of Directors and FOR proposals 2 and 3 and AGAINST proposal 4. When proxies are properly dated, executed and returned (whether by the aforementioned proxy card, telephone or Internet instructions), the shares represented by such proxies will be voted at the Annual Meeting in accordance with the instructions of the stockholder. However, if no specific instructions are given, the shares will be voted in accordance with the recommendations of our Board of Directors and as the proxy holders may determine in their discretion with respect to any other matters that properly come before the meeting.

How may I vote if my shares are held in a stock brokerage account, by a bank or other nominee?

If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you by your broker or nominee who is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your broker on how to vote and you are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote these shares in person at the Annual Meeting. If a broker, bank or other nominee holds your shares, you will receive instructions from them that you must follow in order to have your shares voted.

Can I change my vote?

You may change your vote at any time prior to the vote at the Annual Meeting. To change your proxy instructions if you are a stockholder of record, you must:

1. Advise our Assistant Secretary in writing at our principal executive office before the proxy holders vote your shares that you wish to revoke your proxy instructions; or

2. Deliver proxy instructions dated after your earlier proxy instructions as follows:

- (a) **By Phone:** Use the toll free telephone number provided on the proxy card to vote again prior to 11:59 P.M. EST on November 3, 2005 (specific instructions for using the telephone voting system are on the proxy card);
- (b) **By Internet:** Use the Internet voting site listed on the proxy card to vote again prior to 11:59 P.M. EST on November 3, 2005 (specific instructions for using the Internet voting system are on the proxy card);
- (c) **By Mail:** Complete, sign and date another proxy card bearing a later date and deliver such proxy card prior to 11:59 P.M. EST on November 3, 2005; or
- (d) **In Person:** Attend the Annual Meeting and vote your shares in person.

Who will bear the cost of this proxy solicitation?

We will pay the cost of this proxy solicitation. KLA-Tencor has retained the services of Automatic Data Processing ("ADP") to aid in the solicitation of proxies from brokers, bank nominees and other institutional owners. We estimate that we will pay ADP fees of approximately \$100,000 for this solicitation activity and for forwarding solicitation material to beneficial and registered stockholders and processing the results. Certain of our Directors, officers and regular employees, without additional compensation, may solicit proxies personally or by telephone.

Can my broker vote my shares if I do not instruct him or her how I would like my shares voted?

Yes. If your shares are held in a brokerage account or by another nominee, you are considered the “beneficial owner” of shares held in “street name,” and these proxy materials are being forwarded to you by your broker or nominee (the “record holder”) along with a voting card. As the beneficial owner, you have the right to direct your record holder how to vote your shares, and your record holder is required to vote your shares in accordance with your instructions. If you do not give instructions to your record holder, the record holder will be entitled to vote your shares in its discretion on Proposal 1 (Election of Directors) and Proposal 3 (Ratification of Independent Auditor) but will not be able to vote your shares on Proposal 2 (Performance Bonus Plan) or Proposal 4 (Majority Voting for Directors) and your shares will be considered a “broker non-vote” on both Proposal 2 and Proposal 4.

Are abstentions and broker non-votes counted?

Shares that are voted “FOR,” “AGAINST,” “WITHHELD” or “ABSTAIN” are treated as being present for purposes of determining the presence of a quorum and are also treated as shares entitled to vote at the Annual Meeting (“Votes Cast”).

Since abstentions will be counted for purposes of determining both (i) the presence or absence of a quorum for the transaction of business and (ii) the total number of Votes Cast with respect to a proposal (other than the election of Directors), abstentions will have the same effect as a vote against the proposal (other than election of Directors).

Shares that are subject to a broker non-vote are counted for purposes of determining whether a quorum exists but not for purposes of determining whether a proposal has passed.

How does the Board of Directors recommend that I vote?

The Board of Directors recommends that stockholders vote as follows:

1. “FOR” the election of the three nominated Class I Directors to the Board of Directors—Kenneth Levy, Jon D. Tompkins and Lida Urbanek;

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2. “FOR” approval of the Company’s Internal Revenue Code Section 162(m) Performance Bonus Plan;
3. “FOR” ratification of PricewaterhouseCoopers LLP as the Company’s independent registered public accounting firm for the fiscal year ending June 30, 2006; and
4. “AGAINST” the stockholder proposal regarding majority voting for Directors.

Will any other business be transacted at the Annual Meeting?

We are not aware of any matters to be presented other than those described in this Proxy Statement. In the unlikely event that any matters not described in the Proxy Statement are properly presented at the Annual Meeting, the proxy holders will use their own judgment to determine how to vote your shares. If the Annual Meeting is adjourned or postponed, the proxy holders can vote your shares on the new meeting date as well, unless you have revoked your proxy instructions.

What happens if the Annual Meeting is adjourned or postponed?

If the Annual Meeting is adjourned or postponed, the proxy holders can vote your shares on the new meeting date as well, unless you have properly revoked your proxy instructions.

Can I present other business to be transacted at the Annual Meeting?

Any stockholder may present a matter from the floor for consideration at a meeting of stockholders so long as certain procedures are followed. Under our bylaws, as amended, a stockholder notice must be delivered to, or mailed and received by, KLA-Tencor (attention: Assistant Secretary) at least 120 days prior to the anniversary of the mailing date for this proxy statement (under the assumption that the next annual meeting of stockholders will occur on the anniversary of the same calendar day as the day of the most recent annual meeting of stockholders).

What is required in a stockholder’s notice to present other business to be transacted?

The stockholder's notice must set forth, as to each proposed matter, the following:

1. A brief description of the proposed matter and reasons for conducting such business at the meeting;
2. Name and address of the stockholder, as they appear on KLA-Tencor's books;
3. The class and number of shares of KLA-Tencor that are beneficially owned by the stockholder;
4. Any material interest of the stockholder in such business; and
5. Any other information that is required to be provided by such stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934.

Can I still present other business to be transacted if my notice is deficient?

If the stockholder notice is not in compliance with the requirements set forth in our bylaws, the presiding officer of the meeting may refuse to acknowledge the matter.

What is the deadline for stockholder proposals in connection with the 2006 Annual Meeting?

Stockholders may present proposals for action at a future meeting only if they comply with the requirements of the proxy rules established by the Securities and Exchange Commission ("SEC") and the provisions of our bylaws. We must receive stockholder proposals that are intended to be presented by such stockholders at our 2006 Annual Meeting of Stockholders no later than May 26, 2006 to be considered for inclusion in the Proxy Statement and form of Proxy relating to that meeting.

Stockholder proposals that are not intended to be included in our proxy materials for such meeting, but that are to be presented by the stockholder from the floor are subject to the advance notice provisions set forth above under "**Can I present**

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other business to be transacted at the Annual Meeting?" and other requirements set forth in our bylaws.

How may I obtain a copy of KLA-Tencor's Bylaws?

For a free copy of KLA-Tencor's bylaws, please contact our Investor Relations department at (408) 875-3600 or visit our website at <http://ir.kla-tencor.com> and fill out a request form.

What should I do if I receive more than one set of voting materials?

You may request delivery of a single copy of our future proxy statements and annual reports by writing to the address below or calling our Investor Relations department at the telephone number below. Stockholders may also request electronic delivery of our annual report and proxy statement by writing to the address below, calling our Investor Relations department at the telephone number below or via our website at <http://ir.kla-tencor.com>.

May I get additional copies of these materials and the exhibits to the Annual Report?

Certain stockholders who share an address are being delivered only one copy of this Proxy Statement and our 2005 Annual Report on Form 10-K. You may receive additional copies of this Proxy Statement and our Annual Report on Form 10-K for the fiscal year ended June 30, 2005 without charge or a copy of the exhibits to such Form 10-K for a reasonable fee (which shall be limited to our reasonable expenses in furnishing such exhibits) by sending a written request to KLA-Tencor Corporation, Attention: Investor Relations, 160 Rio Robles, San Jose, CA 95134. Requests may also be made by calling Investor Relations of KLA-Tencor at (408) 875-3600.

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The Company has a classified Board of Directors currently comprised of three incumbent Class I Directors (Kenneth Levy, Jon D. Tompkins and Lida Urbanek), four incumbent Class II Directors (H. Raymond Bingham, Robert T. Bond, Richard J. Elkus, Jr. and Michael E. Marks) and three incumbent Class III Directors (Edward W. Barnholt, Stephen P. Kaufman and Kenneth L. Schroeder). The Class II Directors and the Class III Directors will serve until the annual meetings of stockholders to be held in 2006 and 2007, respectively, or until their respective successors are duly elected and qualified. At each annual meeting, Directors are elected for a full term of three years to succeed those Directors whose terms expire at the annual meeting. As a result of the Company's mandatory retirement policy, Mr. Elkus will retire from the Board of Directors at the Annual Meeting pursuant to action by the Board of Directors that was taken at their meeting on August 4, 2005. In addition, the Board of Directors will be reduced to nine members, with the number of Class II Directors reduced from four to three.

Nominees

The term of the three current Class I Directors will expire on the date of the Annual Meeting. Three Class I Directors of the Board of Directors are to be elected at the Annual Meeting. The Nominating and Governance Committee, consisting solely of independent directors as determined under the rules of the Nasdaq National Market, recommended the nominees set forth in this Proposal One, each of whom is an incumbent Director. Based on that recommendation, the members of the Board of Directors unanimously resolved to nominate such individuals for election. The three nominees for election as Class I Directors by the stockholders are:

- Kenneth Levy;
- Jon D. Tompkins; and
- Lida Urbanek.

If elected, the nominees will serve as Directors until the Company's annual meeting of stockholders in 2008, and until their successors are duly elected and qualified. If any of the nominees declines to serve or becomes unavailable for any reason, or a vacancy occurs before the election, the proxies may be voted for such substitute nominees as the Board of Directors may designate. As of the date of this Proxy Statement, the Board of Directors is not aware of any nominee who is unable or will decline to serve as a Director.

Vote Required and Recommendation

If a quorum is present and voting, the three nominees for Class I Directors receiving the highest number of affirmative votes will be elected as Class I Directors. Votes withheld from any Director and broker non-votes are counted for purposes of determining the presence or absence of a quorum but have no other legal effect on the selection of nominees for Directors.

THE MEMBERS OF THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMEND A VOTE "FOR" EACH OF THE CLASS I NOMINEES LISTED ABOVE.

INFORMATION ABOUT THE DIRECTORS AND THE NOMINEES

The following table sets forth certain information with respect to the Company's Board of Directors as of the date of this proxy statement:

Nominees for Election as Class I Directors

	Principal Occupation of Board Members During the Past Five Years	Age
Kenneth Levy	Kenneth Levy is a founder of KLA Instruments Corporation and has been a Director since 1975. Since July 1, 1999, he has been Chairman of the Board of KLA-Tencor. From July 1998 until June 30, 1999, he was Chief Executive Officer and a Director. From 1975 until April, 1997 he was Chief Executive Officer of KLA Instruments Corporation. He currently serves on the boards of directors of the following publicly traded companies: Juniper Networks, Inc. and Extreme Networks, Inc., and is Chairman of the Board of PowerDsine, Inc. In addition, he is a Director Emeritus of Semiconductor Equipment and Materials Institute (SEMI), an industry trade association.	62
Jon D. Tompkins	Jon D. Tompkins has been a Director of KLA-Tencor since April 1997. He was Chairman of the Board from July 1998 to June 1999, when he retired from such position. From May 1997 until July 1998, he was Chief Executive Officer. From April 1991 until April 1997, Mr. Tompkins was President and Chief Executive Officer of Tencor Instruments prior to its merger with KLA Instruments Corporation. He was a director of Tencor Instruments from 1991 until April 1997 and was appointed Chairman of the Board of Directors of Tencor Instruments in November 1993. Mr. Tompkins currently serves on the boards of directors of Cymer, Inc., Credence Systems Corporation, and is Chairman of the Board at Electro Scientific Industries, Inc.	65
Lida Urbanek	Lida Urbanek has been a Director of KLA-Tencor since April 30, 1997. She is a private investor. She was a director of Tencor Instruments from August 1991 until April 30, 1997.	62

Class II Directors

	Principal Occupation of Board Members During the Past Five Years	Age
H. Raymond Bingham	H. Raymond Bingham has been a Director of KLA-Tencor since October 1999. He served as President and Chief Executive Officer of Cadence Design Systems, Inc. (“Cadence”) from April 1999 to April 2004. Mr. Bingham was the Executive Chairman of the board of directors of Cadence from May 2004 to July 2005 and was a director of Cadence from November 1997 to July 2005. From 1993 to April 1999, Mr. Bingham served as Executive Vice President and Chief Financial Officer of Cadence. Prior to joining Cadence, Mr. Bingham was Executive Vice President and Chief Financial Officer of Red Lion Hotels, Inc. for eight years. Mr. Bingham also serves on the boards of directors of Freescale Semiconductor, Inc. and Oracle Corporation.	59
Robert T. Bond	Robert T. Bond has been a Director of KLA-Tencor since August 2000. From April 1996 to January 1998, Mr. Bond served as Chief Operating Officer of Rational Software Corporation. Prior to that, he held various executive positions at Rational Software Corporation. Mr. Bond was employed by Hewlett-Packard Company from 1967 to 1983 and held various management positions during his tenure there. Mr. Bond also serves on the board of directors of Portal Software, MontaVista Software, and DecisionPoint Software.	62
Richard J. Elkus, Jr.	Richard J. Elkus, Jr. has been a Director of KLA-Tencor since April 1997. He was Executive Vice President and Vice Chairman of the board of directors of Tencor Instruments from February 1994 until April 1997. In addition to KLA-Tencor, Mr. Elkus also serves as Co-Chairman of the Board of directors of Voyan Technology. Additionally, he currently serves on the boards of directors of Sopra SA, Lam Research Corporation, Virage Logic Corporation, the National Science and Technology Medals Foundation and on the Boards of Trustees of the Scripps Research Institute and the Palo Alto Medical Foundation.	70
Michael E. Marks	Michael E. Marks has been a Director of KLA-Tencor since November 2003. He has been the Chief Executive Officer of Flextronics International Ltd. (“Flextronics”) since January 1994 and also serves on its board of directors. Mr. Marks was Chairman of the Board of directors of Flextronics from July 1993 to January 2003. Prior to joining Flextronics, he was President and Chief Executive Officer of Metcal, Inc., a precision heating instrument company. Mr. Marks also serves on the boards of directors of SanDisk Corporation and Schlumberger Limited (Schlumberger N.V.).	54

Class III Directors

	Principal Occupation of Board Members During the Past Five Years	Age
Edward W. Barnholt	Edward W. Barnholt has been a Director of KLA-Tencor since 1995. From March 1999 to March 2005, Mr. Barnholt was President and Chief Executive Officer of Agilent Technologies, Inc. (“Agilent”) and from November 2002 to March 2005, he was Chairman of the Board. On March 1, 2005, Mr. Barnholt retired as the Chairman, President and Chief Executive Officer of Agilent. Mr. Barnholt will serve as the Chairman Emeritus of Agilent until November 1, 2005. Before being named Agilent’s Chief Executive Officer, Mr. Barnholt served as Executive Vice President and General Manager of Hewlett-Packard Company’s Measurement Organization from 1998 to 1999. From 1990 to 1998, he served as General Manager of Hewlett-Packard Company’s Test and Measurement Organization. He was elected Senior Vice President of Hewlett-Packard Company in 1993 and Executive Vice President in 1996. Mr. Barnholt also serves on the boards of directors of Adobe Systems, Inc., eBay, the Tech Museum of Innovation and the Silicon Valley Leadership Group.	62
Stephen P. Kaufman	Stephen P. Kaufman has been a Director of KLA-Tencor since November 2002. He has been a Senior Lecturer at the Harvard Business School since January 2001. He was a member of the board of directors of Arrow Electronics, Inc. (“Arrow”) from 1984 to May 2003. From 1986 to June 2000, he was Chief Executive Officer of Arrow. From 1985 to June 1999, he was also Arrow’s President. From 1994 to June 2002, he was Chairman of the Board of Arrow. Mr. Kaufman also serves on the boards of directors of Harris Corporation and Freescale Semiconductor Corporation.	63
Kenneth L. Schroeder	Kenneth L. Schroeder joined KLA Instruments in 1979 and left in 1987 to pursue personal and other business interests. He returned to KLA Instruments in 1991. Mr. Schroeder has been Chief Executive Officer and a member of the Board of Directors of KLA-Tencor since July 1, 1999 as well as President from May 2004 to July, 2005. He also held the position of President from November 1991 to July 2002.	59

**PROPOSAL TWO:
APPROVAL OF THE COMPANY’S INTERNAL REVENUE CODE
SECTION 162(m) PERFORMANCE BONUS PLAN**

**Approval of Company’s
Internal Revenue Code
Section 162(m) Performance
Bonus Plan**

The Board of Directors of the Company has adopted the KLA-Tencor Corporation Internal Revenue Code Section 162(m) Performance Bonus Plan (the “Bonus Plan”) effective as of July 1, 2005, and is proposing the Bonus Plan for approval by a majority of the shares of the Company’s Common Stock that are present in person or by proxy and entitled to vote at the Annual Meeting. Stockholder approval of the Bonus Plan will permit the Company to qualify the Bonus Plan under section 162(m) of Internal Revenue Code (the “Code”), thereby allowing the Company to deduct for federal income tax purposes compensation paid under the Bonus Plan. If stockholders do not approve the Bonus Plan, it will not be adopted. If that happens, we may not be entitled to a tax deduction for some or all of the incentive cash compensation paid to our Chief Executive Officer and our

four other most highly compensated executive officers.

The following paragraphs provide a summary of the principal features of the Bonus Plan and its operation. The summary is qualified in its entirety by reference to the Bonus Plan's full text, a copy of which is attached hereto as Appendix A.

General

The purpose of the Bonus Plan is to increase stockholder value and the success of the Company by motivating key executives to perform to the best of their abilities and to achieve the Company's objectives. The Bonus Plan's goals provide such executives with incentive awards only after they achieve specified performance goals.

Administration

The Bonus Plan will be administered by the Compensation Committee of the Board of Directors or a subcommittee of the Compensation Committee (the "Committee"). The Committee may delegate specific administrative tasks to Company employees or others to assist with day-to-day administration of the Bonus Plan. To the extent such a delegation of authority has been made, the term "Committee" in this Proposal Two should be read as "Committee or its delegate." The Committee shall consist of two or more members of the Board who are not employees of the Company and who otherwise qualify as outside directors under Code section 162(m). Subject to the terms of the Bonus Plan, the Committee has sole discretion to:

- select the employees who will be eligible to receive awards;
- determine the target award for each participant;
- establish a period of time or "performance period" during which performance will be measured;
- set the performance goals that must be achieved during the performance period before any actual awards are paid;
- establish a payout formula to provide for an actual award greater or less than a participant's target award to reflect actual performance versus the predetermined performance goals; and
- interpret the provisions of the Bonus Plan.

Participation and Eligibility

The Committee selects the employees of the Company who will be eligible to receive awards under the Bonus Plan for each performance period. The actual number of employees who will be eligible to receive an award during any particular performance period cannot be determined in advance because the Committee has discretion to select the participants.

As of July 1, 2005, the Committee has established (subject to stockholder approval of the Plan) one performance period under the Bonus Plan. That performance period will run for the duration of the Company's 2006 fiscal year (July 1, 2005 through June 30, 2006). Approximately 100 employees have been designated for participation in the fiscal year 2006 performance period, including all of our named executive officers and other executive officers. We currently expect that a similar number of employees will participate in future years and performance periods, but the actual number of employees participating may be higher or lower as determined by the Committee.

Plan Operation

The duration of each performance period will be determined by the Committee in its discretion. The Committee currently expects that most performance periods under the Bonus Plan will last for one fiscal year but the Committee may establish shorter or longer performance periods in the future. However, no performance period may last longer than three fiscal years. Also, no participant may participate in more than three performance periods at any one time.

For each performance period, the Committee will designate the employees eligible to participate in that performance period and for each participant also will establish:

- a target award, expressed as a percentage of the participant's base salary or a specific dollar amount; and
- the performance goal or goals that must be achieved before an award actually will be paid to the participant.

The performance goals will require the achievement of objectives for one or more of the following measures: (a) bookings, (b) cash flow, (c) pre-tax margin, (d) profit, (e) return on assets, (f) return on invested capital, and (g) revenue. Each of these measures is defined in the Bonus Plan attached as Appendix A. Performance goals may differ from participant to participant, performance period to performance period and from award to award.

The Committee may choose to set goals (from the above list): (a) in absolute terms, (b) in relative terms (including, but not limited, the passage of time and/or against other companies or financial metrics), (c) on a per share and/or per capita basis, (d) against the performance of the Company as a whole or against particular segments or products of the Company and/or (5) on a pre-tax or after-tax basis. The Committee also will determine whether any element(s) (for example, the effect of mergers or acquisitions) will be included in or excluded from the calculations (whether or not such determinations result in any performance goal being measured on a basis other than generally accepted accounting principles).

After the performance period ends, the Committee will certify the extent to which the pre-established performance goals actually were achieved or exceeded. The actual award that is payable to a participant is determined using a formula that increases or decreases the participant's target award based on the level of actual performance attained. However, the Bonus Plan limits actual awards to a maximum of \$4 million per person for any performance period, even if the

preestablished formula otherwise indicates a larger award. Also, as indicated above, no participant may participate in more than three performance periods at any one time.

The Committee has discretion to reduce or eliminate the actual award of any participant. Also, unless determined otherwise by the Committee, a participant will forfeit the bonus if a participant terminates employment before the bonus actually is paid. However, the Committee has discretion to pay out part or all of the award.

Actual awards are paid in cash generally no later than ninety (90) days after the performance period ends. However, the Committee has discretion to defer payment of part or all of any bonuses and/or to apply a vesting schedule to part or all of any bonuses. No vesting schedule (that is, the period of time for which an employee must remain employed to actually receive the bonus) may be longer than four years.

The Committee also may pay bonuses to Bonus Plan participants outside of the Bonus Plan for the accomplishment of strategic or other individual goals. Any bonuses paid outside of the Bonus Plan will not qualify under Section 162(m) of the Code and therefore we might not receive a tax deduction for those bonuses (if any). However, the Bonus Plan has been designed to permit the payment of awards that qualify under Section 162(m) of the Code.

Federal Income Tax Considerations

An actual award under the Bonus Plan generally will be compensation taxable as ordinary income (and subject to income tax withholding) when paid to the participant. The Company generally will be entitled to a corresponding deduction for federal income tax purposes, except as follows. Section 162(m) of the Code generally limits to \$1,000,000 the amount of compensation that may be deducted by the Company in any tax year with respect to the Company's Chief Executive Officer or any of the four other most highly compensated executive officers. However, if the Company pays compensation that is "performance based" under section 162(m), the Company still may receive a federal income tax deduction for the compensation even if it is more than \$1 million during a single year. The Bonus Plan is designed, and is intended to be administered, to allow the Company to pay incentive compensation that is performance based and therefore fully tax deductible on the Company's federal income tax return.

Amendment and Termination of the Bonus Plan

The Committee may amend or terminate the Bonus Plan at any time and for any reason. However, no amendment or termination may impair the rights of a participant with respect to payments made prior to such amendment or termination unless the Committee has determined that such amendment or termination is in the best interests of all persons to whom awards have been granted.

Estimated Bonuses to be Paid to Certain Individuals and Groups

Awards under the Bonus Plan (if any) will be determined based on actual future performance during performance periods designated by the Committee. As a result, future actual awards cannot now be determined. The following table sets forth the target awards for the fiscal year 2006 performance period for the persons and groups shown below. For the 2006 performance period, the Committee selected performance goals that relate to the achievement of targets for pre-tax margin, pre-tax profit and revenue. The Committee also may permit Bonus Plan participants potentially to earn bonuses outside of the Bonus Plan for the achievement of other strategic or individual goals, although it currently does not intend to do so for fiscal year 2006. These potential bonus amounts (if any) are not included in the table below and would not be subject to stockholder approval.

Our executive officers are eligible to receive awards under the Bonus Plan and accordingly our executive officers have an interest in this proposal.

Name of Individual or Group	Target Award	Maximum Award
Kenneth L. Schroeder Chief Executive Officer and Director	\$ 1,590,000	\$ 2,580,000
Richard P. Wallace President and Chief Operating Officer	\$ 864,000	\$ 1,404,000
John H. Kispert Executive Vice President and Chief Financial Officer	\$ 645,600	\$ 1,050,000
Avi Cohen Group Vice President	\$ 396,000	\$ 643,500
Lance Glasser Chief Technical Officer	\$ 396,000	\$ 643,500
All executive officers, as a group	\$ 4,724,000	\$ 7,676,000(2)

All employees who are not executive officers, as a group	\$	13,735,000	\$	20,026,000(2)
All Directors who are not executive officers, as a group (1)		0		0

(1) This group is not eligible to participate in the Bonus Plan.

(2) The maximum award shown is the total maximum award payable to all participants in the named group.

There can be no assurance that the target awards shown above actually will be paid. The actual award paid (if any) may be higher or lower depending on actual performance compared to the targeted performance goals. In no event will any participant's actual award for the fiscal year 2006 performance period under the Bonus Plan exceed the maximum award shown. In addition, the Committee has discretion to decrease (but not increase) the award otherwise indicated under the preestablished formula. For the 2006 performance period, the Committee currently intends to consider reducing the award that otherwise is indicated under the formula depending on whether certain other strategic goals are achieved (for example, goals relating to product quality, customer satisfaction, growth in emerging markets and/or cost of goods efficiencies). The Committee also may choose to reduce the otherwise indicated awards for other reasons, in its discretion.

Vote Required and Recommendation

If a quorum is present and voting, the affirmative vote of a majority of Votes Cast is needed to ratify the approval of the Bonus Plan.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" APPROVAL OF THE BONUS PLAN.

PROPOSAL THREE: RATIFICATION OF APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING JUNE 30, 2006.

Audit Committee Recommendation

The Audit Committee has the sole authority to retain or dismiss our independent auditors. The Audit Committee has selected PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit the consolidated financial statements of the Company for its 2006 fiscal year. Before making its determination, the Audit Committee carefully considered that firm's qualifications as independent auditors.

The Board of Directors, following the Audit Committee's determination, unanimously recommends that the stockholders vote for ratification of such appointment.

Although ratification by stockholders is not required by law, the Board of Directors has determined that it is desirable to request approval of this selection by the stockholders. If the stockholders do not ratify the appointment of PricewaterhouseCoopers LLP, the Audit Committee may reconsider its selection.

Attendance at the Annual Meeting

Representatives of PricewaterhouseCoopers LLP are expected to be present at the Annual Meeting with the opportunity to make a statement if they desire to do so, and are expected to be available to respond to appropriate questions.

Fees

The aggregate fees billed by PricewaterhouseCoopers LLP, KLA-Tencor's independent auditors, in fiscal years 2005 and 2004 were as follows:

Services Rendered/Fees	2005	2004
Audit Fees (1)	\$ 3,215,000	\$ 1,193,000
Audit-Related Fees (2)	\$ 32,000	\$ 109,000
Total Audit and Audit-Related Fees	\$ 3,247,000	\$ 1,302,000
Tax Compliance	\$ 371,000	\$ 1,051,000
Tax Planning and Consulting	\$ 462,000	\$ 571,000
Total Tax Fees (3)	\$ 833,000	\$ 1,622,000
All Other Fees (4)	\$ 91,000	\$ 171,000

- (1) For professional services rendered for the audits of annual financial statements set forth in KLA-Tencor's Annual Report on Form 10-K for fiscal years 2005 and 2004, the review of quarterly financial statements included in KLA-Tencor's Form 10-Qs for fiscal years 2005 and 2004 and fees for services related to statutory and regulatory filings or engagements.
- (2) For fiscal years ended 2005 and 2004, assurance and related services related to accounting consultations and work related to the Sarbanes-Oxley Act of 2002.
- (3) For fiscal years ended 2005 and 2004, tax services for U.S, foreign tax and expatriate compliance and tax planning and consulting.
- (4) For fiscal years ended 2005 and 2004, fees for services other than those described above.

Pre-approval Policies and Procedures

The Audit Committee has adopted a policy regarding non-audit services provided by PricewaterhouseCoopers LLP, our independent auditors. First, the policy ensures the independence of our auditors by expressly naming all services that the auditors may not perform and reinforcing the principle of independence regardless of the type of service. Second, certain non-audit services such as tax-related services and acquisition advisory services are permitted but limited in proportion to the audit fees paid. Third, the Chair of the Audit Committee pre-approves non-audit services not specifically permitted under this policy and the Audit Committee reviews the annual plan and any subsequent engagements. Thus, all of the services described above under audit-related fees, tax fees and all other fees were approved by the Audit Committee pursuant to its pre-approval policies and procedures.

On a quarterly basis, management provides written updates to the Audit Committee providing an update of audit and non-audit services, the amount of audit and non-audit service fees incurred to date, and the estimated cost to complete such services.

Independence Assessment by Audit Committee

The Company's Audit Committee considered and determined that the provision of the services provided by PricewaterhouseCoopers LLP as set forth herein are compatible with maintaining PricewaterhouseCoopers LLP's independence and approved all non-audit related fees and services.

Vote Required and Recommendation

If a quorum is present and voting, the affirmative vote of the majority of Votes Cast is needed to ratify the appointment of PricewaterhouseCoopers LLP as KLA-Tencor's independent registered public accounting firm, to audit the consolidated financial statements of the Company for its 2006 fiscal year.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING JUNE 30, 2006.

PROPOSAL FOUR: A STOCKHOLDER PROPOSAL REGARDING MAJORITY VOTING FOR DIRECTORS

Company Recommendation

The United Brotherhood of Carpenters Pension Fund (the "UBC Pension Fund"), which beneficially owns 3,200 shares of the Company's Common Stock, has requested that a proposal regarding majority voting for Directors be presented for stockholder vote at this Annual Meeting. The proposal, along with the UBC Pension Fund's supporting statement is included verbatim below. The UBC Pension Fund's request was submitted by Douglas J. McCarron, Fund Chairman of the UBC Pension Fund, 101 Constitution Avenue, N.W., Washington, D.C. 20001.

For the reasons set forth following the proposal and supporting statement, the Board of Directors and management of KLA-Tencor disagree with the UBC Pension Fund's proposal and supporting statement.

The Board of Directors recommends a vote "AGAINST" the UBC Pension Fund's proposal.

UBC Pension Fund's Proposed Shareholder Resolution

RESOLVED: That the shareholders of KLA-Tencor Corporation ("Company") hereby request that the Board of Directors initiate the appropriate process to amend the Company's governance documents (certificate of incorporation or bylaws) to provide that director nominees shall be elected by the affirmative vote of the majority of votes cast

at an annual meeting of shareholders.

UBC Pension Fund's Supporting Statement

Our Company is incorporated in Delaware. Among other issues, Delaware corporate law addresses the issue of the level of voting support necessary for a specific action, such as the election of corporate directors. Delaware law provides that a Company's certificate of incorporation or bylaws may specify the number of votes that shall be necessary for the transaction of any business, including the election of directors (DGSC, Title 8, Chapter 1, Subchapter, VII, Section 216). Further, the law provides that if the level of voting support necessary for a specific action is not specified in the certificate of incorporation or bylaws of the corporation, directors "shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors."

Our Company presently uses the plurality vote standard for the election of directors. We feel that it is appropriate and timely for the Board to initiate a change in the Company's director election vote standard. Specifically, this shareholder proposal urges that the Board of Directors initiate a change to the director election vote standard to provide that in director elections a majority vote standard will be used in lieu of the Company's current plurality vote standard. Specifically, the new standard should provide that nominees for the board of directors must receive a majority of the vote cast in order to be elected or re-elected to the Board.

Under the company's current plurality vote standard, a director nominee in a director election can be elected or re-elected with as little as a single affirmative vote, even while a substantial majority of the votes cast are "withheld" from that director nominee. So even if 99.9% of the shares "withhold" authority to vote for a candidate or all the candidates, a 0.01% "for" vote results in the candidate's election or re-election to the board. The proposed majority vote standard would require that a director receive a majority of the vote cast in order to be elected to the Board.

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It is our contention that the proposed majority vote standard for corporate board elections is a fair standard that will strengthen the Company's governance and the Board. Our proposal is not intended to limit the judgment of the Board in crafting the requested governance change. For instance, the Board should address the status of incumbent directors who fail to receive a majority vote when standing for re-election under a majority vote standard or whether a plurality director election standard is appropriate in contested elections.

We urge your support of this important director election reform.

KLA-Tencor's Statement in Opposition

The Company currently elects its Directors by a plurality standard, meaning that the nominees who receive the most affirmative votes are elected to the Board of Directors. This method of voting, which is permissible under Delaware corporate law and is the predominant method currently in use among U.S. public companies, has served us well for many years. In fact, in no instance can it be found that plurality voting prevented our stockholders from either electing the Directors they wanted to elect or otherwise expressing their dissatisfaction with any particular Director or the Board as a whole.

For the following reasons, we believe it would not be in the best interests of our stockholders to change the method by which Directors are elected at this time:

- *This proposal is unnecessary to the achievement of sound corporate governance at KLA-Tencor.*

No Director elected in the past five years has received less than 88% favorable votes. Consequently, this proposal would have had no effect on KLA-Tencor's recent Board elections. Even without this proposal, our stockholders have been highly successful in electing responsible, objective Directors who consistently protect the best interests of the stockholders.

- *We maintain a rigorous Director nomination and election process that gives due regard to stockholder nominees.*

The Board of Directors maintains a Nominating and Governance Committee that is comprised entirely of independent Directors. As described under "About the Board of Directors and its Committees—Nominating and Governance Committee" below, the Nominating and Governance Committee considers candidates recommended by stockholders in the same manner as other candidates. Consequently, adoption of the UBC Pension Fund's proposal is not necessary in order to compel or encourage the Board to consider stockholder interests and desires.

- *Given the current state of applicable corporate law and practice, majority voting for Directors may have unintended negative consequences.*

Plurality voting is the accepted standard for the election of Directors of U.S. public companies and is the default method of electing Directors under Delaware corporate law. In the case of majority voting, if an incumbent Director fails to receive a majority vote, or if no candidate in a contested election receives a majority vote, the incumbent would remain in office until removed by stockholders or until a successor was elected even if the opposing candidate received more favorable votes than the incumbent. Plurality voting, on the other hand, dictates that whoever received the most favorable votes would win the election. Furthermore, plurality voting gives stockholders the opportunity to express their dissatisfaction with some element of corporate governance (by voting "withhold" on one or more Directors) without disrupting the elective process. These examples demonstrate that plurality voting offers advantages over majority Director voting.

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In March 2005, the UBC Pension Fund and representatives of several other building trade unions formed a working group with representatives of ten public companies to study the feasibility of using the majority vote standard for Director elections. The working group members have stated their intent to prepare a report on the majority-vote standard prior to the 2006 proxy season. The American Bar Association's Committee on Corporate Laws, chaired by E. Norman Veasey, a former chief justice of the Delaware Supreme Court, is reviewing possible changes to the Model Business Corporation Act (the "Model Act") regarding Director elections. A task force formed by the Committee to study the issue recently issued a discussion paper regarding stockholder approval for the election of Directors, as well as possible changes to the Model Act.

We believe that adoption of the UBC Pension Fund's proposal would be inappropriate at this time, particularly in light of the fact that proponent's working group and the ABA task force have not issued their findings and the proposal does not address the legal and practical issues of changing long-standing, successful voting procedures. We do not believe that stockholders should be asked to approve a proposal without understanding the full ramifications of its adoption.

We are monitoring, and will continue to monitor, these discussions and will take appropriate action to maintain our commitment to the highest standards of corporate governance. If a consensus emerges that reflects that majority voting for Directors is the best corporate governance practice in this area, we will revisit our Director election procedures and consider amending our governance documents to reflect such a change. We do not believe that the Company, nor our stockholders would be best served by prematurely adopting such a change.

For these reasons, the Board of Directors strongly urges stockholders to vote against the UBC Pension Fund's proposal to require majority voting for the election of Directors.

Vote Required and Recommendation

If a quorum is present and voting, the affirmative vote of a majority of the Votes Cast is needed to pass this stockholder proposal.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "AGAINST" THE UBC PENSION FUND'S PROPOSAL TO REQUIRE MAJORITY VOTING FOR THE ELECTION OF DIRECTORS.

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OUR CORPORATE GOVERNANCE PRACTICES

At KLA-Tencor we have always believed in strong and effective corporate governance procedures and practices. In that spirit, we have summarized several of our corporate governance practices below.

Adopting Governance Guidelines

The Board of Directors has adopted a set of corporate governance guidelines to establish a framework within which it will conduct its business and to guide management in its running of your Company. The governance guidelines can be found on our website at <http://ir.kla-tencor.com> and are summarized below.

Monitoring Board Effectiveness

It is important that our Board of Directors and its Committees are performing effectively and in the best interest of the Company and its stockholders. The Board of Directors and each Committee are responsible for annually assessing their effectiveness in fulfilling their obligations. In addition, our Nominating and Governance Committee is charged with annually reviewing the Board of Directors and its membership.

Conducting Formal Independent Sessions

At the conclusion of each regularly scheduled Board meeting, the independent Directors meet without KLA-Tencor management and the non-independent Directors.

Hiring Outside Advisors

The Board and each of its Committees may retain outside advisors and consultants of their choosing at the Company's expense, without management's consent.

Avoiding Conflicts of Interest

KLA-Tencor expects its Directors, executives and employees to conduct themselves with the highest degree of integrity, ethics and honesty. KLA-Tencor's credibility and reputation depend upon the good judgment, ethical standards and personal integrity of each Director, executive and employee. In order to provide assurances to KLA-Tencor and its stockholders, KLA-Tencor has implemented standards of business conduct which provide clear conflict of interest guidelines to its employees, as well as an explanation of reporting and investigatory procedures.

Providing Transparency

KLA-Tencor believes it is important that stockholders understand our governance practices. In order to help ensure transparency of our practices we have posted information regarding our corporate governance procedures on our website at <http://ir.kla-tencor.com>.

Communications with the Board of Directors

Although KLA-Tencor does not have a formal policy regarding communications with the Board of Directors, stockholders may communicate with the Board of Directors by writing to the Company at KLA-Tencor Corporation, Attention: Investor Relations, 160 Rio Robles, San Jose, CA 95134. Stockholders who would like their submission directed to a member of the Board may so specify, and the communication will be forwarded, as appropriate.

Standards of Business Conduct

The Board of Directors has adopted Standards of Business Conduct for all of the Company's employees and Directors, including the Company's principal executive and senior financial officers. You can obtain a copy of our Standards of Business Conduct via our website at <http://ir.kla-tencor.com>, or by making a written request to the Company at KLA-Tencor Corporation, Attention: Investor Relations, 160 Rio Robles, San Jose, CA 95134. We will disclose any amendments to the Standards of Business Conduct or waiver of a provision therefrom, on our website at the same address.

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Ensuring Auditor Independence

KLA-Tencor has taken a number of steps to ensure the continued independence of our outside auditors. Our independent auditors report directly to the Audit Committee, which also has the ability to pre-approve or reject any non-audit services proposed to be conducted by our outside auditors.

Stockholder Nominations to the Board

Please see “**ABOUT THE BOARD OF DIRECTORS AND ITS COMMITTEES—NOMINATING AND GOVERNANCE COMMITTEE**”.

ABOUT THE BOARD OF DIRECTORS AND ITS COMMITTEES

The Board of Directors

The Board of Directors of the Company held a total of five meetings during the fiscal year ended June 30, 2005.

All Directors other than Messrs. Levy, Schroeder and Tompkins meet the definition of independence within the meaning of the Nasdaq National Market director independence standards. None of the Company's Directors fall outside of the SEC's 10% ownership safe harbor.

The Board of Directors has three standing committees: the Audit Committee; the Compensation Committee; and the Nominating and Governance Committee. The Board of Directors has determined that each of the members of each of the Committees has no material relationship with the Company (including any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment as a Director) and is independent within the meaning of the Nasdaq National Market director independence standards, including in the case of the Audit Committee, the heightened “independence” standard required for such Committee members.

Each Committee meets regularly and has a written charter approved by the Board of Directors, all of which were attached as appendices to the Proxy Statement related to our 2003 Annual Meeting, which was filed with the Securities and Exchange Commission on September 23, 2003 and are available via our website at <http://ir.kla-tencor.com>. In addition, at each regularly scheduled Board of Directors meeting, a member of each Committee reports on any significant matters addressed by the Committee. In 2002, after reviewing the Sarbanes-Oxley Act of 2002 and the proposed rules of the SEC and the Nasdaq Stock Market, the Board of Directors revised all of its Committee charters to implement voluntarily the proposed standards and to expand the responsibilities of each Committee as well as establish independence and self-assessment requirements. The Board of Directors and each Committee regularly reviews the Committee charters.

During the fiscal year ended June 30, 2005, all incumbent Directors attended 100% of the total number of meetings of the Board of Directors and each Director attended at least 80% of the aggregate of the total number of meetings held by all Committees of the Board on which each such Director served (during the periods that each such Director served).

Although we do not have a formal policy mandating attendance by members of the Board of Directors at our annual meetings of stockholders, we do have a formal policy encouraging their attendance at annual meetings of KLA-Tencor stockholders. Six Directors attended the 2004 Annual Meeting of stockholders.

For more information regarding the responsibilities of our Board Committees, please refer to our charters which can be found on our corporate governance website located at <http://ir.kla-tencor.com>.

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Audit Committee

The Audit Committee consists of Mr. Bingham, Mr. Bond, Mr. Elkus and Mr. Kaufman. The Board of Directors has determined that Mr. Bingham is an “audit committee financial expert” within the meaning of the rules and regulations promulgated by the SEC. During fiscal year 2005, Mr. Bingham was the Chairman of the Audit Committee.

The Audit Committee is responsible for appointing, compensating and overseeing the work of the Company's independent auditors, approving the services performed by the Company's independent auditors and for reviewing and evaluating the Company's accounting principles and its system of internal accounting controls. The Audit Committee held eleven meetings during the last fiscal year.

Compensation Committee

The Compensation Committee consists of Mr. Barnholt, Mr. Bond, Mr. Marks and Ms. Urbanek. During fiscal year 2005, Mr. Bond was the Chairman of the Compensation Committee. The Compensation Committee reviews and approves the Company's executive compensation policy and administers the Company's employee equity benefit plans. The Compensation Committee held four meetings during the last fiscal year.

Nominating and Governance Committee

The Nominating and Governance Committee consists of Mr. Barnholt, Mr. Elkus and Mr. Kaufman. Mr. Barnholt served as the Chairman of the Nominating and Governance Committee during fiscal year 2005. The Nominating and Governance Committee nominated the three Class I Directors for election at the Annual Meeting, each of whom is standing for reelection. The Nominating and Governance Committee is primarily responsible for identifying and evaluating the qualifications of all candidates for election to the Board of Directors, as well as reviewing corporate governance policies and procedures. The Nominating and Governance Committee held five meetings during the last fiscal year.

It is the Nominating and Governance Committee's policy to consider candidates for the Board of Directors recommended by stockholders who have owned at least 1% of the Company's outstanding shares for at least one year and who have evidenced intent to continue as a substantial stockholder for the long term. Stockholders wishing to submit recommendations must notify the Company (attention: Assistant Secretary) in writing of their intent to do so and provide the Company with certain information set forth in Section 11 of our bylaws and all other information regarding nominees that is required to be provided pursuant to Regulation 14A of the Securities Exchange Act of 1934, or as otherwise requested by the Nominating and Governance Committee. In addition, stockholders may nominate candidates for the Board of Directors pursuant to the provisions of Section 11 of our bylaws and in conformance with the requirements of Regulation 14A of the Securities Exchange Act of 1934.

In considering candidates for Director nomination, including evaluating any recommendations from stockholders as set forth above, the Nominating and Governance Committee only considers candidates who have demonstrated executive experience, have experience in an applicable industry, or significant high level experience in accounting, legal or a technical field applicable to the Company. In addition, in evaluating Director candidates, the Nominating and Governance Committee considers all factors it considers appropriate, which may include strength of character, mature judgment, career specialization, relevant technical skills, diversity of experience and the extent to which the candidate would fill a present need on the Board of Directors.

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The Nominating and Governance Committee regularly assesses the appropriate size and composition of the Board of Directors, and whether any vacancies on the Board are expected. In the event that vacancies are anticipated, or otherwise arise, the Nominating and Governance Committee considers potential candidates that may come to its attention through current members of the Board of Directors, professional search firms, stockholders who have owned at least 1% of the Company's outstanding shares for at least one year and who have evidenced intent to continue as a substantial stockholder for the long term, or other persons. In evaluating properly submitted stockholder recommendations, the Nominating and Governance Committee uses the evaluation standards discussed above and seeks to achieve a balance of knowledge, experience and capability on the Board of Directors.

DIRECTOR COMPENSATION

Employee Directors

Members of the Board of Directors who are employees do not receive any additional compensation for their services as Directors.

1998 Outside Director Plan

Members of the Board who are not employees of the Company ("Outside Directors") receive benefits under the 1998 Outside Director Plan ("1998 Director Plan"), which was approved by the stockholders at the 1998 annual meeting of stockholders. Each Outside Director receives a nonstatutory stock option to purchase 10,000 shares of Common Stock as of the date on which such Director first becomes an Outside Director (the "First Option"). If a new Outside Director does not join the Board at the beginning of the Company's fiscal year, the First Option will be pro rated to reflect the quarter in which such new Outside Director joins the Board. In addition, after the first option grant in the year the Outside Director joins the Board of Directors and on an annual basis thereafter, each Outside Director is automatically granted a nonstatutory stock option to purchase an additional aggregate 10,000 shares of Common Stock of the Company (the "Subsequent Grant"). The Subsequent Grant is provided to each Outside Director in 2,500 share increments each quarter, approximately two business days following the Company's earnings release for the prior fiscal quarter. The Chairman of the Audit Committee receives an additional nonstatutory stock option grant to purchase an additional 2,500 shares of Common Stock on the date of each subsequent annual meeting on which such Director remains the Chairman of the Audit Committee. The term of options granted under the 1998 Director Plan may not exceed 10 years. The 1998 Director Plan provides that the exercise price shall be equal to the fair market value of the Common Stock on the date of grant of the option. Options granted under the 1998 Director Plan become exercisable immediately upon the date of grant.

Cash Compensation

Each Outside Director receives an annual fee of \$40,000 and \$2,500 for each meeting they attend (\$1,250 if participation is by telephone), plus reasonable expenses in attending such meeting. Committee members receive \$1,500 per committee meeting they attend (\$750 if participation is by telephone). The Audit Committee Chairman receives an annual retainer of \$10,000.

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INFORMATION ABOUT EXECUTIVE OFFICERS

Set forth below are the names, ages and positions of the executive officers of KLA-Tencor as of September 23, 2005.

Name and Position	Principal Occupation of the Executive Officers During the Past Five Years	Age
Kenneth Levy Chairman of the Board	Kenneth Levy is a founder of KLA Instruments Corporation and has been a Director since 1975. Since July 1, 1999 he has been Chairman of the Board of KLA-Tencor. From July 1998 until June 30, 1999, he was Chief Executive Officer and a Director. From 1975 until April 30, 1997 he was Chief Executive Officer of KLA Instruments Corporation. He currently serves on the boards of directors of the following publicly traded companies: Juniper Networks, Inc. and Extreme Networks, Inc. and is Chairman of the Board of PowerDyne, Inc. In addition, he is a Director Emeritus of Semiconductor Equipment and Materials Institute (SEMI), an industry trade association.	62
Kenneth L. Schroeder Chief Executive Officer	Kenneth L. Schroeder joined KLA Instruments in 1979 and left in 1987 to pursue personal and other business interests. He returned to KLA Instruments in 1991. Mr. Schroeder has been Chief Executive Officer and a member of the Board of Directors of KLA-Tencor since July 1, 1999 as well as President from May 2004 to July, 2005. He also held the position of President from November 1991 to July 2002.	59
Richard P. Wallace President & Chief Operating Officer	Richard P. Wallace has been President and Chief Operating Officer since July 2005. He was Executive Vice President of the Customer Group from May 2004 to July 2005. He was Executive Vice President of the Wafer Inspection, Review & Analysis Group from July 2000 to May 2004. From July 1999 to June 2000, he was the Group Vice President for Lithography and Films. From April 1998 to June 1999, he was Vice President and General Manager of the Mirage Group. From 1995 to March 1998 he was Vice President and General Manager of the Wisard division. Mr. Wallace joined KLA-Tencor in 1988 and has held a series of other management positions.	45
John H. Kispert Executive Vice President & Chief Financial Officer	John H. Kispert has been Chief Financial Officer and Executive Vice President since July 2000. From July 1999 to July 2000, Mr. Kispert was Vice President of Finance and Accounting. From February 1998 to July 1999, he was Vice President of Operations for the Wafer Inspection Group. Mr. Kispert joined KLA-Tencor in February 1995 and has held a series of other management positions within the Company. He currently serves on the board of directors of North American SEMI, an industry trade association.	41
Avi Cohen Group Vice President	Avi Cohen has been Group Vice President, Parametric Solutions Group since August 2003. He was Senior Vice President responsible for the Patterning Solutions Group from January 2003 to August 2003 and he was Senior Vice President responsible for the Integrated Metrology Group from January 2002 to January 2003. From May 1997 to January 2002 he was Vice President and General Manager of the Optical Metrology Division. Mr. Cohen has been the President of KT Israel since February 1995.	52
Lance Glasser Chief Technical Officer	Lance Glasser has been Chief Technical Officer since August 2005. He was Group Vice President, Wafer Inspection Group from May 2004 to August 2005. He was Vice President and General Manager of Reticle and Photomask Inspection Division from April 1999 to May 2004.	52

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Principal Stockholders

As of August 26, 2005, based on our review of filings made with the SEC, we are aware of the following entities being the beneficial owner of more than 5% of the Company's Common Stock:

Name and Address	Number of Shares Beneficially Owned	Percent of Shares Beneficially Owned (1)
Capital Guardian Trust Co. (2) 333 South Hope Street Los Angeles, CA 90071	28,881,663	14.67%
Capital Research & Management Co. (2) 333 South Hope Street Los Angeles, CA 90071	19,935,818	10.13%
Fidelity Management Research (2)(3) 82 Devonshire Street Boston, MA 02109	16,702,166	8.48%
Alliance Capital Management (2) 1345 Avenue of the Americas 38th Fl. New York, NY 10105-0096	10,425,959	5.30%

(1) Based on 196,876,000 outstanding shares of Common Stock as of August 26, 2005.

(2) Based on information provided pursuant to Schedule 13F filed with the Securities and Exchange Commission.

(3) FMR Corp. is a parent holding company and includes shares held by Fidelity Management Research and Fidelity International Limited.

Management

The following table sets forth the beneficial ownership of Common Stock of the Company as of September 6, 2005 by all Directors, each of the named executive officers set forth in the Summary Compensation Table, and by all Directors and current executive officers as a group:

Name and Address	Number of Shares Beneficially Owned	Percent of Shares Beneficially Owned (1)
Kenneth Levy (2)	2,606,813	1.32%
Kenneth L. Schroeder (3)	879,198	*
Edward W. Barnholt (4)	85,832	*
H. Raymond Bingham (5)	62,500	*
Robert T. Bond (6)	62,000	*
Richard J. Elkus, Jr. (7)	77,500	*
Stephen P. Kaufman (8)	31,000	*
Michael E. Marks (9)	20,000	*
Jon D. Tompkins (10)	19,200	*
Lida Urbanek (11)	1,379,861	*
Richard P. Wallace (12)	122,593	*
John H. Kispert (13)	142,295	*
Avi Cohen (14)	180,765	*
Lance Glasser (15)	130,132	*
All Directors and executive officers as a group (17 persons) (16)	6,039,699	3.06%

* Less than 1%

(1) Based on 197,626,388 outstanding shares of the Common Stock of the Company as of September 6, 2005.

(2) Includes 653,297 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005, 1,614,375 shares, which are held in trust for the benefit of Mr. Levy's family, 40,000 shares which are held by the Levy Family Foundation, and 298,000 shares which are held by the KGMW, L.P.

(3) Includes 716,540 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005. Mr. Schroeder also holds restricted stock units representing 100,000 shares subject to further vesting restrictions.

(4) Includes 85,832 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(5) Includes 62,500 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(6) Includes 60,000 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(7) Includes 12,500 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(8) Includes 30,000 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(9) Includes 20,000 shares subject to options which are presently exercisable or will become exercisable, within 60 days of September 6, 2005.

(10) Includes 15,000 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005.

(11) Includes 76,946 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005, 1,271,414 shares of which are held in trust for the benefit of Mrs. Urbanek's family, and 29,555 shares of which are held by the Urbanek Family Foundation.

(12) Includes 119,042 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005. Mr. Wallace also holds restricted stock units representing 41,111 shares subject to further vesting restrictions.

(13) Includes 135,614 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005, 6,681 shares which are held in trust for the benefit of Mr. Kispert's family. Mr. Kispert also holds restricted stock units representing 48,333 shares subject to further vesting restrictions.

(14) Includes 178,143 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005. Mr. Cohen also holds restricted stock units representing 33,333 shares subject to further vesting restrictions.

(15) Includes 126,624 shares subject to options which are presently exercisable or will become exercisable within 60 days of September 6, 2005. Dr. Glasser also holds restricted stock units representing 33,333 shares subject to further vesting restrictions.

(16) Includes options to purchase an aggregate of 2,522,638 shares held by the current officers and directors which are presently exercisable or will become exercisable within 60 days of September 6, 2005. In addition, current officers hold restricted stock units representing 266,110 shares subject to further vesting restrictions.

EXECUTIVE COMPENSATION AND OTHER MATTERS

Executive Compensation

The following table sets forth, as to the person who served as Chief Executive Officer during the fiscal year ended June 30, 2005 and each of the four other most highly compensated executive officers whose salary plus bonus exceeded \$100,000, information concerning all reportable compensation awarded to, earned by or paid to each for services to the Company in all capacities during the fiscal year ended June 30, 2005, as well as such compensation for each such individual for the Company's previous two fiscal years.

Name and Principal Position	Year	Annual Compensation			Long Term Compensation (1)		
		Salary	Bonus (3)	Other Annual Compensation (\$)	Restricted Stock Award(s) (6)	Securities Underlying Options/SARs (#)	All Other Compensation (2)
Kenneth L. Schroeder	2005	\$746,460	\$2,018,130	N/A	\$4,068,000(7)	348,300	\$ 1,000
Chief Executive Officer	2004	\$581,195	\$1,183,023	N/A	N/A	158,950	\$ 0
	2003	\$577,940	\$ 199,209	N/A	N/A	94,350	\$ 9,231
Richard P. Wallace	2005	\$392,181	\$ 791,653	N/A	\$1,672,395(8)(12)	86,250	\$ 1,000
President & Chief Operating Officer	2004	\$336,501	\$ 443,730	N/A	N/A	76,250	\$ 1,000
	2003	\$324,674	\$ 75,545	N/A	N/A	38,500	\$ 5,767
John H. Kispert	2005	\$447,066	\$ 900,251	N/A	\$1,966,186(9)(12)	86,250	\$ 1,000
Executive Vice President & Chief Financial Officer	2004	\$396,393	\$ 658,700	N/A	N/A	76,250	\$ 1,000
	2003	\$324,357	\$ 167,133	N/A	N/A	37,500	\$ 5,766
Avi Cohen	2005	\$303,288	\$ 505,920	\$ 34,279(4)	\$1,355,986(10)(12)	81,000	\$ 1,000
Group Vice President	2004	\$253,346	\$ 295,975	\$ 79,843(4)	N/A	40,250	\$ 1,000
	2003	\$219,977	\$ 56,732	\$229,359(4)	N/A	18,750	\$ 4,069
Lance Glasser	2005	\$300,606	\$ 473,744	\$ 1,480(5)	\$1,355,986(11)(12)	78,750	\$ 1,000
Chief Technical Officer	2004	\$241,760	\$ 267,046	\$ 740(5)	N/A	25,750	\$ 1,000
	2003	\$234,505	\$ 34,003	\$2,670 (5)	N/A	13,500	\$ 4,343

(1) The Company has not granted any stock appreciation rights and the Company does not have any Long Term Incentive Plans as that term is defined in the regulations.

(2) In FY 2005 Mr. Schroeder received \$1,000 contributed by the Company as a matching contribution to the 401(k) Plan; Mr. Kispert received \$1,000 contributed by the Company as a matching contribution to the 401(k) Plan; Mr. Wallace received \$1,000 contributed by the Company as a matching contribution to the 401(k) Plan; Mr. Cohen received \$1,000 contributed by the Company as a matching contribution to the 401(k) Plan; and Dr. Glasser received \$1,000 contributed by the Company as a matching contribution to the 401(k) Plan.

(3) In addition to other bonus payments, this amount includes payments made pursuant to the Company's Outstanding Corporate Performance Executive Bonus Plan ("OCPB"). Of the OCPB payment earned in fiscal year 2005, 34% is payable currently. The remaining 66% of the OCPB payment earned in fiscal year 2005 is automatically deferred into the Company's Executive Deferred Savings Plan ("EDSP") as a Company contribution. Executives whose employment terminates before the end of the vesting period will receive a pro rata distribution of such deferred bonus funds. The OCPB amounts for fiscal year 2005 represent 74% of the aggregate fiscal year 2005 bonus amounts for Mr. Schroeder, 69% for Mr. Wallace, 69% for Mr. Kispert, 71% for Mr. Cohen and 76% for Dr. Glasser.

(4) In FY 2003, Mr. Cohen received a \$67,652 housing allowance plus \$161,707 as a Company reimbursement for the payment of taxes. In FY 2004, Mr. Cohen received a \$62,257 housing allowance, a management retention award in the amount of \$17,587, and \$3,561 as reimbursement for relocation expenses. In FY 2005, Mr. Cohen received a management retention award in the amount of \$33,539 as well as patent awards.

(5) Represents amounts received by Dr. Glasser for patent awards.

(6) Value is based on the price of the Company's Common Stock on October 18, 2004, which was the grant date, at \$40.68.

(7) Represents a total of 100,000 shares granted to Mr. Schroeder pursuant to a Restricted Stock Unit Agreement. 100% of the shares are scheduled to vest on July 1, 2007.

- (8) Represents a total of 41,111 shares granted to Mr. Wallace pursuant to a Restricted Stock Unit Agreement.
- (9) Represents a total of 48,333 shares granted to Mr. Kispert pursuant to a Restricted Stock Unit Agreement.
- (10) Represents a total of 33,333 shares granted to Mr. Cohen pursuant to a Restricted Stock Unit Agreement.
- (11) Represents a total of 33,333 shares granted to Dr. Glasser pursuant to a Restricted Stock Unit Agreement.
- (12) 50% of the shares will vest on October 18, 2008 and the remaining 50% will vest on October 18, 2009.

OPTION/SAR GRANTS IN LAST FISCAL YEAR

Stock Option Grants and Exercises

The following tables set forth the number of securities underlying stock options granted to the named executive officers under the Company's stock option plans and the options exercised by such named executive officers during the fiscal year ended June 30, 2005.

The Option/SAR Grant Table sets forth hypothetical gains or "option spreads" for the options at the end of their respective ten-year terms, as calculated in accordance with the rules of the Securities and Exchange Commission. Each gain is based on an arbitrarily assumed annualized rate of compound appreciation of the market price at the date of grant of 5% and 10% from the date the option was granted to the end of the option term. Actual gains, if any, on option exercises are dependent on the future performance of the Company's Common Stock and overall market conditions.

	Number of Securities Underlying Options (1)	Percent of Total Options Granted to Employees in Fiscal Year (2)	Exercise or Base Price (\$/share)	Expiration Date	Potential Realizable Value At Assumed Annual Rates of Stock Price Appreciation for Option Term (\$)	
					5%	10%
Kenneth L. Schroeder						
Chief Executive Officer	22,500		\$40.66	8/2/2014	\$ 575,344	\$ 1,458,035
	325,800		\$41.79	9/21/2014	\$8,562,515	\$21,699,094
Total	348,300	3.62%			\$9,137,859	\$23,157,129
Richard P. Wallace						
President & Chief Operating Officer	11,250		\$40.66	8/2/2014	\$ 287,672	\$ 729,018
	75,000		\$41.79	9/21/2014	\$1,971,113	\$ 4,995,187
Total	86,250	0.90%			\$2,258,785	\$ 5,724,205
John H. Kispert						
Executive Vice President & Chief Financial Officer	11,250		\$40.66	8/2/2014	\$ 287,672	\$ 729,018
	75,000		\$41.79	9/21/2014	\$1,971,113	\$ 4,995,187
Total	86,250	0.90%			\$2,258,785	\$ 5,724,205
Avi Cohen						
Group Vice President	6,000		\$40.66	8/2/2014	\$ 153,426	\$ 388,809
	75,000		\$41.79	9/21/2014	\$1,971,112	\$ 4,995,187
Total	81,000	0.84%			\$2,124,538	\$ 5,383,996
Lance Glasser						
Chief Technical Officer	3,750		\$40.66	8/2/2014	\$ 95,891	\$ 243,005
	75,000		\$41.79	9/21/2014	\$1,971,112	\$ 4,995,187
Total	78,750	0.82%			\$2,067,003	\$ 5,238,193

(1) The Company has not granted any stock appreciation rights. Generally, and assuming continued employment, all options vest 20% after the first 12 months and then 80% over the following 48 months.

(2) Based on a total of 9,625,481 options granted to employees in fiscal year 2005.

**AGGREGATED OPTION/SAR EXERCISES IN LAST FISCAL YEAR
AND FISCAL YEAR-END OPTION VALUES**

1982 Stock Option Plan

The following table sets forth information with respect to the persons named in the Summary Compensation Table concerning exercised and unexercised options held as of June 30, 2005.

	Number of Shares Acquired on Exercise	Value Realized	Number of Securities Underlying Unexercised Options at 6/30/2005		Value of Unexercised In-the-Money Options at 6/30/2005 (1)	
			Vested	Unvested	Exercisable	Unexercisable
Kenneth L. Schroeder Chief Executive Officer	93,968	\$3,363,486	697,792	752,540	\$10,479,738	\$4,172,109
Richard P. Wallace President & Chief Operating Officer	(2)	(2)	88,084	165,544	\$ 463,578	\$ 543,088
John H. Kispert Executive Vice President & Chief Financial Officer	(2)	(2)	103,031	170,169	\$ 878,487	\$ 608,752
Avi Cohen Group Vice President	(2)	(2)	154,372	121,941	\$ 2,504,959	\$ 343,188
Lance Glasser Chief Technical Officer	6,000	\$ 231,625	109,881	107,619	\$ 1,528,557	\$ 305,518

(1) The Company has not granted any stock appreciation rights. Total value of vested options based on fair market value of Company's Common Stock of \$43.68 per share as of June 30, 2005.

(2) None of such persons exercised any stock options during the last fiscal year.

EQUITY COMPENSATION PLAN

Equity Compensation Plan Information

The following table summarizes certain information regarding our equity compensation plans as of June 30, 2005.

	Number of Securities to be Issued Upon Exercise of Outstanding Options (1)	Weighted-Average Exercise Price of Outstanding Options	Number of Securities remaining available for Future Issuance Under the Stock Option Plans and Employee Stock Purchase Plan (2)
Equity Compensation Plans Approved by Stockholders (3)	25,680,578	\$ 36.72	13,620,320
Equity Compensation Plans Not Approved by Stockholders (4)	7,698,409	\$ 38.29	0
Total	33,378,987	\$ 37.08	13,620,320

(1) Amounts shown are for options granted only. There were 406,960 shares of restricted stock units issued under the 2004 Equity Incentive Plan as of June 30, 2005.

(2) Any 2004 Equity Incentive Plan awards of restricted stock, performance shares, performance units or deferred stock units with a per share or unit purchase price lower than 100% of fair market value on the date of the grant shall be counted against the total number of shares issuable under the plan as 1.8 shares for every one share subject thereto.

- (3) Represents shares of the Company's Common Stock issuable pursuant to the Company's 2004 Equity Incentive Plan and 1997 Employee Stock Purchase Plan and the 1998 Outside Director Option Plan. On October 18, 2004, the Shareholders approved the Company's 2004 Equity Incentive Plan. This approval included a reserve establishment of 11,000,000 shares of common stock for use under the plan, the ability to transfer up to an additional 1,500,000 shares of forfeited or expired stock under the 1982 Stock Option Plan and the 2000 Nonstatutory Plan. The approval also included terms that require the termination of the 1982 Stock Option Plan and the 2000 Nonstatutory Plan. The Company's 1997 Employee Stock Purchase Plan is replenished annually on the first day of each fiscal year by virtue of an evergreen provision. The provision allows for share replenishment equal to the lesser of 2,000,000 shares or the number of shares which the Company estimates will be required to issue under the plan during the forthcoming fiscal year. At June 30, 2005, a total of 1,804,736 shares were reserved and available for issuance under this plan.
- (4) Represents shares of the Company's Common Stock issuable pursuant to the Company's 2000 Nonstatutory Plan. The 2000 Nonstatutory Plan permitted the grant to employees and consultants of the Company of nonstatutory stock options to purchase up to five million, six hundred thousand (5,600,000) shares of stock. During the fiscal year ending June 30, 2005, the 2000 Nonstatutory Plan was terminated and no future grants may be made under it.

REPORT OF THE COMPENSATION COMMITTEE ON EXECUTIVE COMPENSATION

Compensation Committee

The Compensation Committee is responsible to KLA-Tencor's Board of Directors and to its stockholders for setting and administering the policies governing annual compensation of executive officers and other key employees ("Executives"), considering their performance and making recommendations regarding their cash and equity compensation to the full Board of Directors. The Committee operates under a written charter adopted by the Board of Directors.

The Committee is comprised of four independent, non-employee members of the Board of Directors, none of whom have interlocking relationships as defined by the Securities and Exchange Commission and all of whom meet current standards of independence requirements of the National Market.

The Committee periodically reviews its approach to executive compensation and makes changes as appropriate. The Committee meets regularly without employees present to discuss executive compensation matters. The Committee currently retains, and has retained in the past, consultants when necessary, as determined by the members of the Committee.

Compensation Philosophy

The philosophy of the Compensation Committee on executive compensation is that it should be designed to:

- Attract, retain, and reward Executives who contribute to the overall success of the Company;
- Support accomplishment of the Company's business strategies, objectives and initiatives;
- Have a substantial portion of annual compensation be contingent upon the Company's financial performance and an individual's contribution to the Company's success; and
- Align the interests of Executives with the long term interests of stockholders.

Within this philosophy, the Committee's objectives are to provide a comprehensive compensation package that is:

- Competitive with pay levels in the semiconductor capital equipment industry, and other selected companies with which KLA-Tencor competes, for executives of similar education and experience;

- Driven by financial and strategic performance, through salary and annual incentive programs that make up the majority of annual pay opportunity; and
- Aligned with shareholder interests, through grants of equity-based long-term incentives.

The Committee endeavors to structure each Executive's overall compensation package to be consistent with this approach and to enable the Company to attract, retain and reward personnel who contribute to the success of the Company. The Committee applies this philosophy and these objectives in determining appropriate executive compensation levels and other compensation factors, and reaches its decisions with a view towards the Company's overall financial performance.

The Committee considers market information from published survey data provided to the Committee by the Company's human resources staff and the Committee's compensation consultants. The market data consists primarily of base salary and total cash compensation rates, as well as incentive bonus and stock programs of other companies considered by the Committee to be peers in the Company's industry.

Executive Officer Compensation

The compensation programs that the Committee uses to meet its objectives are outlined in this report, along with results for fiscal year 2005. The Committee reviewed and recommended compensation decisions after considering a number of factors, including the economic and business conditions prevailing in the semiconductor and semiconductor capital equipment industries worldwide over the last fiscal year.

Base Salary: Salaries for Executives are set with reference to the median of salaries for comparable positions among other companies in the Company's industry or in industries that employ individuals of similar education and experience to the Executive. Factors considered in making base salary recommendations include: each person's job

responsibilities, level of experience, individual performance and contribution to the Company's business, data from the Company's Human Resources department, and guidance provided by the Compensation Committee's compensation consultants. The Committee exercised its discretion and judgment based upon these factors, and no specific formula was applied to determine the weight of each factor.

Executive Incentive Plan: Each year since fiscal 1979, the Company has adopted an executive incentive plan (the "Incentive Plan") which provides for payments to officers and key employees based 50% on the financial performance of the Company or the relevant business unit, and 50% on the achievement of key strategic business objectives. The Incentive Plan as to Executives is approved by the Compensation Committee and submitted to the Board of Directors for ratification. In fiscal year 2005, target awards for such Executives ranged from 45% to 100% of salary. For the financial component of the program, the maximum payout is 150% of the target. For the strategic component, the maximum payout is 100% of the target. For purposes of the fiscal year 2005 Incentive Plan, the Committee set financial performance goals for pre-tax profit, and strategic objectives relating to managing the ratio of assets to sales and corporate goals. The target goals for fiscal year 2005 were exceeded on financial objectives but underachieved on strategic objectives. As a result, approximately 78% of the eligible Incentive Plan amounts for named officers were paid. The Incentive Plan will be administered under the Bonus Plan, once the Bonus Plan is approved by the stockholders.

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Outstanding Corporate Performance Bonus (OCPB): This program provides a bonus to participants in years when the Company achieves certain levels of profitability and growth above both the Company's budgeted goals and the relative performance of peer companies. The performance measures are the Company's pretax margin and growth of the Company's aggregate revenues over a twelve month period against a target group of public U.S. companies in the semiconductor capital equipment market over the same period. A participant's target payout for the OCPB is equal to the target percentage used in the Executive Incentive Plan. This program is designed to pay below target in most years and only above target in years of exceptional financial performance. For Fiscal Year 2005, the combined strength in pre-tax margins and relative revenue growth resulted in a payout pursuant to the OCPB equal to 199% of target.

Any payouts under the OCPB are made in three annual installments: 34% of each amount is payable at the end of the fiscal year; an additional 33% of each amount is payable at the end of the next fiscal year, and the final 33% of each amount is payable at the end of the second following fiscal year. Installments not yet paid are held by and subject to the terms of the KLA-Tencor Executive Deferred Savings Program. The OCPB will be administered under the Bonus Plan, once the Bonus Plan is approved by the stockholders.

Long-term Incentives: Long-term incentives are currently provided under the 2004 Equity Incentive Plan through grants of stock options and restricted stock units. Such awards provide value to Executives through the growth in value of the Company's Common Stock. The Compensation Committee believes that employee equity ownership is highly motivating, provides a major incentive for employees to build stockholder value and serves to align the interests of employees with those of stockholders.

Grants of stock options to Executives are based upon each Executive's relative position, responsibilities, historical and expected contributions to the Company, and the Executive's existing stock ownership and previous option grants. Stock options are granted at market price on the date of grant and will provide value to the Executive only when the price of the Company's Common Stock increases over the exercise price.

In addition to stock options, grants of restricted stock units were made to executive officers and other key members of senior management in fiscal year 2005. The purpose of these grants was to ensure retention of these key executives, and as a result, they have significant vesting restrictions—50% of the award vests four years from the date of grant, and 50% five years from the date of the grant. The sizeable awards to the Chief Executive Officer and the four other most highly compensated Company executives were intended as one-time awards, and are not anticipated to be made in the future. Notwithstanding this, the Company and the Committee may, in future years, adopt a long-term incentive strategy that uses other equity-based vehicles in addition to or as a replacement for stock options.

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Chief Executive Officer Compensation

The Committee's philosophy on executive compensation is evident in the compensation decisions reached regarding Kenneth L. Schroeder, the Company's Chief Executive Officer, for fiscal year 2005 performance. The components of that program are outlined below:

Employment Agreement: On February 23, 2005, the Company entered into a new employment agreement with Mr. Schroeder (the "Schroeder Agreement"). Under this agreement, the right to maintain or increase Mr. Schroeder's base salary and ongoing participation in the Company's annual and long-term incentive programs is reserved by the Committee. In recommending the Schroeder Agreement for approval by the Board of Directors, the Committee reviewed competitive data provided by the Committee's compensation consultants and information regarding other comparable companies.

Base Salary: During the last fiscal year, as part of the annual compensation review process, the Committee determined to raise Mr. Schroeder's base salary from \$581,000 to \$750,000, after a review of competitive and comparable data of other executives provided by the Company's human resources staff and compensation consultants. The Committee determined that the increase was warranted based on the data provided and in consideration of Mr. Schroeder's job performance, experience and talent.

Annual Incentives: For fiscal year 2005, Mr. Schroeder's target bonus under both the Executive Incentive Plan and the OCPB were equal to 100% of salary. In determining actual incentive compensation payable to Mr. Schroeder for actual performance in fiscal year 2005, the Committee relied on the results of the Executive Incentive Plan and the OCPB. For the financial component of the Executive Incentive Plan, the Committee awarded Mr. Schroeder 81% of target, based primarily on achievement of pre-tax profitability goals. For the strategic component of the Executive Incentive Plan, the Committee awarded Mr. Schroeder 62% of target, based on goals primarily related to growth in revenue across business units.

Mr. Schroeder's total annual incentive payout for fiscal year 2005 resulting from these two programs was \$2,018,130. The Executive Incentive Plan generated a payout of 71% of target, or \$532,898. The OCPB generated a payout of 199% of target, or \$1,485,232, which vests over three years.

For fiscal year 2006, Mr. Schroeder's target bonus under both the Executive Incentive Plan and the OCPB will remain at 100% of salary, based on the Committee's consideration of the Company's revenue and profit in the prior fiscal year, the Company's market capitalization, and data from comparable companies supplied by the Compensation Committee's compensation consultants, in addition to Mr. Schroeder's expected performance and continuing contributions to the Company.

Long-Term Incentives: In fiscal year 2005, the Board of Directors granted Mr. Schroeder stock options exercisable for an aggregate of 348,300 shares of Common Stock ("2005 Options"). The following outlines the vesting schedule for each grant that makes up the 2005 Options: 11,130 of the 2005 Options were granted as part of a 2004 focal grant and become exercisable 20% after one year, then in equal installments over the subsequent 48 months; 11,370 of the 2005 Options become exercisable 20% after three years, then in equal installments over the subsequent 48 months; 75,000 of the 2005 Options become exercisable 20% after one year, then in equal installments over the subsequent 48 months; 75,800 of the 2005 Options become exercisable 20% after four years, then in equal installments over the subsequent 48 months; and the final 175,000 of the 2005 Options vest in their entirety on July 1, 2007.

In addition to stock options, Mr. Schroeder received an award of 100,000 restricted stock units as a participant in the retention program covering the Company's top executive officers. These units will vest in their entirety on July 1, 2007. Consistent with the terms of awards to other participants, these shares have significant vesting restrictions—50% of the award vests four years from the date of grant, and 50% five years after grant—and are intended as a one-time award.

Stock Ownership Guidelines

In fiscal year 2004, the Company adopted programs, approved by the Board of Directors, pursuant to which each Company executive at or above a specified salary grade level, and each member of the Board of Directors, is required to own a prescribed number of shares of Common Stock of the Company by June 30, 2009. These ownership requirements increase gradually until the June 30, 2009 deadline and are based on a number of shares as outlined in the table below:

Title	Shares
CEO	33,500
COO	15,000
CFO/EVP	7,500
GVP/CTO	4,650
VP/GM	2,650
Director	1,000

In 2004, each executive covered under this requirement adopted a five-year program detailing a plan to reach full compliance with such guidelines by 2009.

Deductibility of Compensation Under Internal Revenue Code Section 162 (m)

Section 162(m) of the Internal Revenue Code, adopted in 1993, imposes a \$1 million cap, subject to certain exceptions, on the deductibility to a company of compensation paid to the five executive officers named in such company's proxy statement. In order to qualify for an exception and retain deductibility of compensation in excess of \$1 million U.S. Dollars paid to any of the named executive officers in any taxable year, such compensation must be classified as "performance-based". The Committee considers the desirability of structuring incentive compensation arrangements so as to qualify for such deductions.

The Company's equity compensation programs, including the 2004 Equity Incentive Plan approved by stockholders at the last annual meeting, are structured so that compensation from such programs is "performance-based" when earned. Notwithstanding this, the restricted stock awards made in fiscal 2005 were not structured to qualify for deductions, in order to protect favorable fixed accounting treatment. Additionally, cash compensation voluntarily deferred by the executive officers named in this Proxy Statement under the Company's Deferred Compensation Plans is not subject to the Section 162(m) cap until the year paid.

Annual incentive compensation has historically not been structured to qualify under Section 162(m). Under Proposal 2 in this Proxy Statement, the Company's stockholders are being asked to approve the KLA-Tencor Internal Revenue Code 162(m) Performance Bonus Plan which is structured to qualify incentive compensation as "performance-based" for fiscal years beginning in 2006.

Compensation paid in fiscal 2005 subject to the Section 162(m) cap is expected to exceed \$1 million for Mr. Schroeder and Mr. Kispert. The Committee thus believes that the Company will be subject to limitations on the deductibility of compensation paid to these named executive officers for fiscal year 2005.

The Committee believes that, with the approval of the KLA-Tencor Performance Bonus Plan, the risk of future lost deductions will be minimized. The Committee also continues to consider other steps which might be in the Company's best interests to comply with Section 162(m), while reserving the right to award future compensation which would not comply with the Section 162(m) requirements for non-deductibility if the Compensation Committee concluded that this was in the Company's best interests.

MEMBERS OF THE COMPENSATION COMMITTEE

Robert T. Bond, Chairman
Edward W. Barnholt
Michael E. Marks
Lida Urbaneck

Compensation Committee Interlocks

The members of the Compensation Committee are set forth in the preceding section. There are no members of the Compensation Committee who were officers or employees of the Company or any of its subsidiaries during the fiscal year, formerly officers of the Company, or had any relationship otherwise requiring disclosure hereunder.

REPORT OF THE AUDIT COMMITTEE

Audit Committee

The Company's Audit Committee is comprised of four non-employee Directors, each of whom meet current standards of independence and financial experience requirements of the Nasdaq National Market. The Board has determined that H. Raymond Bingham is an "audit committee financial expert" within the meaning of the rules promulgated by the Securities and Exchange Commission. For fiscal year 2005, H. Raymond Bingham, Robert T. Bond, Richard J. Elkus, Jr. and Stephen P. Kaufman served as members on the Audit Committee. Mr. Bingham served as the Chairman of the Audit Committee for fiscal year 2005. The Board of Directors has adopted a written charter for the Audit Committee that details the responsibilities of the Audit Committee and was attached as Exhibit A to the Proxy Statement related to the 2003 Annual Meeting. This report relates to the activities undertaken by the Audit Committee in fulfilling such responsibilities. The charter is reviewed at least annually for changes, as appropriate, and is posted on the Company's website at <http://ir.kla-tencor.com>, in the Investor Presentations and Corporate Governance section.

KLA-Tencor's management is responsible for establishing and maintaining a system for internal controls and the financial reporting process. The Audit Committee is responsible for overseeing KLA-Tencor's auditing, accounting and financial reporting processes, its system of internal controls, and legal and ethical compliance. This report relates to the activities undertaken by the Audit Committee in fulfilling such responsibilities. During fiscal year 2005, the Audit Committee reviewed, discussed and provided input on the Company's audited consolidated financial statements contained in KLA-Tencor's Annual Report on Form 10-K for the fiscal year ended June 30, 2005. The Audit Committee also met routinely with the independent auditors, with and without members of the KLA-Tencor management team present, to evaluate and approve the Company's internal controls and the overall quality of the Company's financial reporting. The Audit Committee also met with the Company's Chief Executive Officer and Chief Financial Officer to discuss and act, as necessary, on accounting issues and risks facing the Company.

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The Audit Committee also discussed with the Company's independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61, (Communication With Audit Committees).

The Audit Committee received the written disclosures and the letter from the auditors required by Independence Standards Board Standard No. 1, (Independence Discussions With Audit Committees). In addition, on a quarterly basis they reaffirmed their independence. After reviewing such information, the Audit Committee determined that the independent auditors are independent from management and KLA-Tencor. The Audit Committee also concluded that the provision of services covered by fees paid to its independent auditors was compatible with maintaining their independence.

Based on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors, and the Board of Directors approved, the inclusion of the audited financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2005, filed with the Securities and Exchange Commission.

MEMBERS OF THE AUDIT COMMITTEE

H. Raymond Bingham, Chairman
 Robert T. Bond
 Richard J. Elkus, Jr.
 Stephen P. Kaufman

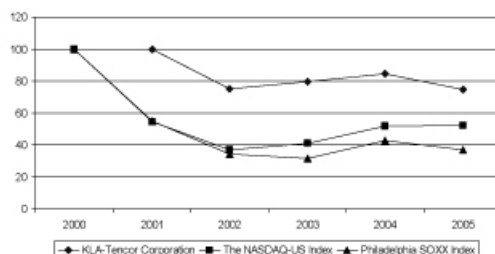
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PERFORMANCE GRAPH

The stock price performance shown on the following graph is not necessarily indicative of future stock price performance.

Comparison of Five Year Cumulative Total Return Among KLA-Tencor Corporation, The NASDAQ—US Index and The Philadelphia SOXX Index (1)

Five Year Cumulative



	2000	2001	2002	2003	2004	2005
KLA-Tencor Corporation	100	99.842	75.116	79.334	84.320	74.811
The NASDAQ-US Index	100	54.295	36.986	41.065	51.762	52.320
Philadelphia SOXX Index	100	54.719	33.982	31.537	42.532	36.743

CERTAIN TRANSACTIONS AND OTHER MATTERS

Change of Control Agreements

On February 23, 2005, the Company entered into a new employment agreement with Mr. Schroeder (the "Schroeder Agreement") which replaces and supersedes both Mr. Schroeder's existing Amended Retention and Non-Competition Agreement dated April 29, 1998 and the Addendum thereto dated November 15, 2001 (together, the "Prior Agreement"). The Schroeder Agreement addresses Mr. Schroeder's employment contract with the Company as President and Chief Executive Officer. The differences to the Prior Agreement that are material to the Company, which are generally subject to Mr. Schroeder not violating his agreement not to compete with the Company, are as follows:

- Extending the term of Mr. Schroeder's part-time employment following his full-time employment from three years to five years (which allows the corresponding continued vesting of his equity awards);
- Allowing all equity awards to continue vesting during Mr. Schroeder's part-time employment rather than just those equity awards granted more than twelve months prior to the date upon which he commences part-time employment;
- Most equity awards which are granted to Mr. Schroeder on and subsequent to September 21, 2004 will have certain termination, acceleration and exercisability extension provisions depending upon the circumstances under which Mr. Schroeder ceases to be Chief Executive Officer and/or terminates employment; and
- The "double-trigger" vesting acceleration protection upon certain terminations of Mr. Schroeder's employment following a change in control of the Company includes all equity awards instead of only stock options.

In connection with the merger between KLA Instruments Corporation and Tencor Instruments (effective April 30, 1997) the Company entered into identical employment arrangements, subsequently amended, (the "Retention and Non-Competition Agreement") with Messrs. Levy and Schroeder. Mr. Schroeder's Retention and Non-Competition Agreement was replaced and superseded in its entirety by the Schroeder Agreement described above. The arrangement as to Mr. Levy, as amended, provides that certain benefits would be paid if certain events took place after April 30, 1997. The purpose of this arrangement was to retain the services of Mr. Levy to ensure the continued smooth transition associated with the merger. The terms of that arrangement provide that if Mr. Levy were to leave the Company after April 30, 1998, subject to releasing the Company from all claims, and in connection with working part-time for 36 months, he will receive (i) his base salary for the first 24 months of part-time employment, (ii) a mutually agreeable level of compensation per month for the final 12 months of part-time employment, (iii) an annual bonus (based on an achievement of 100% of bonus objectives) in the fiscal year of his transition to part-time employment, (iv) a bonus paid in the fiscal year following the payment of the annual bonus above, (based on achievement of 100% of his individual bonus objectives) and (v) a pro-rated bonus for the fiscal year in which part-time employment ended. During the periods of part-time employment, all options to exercise stock of the Company, which were granted more than 12 months prior to the termination of full-time employment, will continue to vest. The same benefits shall be payable in the event the Company terminates his employment without cause. If he is terminated for cause (defined as (i) gross negligence or willful misconduct in connection with the performance of duties, (ii) conviction of or plea of nolo contendere to any felony, or (iii) the

embezzlement or misappropriation of Company property) then he will receive a lump-sum payment equal to 25% of his base salary.

In fiscal year 2002, the Board of Directors approved individual "change-in-control" agreements for Messrs. Schroeder and Kispert. The Schroeder Agreement described above supersedes and replaces this arrangement in its entirety as to Mr. Schroeder. The change-in-control provisions of this agreement as it relates to Mr. Kispert take effect if his employment is terminated involuntarily or constructively within two years after a change in control of the Company. If the provisions become effective, Mr. Kispert, would become eligible to receive: (i) an amount equal to two times his annual compensation, (ii) an amount equal to two times his bonus amount, (iii) continuation of health benefits for two years, and (iv) full acceleration of vesting for all options held. For the purpose of this agreement, a change in control occurs upon merger of the Company with or into another corporation, or a change in more than half of the total voting power of the Company, or upon the sale of substantially all of the assets of the Company.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's executive officers, Directors, and persons who own more than ten percent of a registered Class of the Company's equity securities to file reports of ownership and changes in ownership with the SEC. Executive officers, Directors and greater than ten percent stockholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of the copies of such forms received by it, the Company believes that, with the exceptions noted below, during fiscal 2005 all executive officers, Directors and greater than ten percent stockholders of the Company complied with all applicable filing requirements. Due to an administrative error on the part of the Company, three Forms 4 filed for Mr. Kispert during the fiscal year ending June 30, 2005 incorrectly allocated his share holdings between indirect and direct holdings. The Company filed a Form 5 on behalf of Mr. Kispert to fix this error. Due to a Company administrative error, the following individuals failed to timely file a Form 4 for one option grant (two option grants in the case of Ken Schroeder): Avi Cohen, Lance Glasser, Jeff Hall, John Kispert, Maureen Lamb, Ken Levy, Stuart Nichols, Ken Schroeder, Richard Wallace and Stan Yarbrow. Forms 4 reporting these option grants were filed five business days after the date of grant.

KLA-TENCOR CORPORATION
PERFORMANCE BONUS PLAN

1. Purposes of the Plan. The Plan is intended to increase stockholder value and the success of the Company by motivating Participants (1) to perform to the best of their abilities, and (2) to achieve the Company's objectives. The Plan's goals are to be achieved by offering Participants the opportunity to earn incentive awards for the achievement of goals relating to the performance of the Company. The Plan is intended to permit the payment of bonuses that qualify as performance-based compensation under section 162(m) of the Code.

2. Definitions.

(a) "Actual Award" means as to any Performance Period, the actual cash award (if any) payable to the Participant for a Performance Period. Each Actual Award is determined by a Payout Formula for a Performance Period, subject to the Committee's authority under Section 8(a) to eliminate or reduce the Actual Award otherwise payable.

(b) "Base Salary" means any Performance Period, the Participant's earned salary during that Performance Period. Such Base Salary shall be before both (a) deductions for taxes or benefits, and (b) deferrals of compensation pursuant to Company-sponsored plans.

(c) "Board" means the Board of Directors of the Company.

(d) "Bookings" means net purchase orders received from third parties.

(e) "Cash Flow" means cash generated from operating activities.

(f) "Code" means the Internal Revenue Code of 1986, as amended.

(g) "Committee" means the Compensation Committee of the Board, or a sub-committee of the Compensation Committee, which shall consist solely of two or more members of the Board who are not employees of the Company and who otherwise qualify as "outside directors" within the meaning of Section 162(m).

(h) "Company" means KLA-Tencor Corporation.

(i) "Determination Date" means the latest possible date that will not jeopardize a Target Award or Actual Award's qualification as Performance-Based Compensation.

(j) "Fiscal Year" means a fiscal year of the Company.

(k) "Maximum Award" means as to any Participant for any Performance Period, \$4 million.

(l) "Participant" means an eligible executive or key employee of the Company participating in the Plan for a Performance Period.

(m) "Payout Formula" means as to any Performance Period, the formula or payout matrix established by the Committee pursuant to Section 7 in order to determine the Actual Awards (if any) to be paid to Participants. The formula or matrix may differ from Participant to Participant.

(n) "Performance-Based Compensation" means compensation that is intended to qualify as "performance-based compensation" within the meaning of Section 162(m).

(o) "Performance Goals" means the goal(s) (or combined goal(s)) determined by the Committee (in its discretion) to be applicable to a Participant for a Target Award for a Performance Period. As determined by the Committee, the Performance Goals applicable to an Actual Award and/or Target Award may provide for a targeted level or levels of achievement using one or more of the following measures: (i) Bookings, (ii) Cash Flow, (iii) Pre-Tax Margin, (iv) Profit, (v) Return on Assets, (vi) Return on Invested Capital, and/or (vii) Revenue. Performance Goals may differ from Participant to Participant, Performance Period to Performance Period and from award to award. Any Performance Goal may be tested or measured, as applicable, (1) in absolute terms, (2) in relative terms (including, but not limited, the passage of time and/or against other companies or financial metrics), (3) on a per

share and/or share per capita basis, (4) against the performance of the Company as a whole or against particular segments or products of the Company, and/or (5) on a pre-tax or after-tax basis. On or prior to the Determination Date, the Committee shall determine whether any element(s) (for example, but not by way of limitation, the effect of mergers or acquisitions) shall be included in or excluded from the calculation of any Performance Goal with respect to any Participants (whether or not such determinations result in any Performance Goal being measured on a basis other than generally accepted accounting principles).

(p) "Performance Period" means any Fiscal Year or such other period shorter or longer than a Fiscal Year, as determined by the Committee in its sole discretion. However, no Performance Period shall have a duration longer than three Fiscal Years. Also, with respect to any Participant, no more than three Performance Periods shall exist at any one time.

(q) "Plan" means this Performance Bonus Plan, as amended from time to time.

(r) "Pre-Tax Margin" means the percentage equal to Profit before taxes, divided by Revenue.

(s) "Profit" means net income.

(t) "Return on Assets" means the percentage equal to Profit, divided by average net assets.

(u) "Return on Invested Capital" means the percentage equal to Profit, divided by average invested capital.

(v) "Revenue" means net sales to third parties.

(w) "Section 162(m)" means Section 162(m) of the Code, or any successor to Section 162(m), as that Section may be interpreted from time to time by the Internal Revenue Service, whether by regulation, notice or otherwise.

(x) "Target Award" means the target award payable under the Plan to a Participant for the Performance Period, expressed as a percentage of his or her Base Salary or a specific dollar amount, as determined by the Committee in accordance with Section 6.

3. Plan Administration.

(a) The Committee shall be responsible for the general administration and interpretation of the Plan and for carrying out its provisions. Subject to the requirements for qualifying compensation as Performance-Based Compensation, the Committee may delegate specific administrative tasks to Company employees or others as appropriate for proper administration of the Plan. Subject to the limitations on Committee discretion imposed under Section 162(m), the Committee shall have such powers as may be necessary to discharge its duties hereunder, including, but not by way of limitation, the following powers and duties, but subject to the terms of the Plan:

(i) discretionary authority to construe and interpret the terms of the Plan, and to determine eligibility, Actual Awards and the amount, manner and time of payment of any Actual Awards hereunder;

(ii) to prescribe forms and procedures for purposes of Plan participation and distribution of Actual Awards; and

(iii) to adopt rules, regulations and bylaws and to take such actions as it deems necessary or desirable for the proper administration of the Plan.

(b) Any rule or decision by the Committee that is not inconsistent with the provisions of the Plan shall be conclusive and binding on all persons, and shall be given the maximum deference permitted by law.

4. Eligibility. The employees eligible to participate in the Plan for a given Performance Period shall be employees of the Company who are designated by the Committee in its sole discretion. No person shall be automatically entitled to participate in the Plan.

5. Performance Goal Determination. The Committee, in its sole discretion, shall establish the Performance Goals for each Participant for the Performance Period. Such Performance Goals shall be set forth in writing on or prior to the Determination Date.

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6. Target Award Determination. The Committee, in its sole discretion, shall establish a Target Award for each Participant. Each Participant's Target Award shall be determined by the Committee in its sole discretion, and each Target Award shall be set forth in writing prior to the Determination Date.

7. Determination of Payout Formula or Formulae. On or prior to the Determination Date, the Committee, in its sole discretion, shall establish a Payout Formula or Formulae for purposes of determining the Actual Award (if any) payable to each Participant. Each Payout Formula shall (a) be set forth in writing prior to the Determination Date, (b) be based on a comparison of actual performance to the Performance Goals, (c) provide for the payment of a Participant's Target Award if the Performance Goals for the Performance Period are achieved, and (d) provide for an Actual Award greater than or less than the Participant's Target Award, depending upon the extent to which actual performance exceeds or falls below the Performance Goals. Notwithstanding the preceding, in no event shall a Participant's Actual Award for any Performance Period exceed the Maximum Award.

8. Determination of Awards; Award Payment

(a) Determination and Certification. After the end of each Performance Period, the Committee shall certify in writing (for example, in its meeting minutes) the extent to which the Performance Goals applicable to each Participant for the Performance Period were achieved or exceeded. The Actual Award for each Participant shall be determined by applying the Payout Formula to the level of actual performance that has been certified by the Committee. Notwithstanding any contrary provision of the Plan, the Committee, in its sole discretion, may (a) eliminate or reduce the Actual Award payable to any Participant below that which otherwise would be payable under the Payout Formula, and (b) determine whether or not a Participant will receive an Actual Award in the event the Participant incurs terminates his or her employment with the Company prior to the date the Actual Award otherwise is to be paid.

(b) Right to Receive Payment. Each Actual Award that may become payable under the Plan shall be paid solely from the general assets of the Company. Nothing in this Plan shall be construed to create a trust or to establish or evidence any Participant's claim of any right to payment of an Actual Award other than as an unsecured general creditor with respect to any payment to which he or she may be entitled.

(c) Form of Payment. The Company shall pay all Actual Awards in cash paid to the Participant.

(d) Timing of Payments. Except as provided in Section 8(e), the Company shall distribute amounts payable to Participants as soon as is practicable following the determination and written certification of the Actual Award for a Performance Period, but in no event later than 90 days after the end of the applicable Performance Period.

(e) Deferral. The Committee may defer payment of, and apply a vesting schedule to, one or more Actual Awards, or any portion(s) thereof, as the Committee (in its sole discretion) determines, except that no such vesting schedule may exceed four years. In addition, the Committee, in its sole discretion, may permit a Participant to defer receipt of the payment of cash that would otherwise be delivered to a Participant under the Plan. Any such deferral elections shall be subject to such rules and procedures as shall be determined by the Committee in its sole discretion.

9. Term of Plan. Subject to approval of the Company's stockholders at the Company's 2005 Annual Meeting, the Plan shall become effective on July 1, 2005. The Plan shall continue until terminated under Section 10 of the Plan.

10. Amendment and Termination of the Plan. The Committee may amend, modify, suspend or terminate the Plan, in whole or in part, at any time, including the adoption of amendments deemed necessary or desirable to correct any defect or to supply omitted data or to reconcile any inconsistency in the Plan or in any Actual Award granted hereunder; provided, however, that no amendment, alteration, suspension or discontinuation shall be made that would (i) impair any payments to Participants made prior to such amendment, modification, suspension or termination, unless the Committee has made a determination that such amendment or modification is in the best interests of all persons to whom Actual Awards have theretofore been granted; provided further, however, that in no event may such an amendment or modification result in an increase in the amount of compensation payable pursuant to such Actual Award or (ii) cause compensation that is, or may become, payable hereunder to fail to qualify as Performance-Based Compensation. To the extent necessary or advisable under applicable law,

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including Section 162(m), Plan amendments shall be subject to stockholder approval. At no time before the actual distribution of funds to Participants under the Plan shall any Participant accrue any vested interest or right whatsoever under the Plan except as otherwise stated in this Plan.

11. Withholding. Distributions pursuant to this Plan shall be subject to all applicable federal and state tax and withholding requirements.

12. Employment. This Plan does not constitute a contract of employment or compensation or impose on either the Participant or the Company any obligation to retain the Participant as an employee. This Plan does not change the status of the Participant as an employee at will, the policies of the Company regarding termination of employment, nor guarantee further continuing participation in the Plan.

13. Successors. All obligations of the Company under the Plan, with respect to awards granted hereunder, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business or assets of the Company.

14. Indemnification. Each person who is or shall have been a member of the Committee, or of the Board, shall be indemnified and held harmless by the Company against and from (a) any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan or any award, and (b) from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit, or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's Certificate of Incorporation or Bylaws, by contract, as a matter of law, or otherwise, or under any power that the Company may have to indemnify them or hold them harmless.

15. Nonassignment. The rights of a Participant under this Plan shall not be assignable or transferable by the Participant except by will or the laws of intestacy.

16. Governing Law. The Plan shall be governed by the laws of the State of California (without regard to its conflict of laws provisions).

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KLA-TENCOR CORPORATION
C/O EQUISERVE
150 ROYALL STREET
CANTON, MA 02021
MS 45-02-62

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on November 3, 2005. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE STOCKHOLDER COMMUNICATIONS

If you would like to reduce the costs incurred by KLA-Tencor Corporation in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access stockholder communications electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time on November 3, 2005. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to KLA-Tencor Corporation, c/o ADP, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

KLATC1

KEEP THIS PORTION FOR YOUR RECORDS
 DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

KLA-TENCOR CORPORATION (the "Company")

The Board of Directors Recommends a Vote "FOR" all Nominees for Director, "FOR" Proposal 2, "FOR" Proposal 3, and "AGAINST" Proposal 4.

Vote On Directors

1. To elect three Class I Directors to each serve for a three year term and until their successors are duly elected.
 - a. Kenneth Levy
 - b. Jon D. Tompkins
 - c. Lida Urbaneck

For All **Withhold All** **For All Except**

To withhold authority to vote, mark "For All Except" and clearly write the nominee's letter on the line below.

Vote On Proposals

2. To approve the Company's Internal Revenue Code Section 162(m) Performance Bonus Plan.
3. To ratify the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2006.
4. Stockholder proposal regarding majority voting for Directors.

For **Against** **Abstain**

To transact such other business as may properly come before the meeting or any adjournment or postponement thereof.

In their discretion, the proxy holders are authorized to vote on all such other matters as may properly come before the meeting or any adjournment or postponement thereof.

Please sign exactly as your name appears on the stock certificate(s), date and return this Proxy promptly in the postage-paid envelope provided or vote by Internet or by telephone. Please correct your address before returning this Proxy. Persons signing in a fiduciary capacity should so indicate. If shares are held by joint tenants or as community property, both should sign.

HOUSEHOLDING ELECTION - Please indicate if you consent to receive certain future stockholder communications in a single package per household

Yes **No**

 Signature (PLEASE SIGN WITHIN BOX) Date

 Signature (Joint Owners) Date

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

**KLA-TENCOR CORPORATION
Notice of Annual Meeting of Stockholders
November 4, 2005**

To the Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of KLA-Tencor Corporation (the "Company"), a Delaware corporation, will be held on Friday, November 4, 2005 at 1:00 P.M., local time, at the Company's offices located at Three Technology Drive, Milpitas, California 95035, for the purposes stated on the reverse side.

The undersigned hereby appoints John H. Kispert and Stuart J. Nichols, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side, all of the shares of Common Stock of KLA-Tencor Corporation that the undersigned is entitled to vote at the Annual Meeting of Stockholders, and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED STOCKHOLDER. IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES LISTED ON THE REVERSE SIDE FOR THE BOARD OF DIRECTORS, FOR PROPOSALS 2 AND 3, AND AGAINST PROPOSAL 4.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED POSTAGE-PAID ENVELOPE.

**SEE REVERSE
SIDE**

CONTINUED AND TO BE SIGNED ON REVERSE SIDE

**SEE REVERSE
SIDE**