# **SCHEDULE 14A**

(Rule 14a-101)

# SCHEDULE 14A INFORMATION

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

	he Registrant [ ] Party other than the Registrant [ ]						
Check the	appropriate box:						
Comr Comr Rule [X] Defin	ninary Proxy Statement [_] Soliciting Material Under Rule 14a-12 dential, For Use of the mission Only (as permitted by 14a-6(e)(2)) nitive Proxy Statement itive Additional Materials						
	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	of Filing Fee (Check the appropriate box):						
[_] No	fee required.						
[_] Fee	e computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.						
(1)	Title of each class of securities to which transaction applies:						
(2)	Aggregate number of securities to which transaction applies:						
	Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):						
(4)	Proposed maximum aggregate value of transaction:						
(5)	Total fee paid:						
[_] Fee	e paid previously with preliminary materials:						
for	eck box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing which the offsetting fee was paid previously. Identify the previous filing by registration statement mber, or the Form or Schedule and the date of its filing.						
(1)	Amount Previously Paid:						
(2)	Form, Schedule or Registration Statement No.:						
(3)	Filing Party:						
(4)	Date Filed:						



# KLA-TENCOR CORPORATION

# NOTICE OF ANNUAL MEETING OF STOCKHOLDERS NOVEMBER 9, 2001

To the Stockholders:		

# YOUR VOTE IS IMPORTANT

All stockholders are cordially invited to attend the meeting in person; however, to assure your representation at the 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 meeting may vote in person even if he or she returned a proxy.

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 9, 2001 at 11:00 a.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 III directors to each serve for a three-year term and until their successors are duly elected.
- 2. To ratify the appointment of PricewaterhouseCoopers LLP as independent accountants of the Company for the fiscal year ending June 30, 2002.
- 3. To transact such other business as may properly come before the meeting or any adjournment or 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 14, 2001 are entitled to notice of, and to vote at the meeting and any adjournment thereof.

Sincerely,

By: Larry W. Sonsini

Larry W. Sonsini

Secretary

San Jose, California October 1, 2001

# 2001 ANNUAL MEETING OF STOCKHOLDERS OF KLA-TENCOR CORPORATION

To be Held on November 9, 2001

#### PROXY STATEMENT

#### INFORMATION CONCERNING SOLICITATION AND VOTING

#### General

The enclosed Proxy is solicited on behalf of the Board of Directors of KLA-Tencor Corporation (the "Company") for use at the Annual Meeting of Stockholders to be held on Friday, November 9, 2001 at 11:00 a.m., local time, or at any adjournment(s) thereof (the "Annual Meeting"), for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. The Annual Meeting will be held at the Company's offices at Three Technology Drive, Milpitas, California 95035. The Company's principal executive offices are located at 160 Rio Robles, San Jose, California 95134 and its telephone number is (408) 875-3000.

These proxy solicitation materials were mailed on or about October 1, 2001 to all stockholders entitled to vote.

#### Record Date

Only stockholders of record at the close of business on September 14, 2001 are entitled to notice of and to vote at the Annual Meeting. As of September 14, 2001, 188,175,083 shares of the Company's Common Stock, \$0.001 par value, were issued and outstanding.

# **Revocability of Proxies**

Any Proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by delivering to the Company a written notice of revocation or a duly executed proxy bearing a later date or by attending the meeting and voting in person.

#### Quorum; Abstentions; Broker Non-votes

The required quorum for the transaction of business at the Annual Meeting is a majority of the votes eligible to be cast by holders of shares of Common Stock issued and outstanding on the record date. Shares that are voted "FOR," "AGAINST," "ABSTAIN" or "WITHHELD FROM" a matter are treated as being present at the Annual Meeting for purposes of establishing a quorum and are also treated as shares entitled to vote at the Annual Meeting (the "Votes Cast") with respect to such matter.

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). Accordingly, abstentions will have the same effect as a vote against the proposal.

Broker non-votes will be counted for purposes of determining the presence or absence of a quorum for the transaction of business, but will not be counted for purposes of determining the number of Votes Cast with respect to the particular proposal on which the broker has expressly not voted. Accordingly, broker non-votes will not affect the outcome of the voting on a proposal that requires a majority of the Votes Cast.

#### **Voting and Solicitation**

On all matters to be voted upon, each share has one vote.

The cost of soliciting proxies will be borne by the Company. The Company has retained the services of Automatic Data Processing ("ADP") to aid in the solicitation of proxies from brokers, bank nominees and other institutional owners. The Company estimates that it will pay ADP a fee of approximately \$100,000 for forwarding solicitation material to beneficial and registered stockholders and processing the results. Proxies may be solicited by certain of the Company's directors, officers and regular employees, without additional compensation, personally or by telephone or telegram.

A copy of the Company's Annual Report to Stockholders on Form 10-K for the year 2001, including financial statements, has been sent simultaneously with this Proxy Statement or has been previously provided to all stockholders entitled to vote at the Annual Meeting. In addition, upon written request to the Company at its principal executive offices, attention Assistant Secretary, the Company will provide without charge to each person solicited a copy of the Company's Annual Report. It is also available at the worldwide website of the Securities and Exchange Commission (www.sec.gov).

# **Deadline for Receipt of Stockholder Proposals**

Proposals of stockholders of the Company which are intended to be presented by such stockholders at the Company's annual meeting in 2002 must be received by the Company at its principal executive offices, attention Assistant Secretary, no later than June 6, 2002 and must satisfy the conditions established by the Securities and Exchange Commission for stockholder proposals in order that such proposals may be included in the proxy statement and form of proxy relating to that meeting.

The attached proxy card grants the proxy holders'discretionary authority to vote on any matter raised at the Annual Meeting. If a stockholder intends to submit a proposal at the Company's annual meeting in 2002, which is not eligible for inclusion in the proxy statement and form of proxy relating to that meeting, the stockholder must give appropriate notice no later than August 23, 2002. If such a stockholder fails to comply with the foregoing notice provision the Company intends to draft the proxy so that the proxy holders will be allowed to use their discretionary voting authority if the proposal is raised at the Company's annual meeting in 2002.

#### SECURITY OWNERSHIP

#### **Principal Stockholders**

During the last fiscal year, the following person was known to the Company to be the beneficial owner of more than 5% of the Company's Common Stock:

Name and Address	Number of Shares Owned	Total (1)
FMR Corp. (2)	16,386,089	8.84%
82 Devonshire Street		
Boston, MA 02109		

- (1) Based on 188,175,083 outstanding shares of Common Stock as of September 14, 2001.
- (2) Based on information provided pursuant to Schedule 13F filed with the Securities and Exchange Commission (the "SEC") on June 30, 2001. FMR Corp. is a parent holding company and includes shares held by Fidelity Management &Research Company, Fidelity Management Trust Company and Fidelity International Limited.

2

# Security Ownership of Management

The following table sets forth the beneficial ownership of Common Stock of the Company as of September 14, 2001 by all directors and nominees, 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	Amount Owned	Approximate Percentage Owned*
Kenneth Levy (1)	3,702,643	1.97
Kenneth L. Schroeder (2)	1,328,902	**
Edward W. Barnholt (3)	55,832	**
H. Raymond Bingham (4)	20,000	**
Robert T. Bond (5)	22,000	**
Richard J. Elkus, Jr. (6)	126,000	**
Dean O. Morton (7)	49,582	**
Jon D. Tompkins (8)	131,924	**
Lida Urbanek (9)	1,371,130	**
Gary E. Dickerson (10)	354,662	**
Edward C. Grady (11)	179,219	**
Neil Richardson (12)	196,627	**

8,455,579

4 49%

- \* Based on 188,175,083 outstanding shares of the Common Stock of the Company as of September 14, 2001.
- \*\* Less than 1%
- (1) Includes 755,822 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001, 2,035,866 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 658,000 shares which are held by the KGMW, LP.
- (2) Includes 804,382 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (3) Includes 54,686 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (4) Includes 20,000 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (5) Includes 20,000 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (6) Includes 25,375 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (7) Includes 36,248 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (8) Includes 61,278 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (9) Includes 42,954 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (10) Includes 141,772 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (11) Includes 57,509 shares, options for which are presently exercisable or will become exercisable, within 60 days of September 14, 2001.

3

- (12) Includes 47,938 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.
- (13) Includes 2,355,218 shares, options for which are presently exercisable or will become exercisable within 60 days of September 14, 2001.

#### PROPOSAL ONE

# TO ELECT THREE CLASS III DIRECTORS TO EACH SERVE FOR A THREE YEAR TERM AND UNTIL THEIR SUCCESSORS ARE DULY ELECTED.

#### **Nominees**

The Company has a classified board comprised of nine director positions consisting of three incumbent Class I directors (Kenneth Levy, Jon D. Tompkins and Lida Urbanek), three incumbent Class II directors (H. Raymond Bingham, Robert T. Bond, and Richard J. Elkus, Jr.) and three incumbent Class III directors (Edward W. Barnholt, Dean O. Morton, and Kenneth L. Schroeder). The Class I directors and the Class II directors will serve until the annual meetings of stockholders to be held in 2002 and 2003 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.

The term of the three Class III directors will expire on the date of the Annual Meeting. Three Class III directors of the Board of Directors are to be elected at the Annual Meeting. The nominees for election by the stockholders to these three positions are Edward W. Barnholt, Dean O. Morton and Kenneth L. Schroeder. If elected, the nominees will serve as directors until the Company's annual meeting of stockholders in 2004, or until their successors are 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 management may designate. The proxy holders also have been advised that, in the event any of the nominees shall not be available for election, a circumstance that is not currently expected, they may vote for the election of substitute nominees in accordance with their judgment. If additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them in such a manner as will assure the election of as many of the nominees as possible and, in such event, the specific nominees to be voted for will be determined by the proxy holders.

If a quorum is present and voting, the three nominees for Class III directors receiving the highest number of votes will be elected as Class III directors.

The following table sets forth certain information with respect to the Company's Board of Directors.

Name of Director	Age	Position	Director Since
Kenneth Levy	58	Chairman of the Board	1975
Kenneth L. Schroeder	55	President and Chief Executive Officer	1991
Edward W. Barnholt	58	Director	1995
H. Raymond Bingham	55	Director	2000
Robert T. Bond	58	Director	2000
Richard J. Elkus, Jr	66	Director	1997
Dean O. Morton	69	Director	1997
Jon D. Tompkins	61	Director	1997
Lida Urbanek	56	Director	1997

There are no family relationships between or among any directors or executive officers of the Company.

Kenneth Levy is a co-founder of KLA Instruments Corporation and since July 1, 1999 has been Chairman of the Board and a Director of KLA-Tencor. From July 1998 until June 30, 1999, he was the Chief Executive Officer and a Director. From April 30, 1997 until June 30, 1998 he was Chairman of the Board. From 1975 until April 30, 1997 he was Chairman of the Board and Chief Executive Officer of KLA Instruments Corporation. He currently serves on the boards of directors of Ultratech Stepper, Inc., SpeedFam-IPEC, Inc. and is a Director Emeritus of SEMI, an industry trade association.

*Kenneth L. Schroeder* has been President, Chief Executive Officer and a Director of KLA-Tencor since July 1, 1999. From November 1991 until June 30, 1999, he was President and Chief Operating Officer and a Director. He currently serves on the board of directors of SEMI, an industry trade association.

Edward W. Barnholt has been a Director of the Company since 1995. Since May 1999, Mr. Barnholt has been President, Chief Executive Officer and a director of Agilent Technologies, Inc. Mr. Barnholt was the Executive Vice President and General Manager of the Test and Measurement Organization of Hewlett-Packard Company from November 1996 to February 1999. He was elected a Senior Vice President of Hewlett-Packard in 1993 and an Executive Vice President in 1996. From December 1988 until 1990 he was General Manager of the Electronic Instrument Group of Hewlett-Packard. In July 1988 he was elected Vice President of Hewlett-Packard. Mr. Barnholt joined Hewlett-Packard in December 1966. He serves on the boards of directors of Agilent Technologies, Inc. and the Tech Museum of Innovation.

H. Raymond Bingham has been a Director of KLA-Tencor since August 2000. He has been the President and Chief Executive Officer of Cadence Design Systems, Inc. since May 1999. Prior to this position, he served as Executive Vice President and Chief Financial Officer of Cadence Design Systems, Inc. from April 1993 to April 1999. Prior to joining Cadence Design Systems, Inc., Mr. Bingham was Executive Vice President and Chief Financial Officer of Red Lion Hotels. He is the chairman of the board of Electronic Design Automation Consortium and also serves on the boards of directors of Cadence Design Systems, Inc., Legato Systems, Inc., and Onyx Software Corporation.

Robert T. Bond has been a Director of KLA-Tencor since August 2000. Mr. Bond has been a private investor since February 1998. 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.

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. He is the Chairman of the Board and a director of Voyan Technology. He currently serves on the boards of directors of SOPRA, Lam Research Corporation, and Virage Logic.

Dean O. Morton has been a Director of KLA-Tencor since April 1997. From June 1993 until April 1997 he was a director of Tencor Instruments. In October 1992 Mr. Morton retired as Executive Vice President, Chief Operating Officer and a director of Hewlett-Packard Company. Mr. Morton held various positions at Hewlett-Packard Company from 1960 until his retirement. Mr. Morton currently serves on the boards of directors of The Clorox Company, BEA Systems Inc., Cepheid, and Pharsight Corporation. Mr. Morton is also a trustee of the Metropolitan Series Fund and State Street Research Funds Group and Portfolios, Inc.

Jon D. Tompkins was Chairman of the Board from July 1998 to June 1999, when he retired his position as Chairman of the Board. Mr. Tompkins has continued to serve as a Director. From May 1997 until July 1998 he was Chief Executive Officer and a Director of KLA-Tencor. From April 1991 until April 1997 he 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

5

November 1993. He currently serves on the boards of directors of Blackhog, Cymer, Inc., Electro Scientific Industries, Credence Systems Corp., Levelite, Logic Vision, and the Community Foundation of Silicon Valley.

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.

# **Board Meetings and Committees**

The Board of Directors of the Company held a total of four meetings during the fiscal year ended June 30, 2001. The Board of Directors has an Audit Committee, a Compensation Committee and a Nominating Committee.

The Audit Committee, which consists of Mr. Bingham, Mr. Elkus and Mr. Morton, held five meetings during the last fiscal year. The Audit Committee recommends engagement of the Company's independent accountants, and is primarily responsible for approving the services performed by the Company's independent accountants and for reviewing and evaluating the Company's accounting principles and its system of internal accounting controls. The Compensation Committee, which consists of Mr. Barnholt, Mr. Bond and Mrs. Urbanek, held four meetings during the last fiscal year. The Compensation Committee reviews and approves the Company's executive compensation policy and makes recommendations concerning the Company's employee benefit plans. The Nominating Committee, which consists of Mr. Barnholt, Mr. Levy, Mr. Morton and Mr. Schroeder, held no formal meetings during the last fiscal year. A unanimous group of the disinterested members of the board of directors nominated the three Class III directors for election. The Nominating Committee is primarily responsible for identifying and evaluating the qualifications of all candidates for election to the Board of Directors. The Nominating Committee will consider nominations of all candidates for election to the Board of Directors. The Nominating Committee will consider nominations must notify the Company of their intent to do so and provide the Company with certain information set forth in the Company's bylaws on or before the date on which stockholder proposals to be included in the proxy statement for the stockholder meeting must be received by the Company.

During the fiscal year ended June 30, 2001, all incumbent Directors attended at least 75% of the aggregate number of meetings of the Board of Directors and meetings of the committees of the Board on which they served.

# **Compensation of Directors**

Members of the Board of Directors who are not employees of the Company 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 ("Outside Director") also receives a nonstatutory option to purchase 20,000 shares of Common Stock as of the date on which such director first becomes an Outside Director (the "First Option"). In addition, each Outside Director is granted a nonstatutory option to purchase an additional 10,000 shares of Common Stock on the date of the subsequent annual meetings on which he or she remains an Outside Director (the "Subsequent Option"). 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. Each Outside Director receives an annual fee of \$20,000 and \$1,000 for each meeting they attend (\$500 if participation is by telephone), plus expenses. Committee members receive \$500 per committee meeting they attend (\$250 if participation is by telephone).

#### **Required Vote**

Directors shall be elected by a plurality of the votes of the shares of the Company's Common Stock entitled to vote and represented in person or by proxy at the Annual Meeting. Votes against, votes withheld and broker nonvotes have no legal effect on the election of directors due to the fact that such elections are by a plurality.

Management recommends a vote FOR each of the Class III nominees listed above.

#### PROPOSAL TWO

# TO RATIFY THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS THE INDEPENDENT ACCOUNTANTS OF THE COMPANY FOR THE FISCAL YEAR ENDING JUNE 30, 2002.

The Board of Directors has selected PricewaterhouseCoopers LLP, independent accountants, to audit the consolidated financial statements of the Company for its 2002 fiscal year and recommends that the stockholders vote for ratification of such appointment. If there is a negative vote on such ratification, the Board of Directors will reconsider its selection. 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.

Audit Fees: The aggregate fees billed or to be billed by PricewaterhouseCoopers LLP for professional services rendered for (i) the audit of the Company's annual financial statements set forth in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2001, and (ii) the review of the Company's quarterly financial statements set forth in the Company's Quarterly Reports on Form 10-Q were approximately \$678,000.

Financial Information Systems Design and Implementation Fees: The aggregate fees billed by PricewaterhouseCoopers LLP for financial information systems design and implementation professional services for the fiscal year ended June 30, 2001 were approximately \$1,440,000.

All Other Fees: The aggregate fees billed by PricewaterhouseCoopers LLP for services other than those described above for the fiscal year ended June 30, 2001 were approximately \$2,092,000.

The Company's Audit Committee has determined that the provision of the services provided by PricewaterhouseCoopers LLP as set forth herein are compatible with maintaining PricewaterhouseCoopers' independence.

The board of directors recommends a vote FOR the ratification of the appointment of PricewaterhouseCoopers LLP as the Independent Accountants of the Company for the fiscal year ending June 30, 2002.

7

# **Executive Compensation**

The following table shows, as to the person who served as Chief Executive Officer during the fiscal year ended June 30, 2001 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, 2001, as well as such compensation for each such individual for the Company's previous two fiscal years.

# SUMMARY COMPENSATION TABLE

Long-term Compensation

Awards Pavouts Restricted Other Securities **Annual Compensation** Underlying LTIP All Other Annual Stock Compensation Award(s) Options/ **Payouts** Compensation (\$)4 Name and Principal Position Year Salary Bonus (\$) (\$)1 SARS(#)2 (\$)3 Kenneth Levv 2001 \$287,066 \$498,049 \$N/A -0-75,803 -0-\$42,564 Chairman of 2000 \$341,483 \$502,196 \$N/A -0-90,000 -0-\$79,681 the Board 1999 \$456,097 \$429,597 \$N/A -0-102,136 -0-\$10,005 Kenneth L. Schroeder 2001 \$554,403 \$959,894 \$N/A -0-151,600 -0-\$84,128 President & Chief 2000 \$505 246 \$737 827 \$N/A -0-150,000 -0-\$95,600 **Executive Officer** 1999 \$445,723 \$420,492 \$N/A -0-102,136 -0-\$ 9,804 Gary E. Dickerson 2.001 \$422,391 -0-130,000 -0-\$653,479 \$N/A \$64,828 Chief Operating 2000 \$N/A 100,000 -0-\$366,288 \$418,371 -0-\$58,504 Officer 1999 \$304,387 \$189,587 \$N/A -0-62,882 -0-\$ 6,844 Neil Richardson 2001 \$330,884 \$301,520 \$N/A -0-75,000 -0-\$50,191 50,000 Executive Vice 2000 \$317,364 \$299,948 \$N/A -0--0-\$ 6,541 \$289,892 President (a) 1999 \$191,133 \$N/A -0-87,717 -0-\$28,604 Jon D. Tompkins 2001 \$490,880 \$854,947 \$N/A -0-10,000 -0-\$73,277 2000 \$482,573 \$705,578 \$N/A -0-10,000 -0-\$43,392 Director 1999 \$291,478 \$214,797 \$N/A -0-50,809 -0-\$ 5,977

<sup>(</sup>a) Excludes re-priced options of 92,283 in fiscal year 2000.

<sup>(1)</sup> The Company has not granted any restricted stock rights.

<sup>(2)</sup> The Company has not granted any stock appreciation rights.

- (3) The Company does not have any Long Term Incentive Plans as that term is defined in the regulations.
- (4) "All Other Compensation" is itemized as follows:
- In fiscal 2001, Mr. Levy received \$28,717 in cash profit sharing; \$12,847 in profit sharing was contributed by the Company to the 401(k) Plan; \$1,000 was contributed by the Company as a matching contribution to the 401(k) Plan.
- In fiscal 2001, Mr. Schroeder received \$57,435 in cash profit sharing; \$25,693 in profit sharing was contributed by the Company to the 401(k) Plan; \$1,000 was contributed by the Company as a matching contribution to the 401(k) Plan.
- In fiscal 2001, Mr. Dickerson received \$44,100 in cash profit sharing; \$19,728 in profit sharing was contributed by the Company to the 401(k) Plan; \$1,000 was contributed by the Company as a matching contribution to the 401(k) Plan.
- In fiscal 2001, Mr. Richardson received \$33,987 in cash profit sharing; \$15,204 in profit sharing was contributed by the Company to the 401(k) Plan; \$1,000 was contributed by the Company as a matching contribution to the 401(k) Plan.
- In fiscal 2001, Mr. Tompkins received \$49,933 in cash profit sharing; \$22,344 in profit sharing was contributed by the Company to the 401(k) Plan; \$1,000 was contributed by the Company as a matching contribution to the 401(k) Plan.

8

#### **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, 2001.

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.

9

# OPTION/SAR1 GRANTS IN LAST FISCAL YEAR

# Kla-tencor Corporation 1982 Stock Option Plan<sup>2</sup>

#### Individual Grants

	Number of Securitites Underlying	es Options/SARS ng Granted to	Exercise or		Potential Realizable Value At Assumed Annual Rates of Stock Price Appreciation for Option Term		
Name	Options/SARS Granted(#)	Employees In Fiscal Year	Base Price (\$/Share)	Expiration Date	5%	10%	
Kenneth Levy	37,901		\$44.6875	8/13/2010	\$1,065,159	\$2,699,323	
•	18,951		\$26.2500	11/10/2010	\$ 312,852	\$ 792,829	
	18,951		\$32.7500	4/4/2011	\$ 390,320	\$ 989,149	
	75,803	0.74%			\$1,768,331	<b>\$4,481,30</b> 1	
Kenneth L. Schroeder	75,800		\$44.6875	8/13/2010	\$2,130,263	\$5,398,504	
	37,900		\$26.2500	11/10/2010	\$ 625,671	\$1,585,575	
	37,900		\$32.7500	4/4/2011	\$ 780,600	\$1,978,193	
	151,600	1.48%			\$3,536,534	\$8,962,272	
Gary E. Dickerson	65,000		\$44.6875	8/13/2010	\$1,826,742	\$4,629,324	
	32,500		\$26.2500	11/10/2010	\$ 536,526	\$1,359,662	
	32,500		\$32.7500	4/4/2011	\$ 669,380	\$1,696,340	
	130,000	1.27%			\$3,032,648	\$7,685,326	
Neil Richardson	30,000		\$44.6875	8/13/2010	\$ 843,112	\$2,136,611	
	15,000		\$26.2500	11/10/2010	\$ 247,627	\$ 627,536	
	45,000		\$32.7500	4/4/2011	\$ 926,833	\$2,348,778	
	90,000	0.87%			\$2,017,572	\$5,112,925	
Jon D. Tompkins	10,000	0.10%	\$26.2500	11/10/2010	\$ 165,085	\$ 418,357	

The Company has not granted any stock appreciation rights.

The material terms of the grants (other than those set forth in the table) are: (a) the exercise price of the options is the fair market value of Common Stock as of the date of grant; (b) as of fiscal year 2002, the options vest on a five year schedule with 20% vesting after one year and the remaining option shares vesting 1/48 per month for the remainder of the vesting term. Options issued prior to fiscal year 2002 vest on a four year schedule with 25% vesting after one year and the remaining option shares vesting 1/36 per month for the remainder of the vesting term; (c) to the extent unexercised, the options lapse after ten years; (d) the options are non-transferable and are only exercisable during the period of employment of the optionee and for 30 days following termination of employment, subject to limited exceptions in the cases of certain terminations, death or permanent disability of the optionee.

# AGGREGATED OPTION/SAR EXERCISES IN LAST FISCAL YEAR AND YEAR-END VALUE $^{\rm I}$

# **KLA-Tencor Corporation 1982 Stock Option Plan**

	Number of Shares		Underlying Und	er of Securities exercised Options cal Year-End	Unexercised	l Value <sup>2</sup> l, In-the-Money At Fiscal Year End
Name	Acquired on Exercise	Value Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
Kenneth Levy	_	\$ 0	682,954	272,849	\$30,986,379	\$ 9,547,296
Kenneth L. Schroeder	50,000	\$2,680,300	713,320	378,280	\$31,678,336	\$11,958,788
Gary E. Dickerson	91,686	\$3,853,004	78,300	271,815	\$ 2,295,621	\$ 8,284,383
Neil Richardson	120,611	\$4,520,080	4,690	174,380	\$ 171,032	\$ 5,561,504
Jon D. Tompkins	76,676	\$3,852,399	80,703	71,425	\$ 3,291,814	\$ 2,968,507

- 1 The Company has not granted any stock appreciation rights.
- 2 Total value of vested options based on fair market value of Company's Common Stock of \$58.47 per share as of June 30, 2001.

10

# AGGREGATED OPTION/SAR EXERCISES IN LAST FISCAL YEAR AND YEAR-END VALUE

# **Tencor Instruments 1993 Equity Incentive Plan**

	Number of Shares	Shares		er of Securities exercised Options cal Year-End	Total Value <sup>2</sup> of Unexercised, In-the-Money Options Held At Fiscal Year End	
Name	Acquired On Exercise	Value Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
Kenneth Levy <sup>3</sup>	-0-	-0-	-0-	-0-	-0-	-0-
Kenneth L. Schroeder <sup>3</sup>	-0-	-0-	-0-	-0-	-0-	-0-
Gary E. Dickerson <sup>3</sup>	-0-	-0-	-0-	-0-	-0-	-0-
Neil Richardson <sup>3</sup>	-0-	-0-	-0-	-0-	-0-	-0-
Jon D. Tompkins	71,488	\$2,644,687	41,676	-0-	\$2,440,651	-0-

- 1 The Company has not granted any stock appreciation rights.
- 2 Total value of vested options based on fair market value of Company's Common Stock of \$58.47 per share as of June 30, 2001.
- Messrs. Levy, Schroeder, Dickerson, and Richardson have never received options under the Tencor Instruments 1993 Equity Incentive Plan. The information under this table is inapplicable to them.

#### Report of the Compensation Committee On Executive Compensation

Compensation Committee. The Compensation Committee is comprised of three of the independent, non-employee members of the Board of Directors, none of whom have interlocking relationships as defined by the Securities and Exchange Commission. The Compensation Committee is responsible for setting and administering the policies governing annual compensation of executive officers, considers their performance and makes recommendations regarding their cash compensation and stock options to the full Board of Directors. The Compensation Committee periodically reviews its approach to executive compensation and makes changes as appropriate.

Compensation Philosophy. The Compensation Committee of the Board of Directors establishes the overall executive compensation strategies of the Company and approves compensation elements for the Chairman of the Board, the Chief Executive Officer and other executive officers. The goals of the Company's compensation policy are to attract, retain and reward executive officers who contribute to the overall success of the Company by offering compensation that is competitive in the industry, to motivate executive officers to achieve the Company's business objectives and to align the interests of executive officers with the long term interests of stockholders. The Company currently uses a compensation package which includes a salary, a management incentive plan and stock option grants to meet these goals.

The compensation philosophy of the Compensation Committee is to provide a comprehensive compensation package for each executive officer that is well suited to support accomplishment of the Company's business strategies, objectives and initiatives. For incentive-based compensation, the Compensation Committee considers the desirability of structuring such compensation arrangements so as to qualify for deductions available under Section 162(m) of the Internal Revenue Code, which disallows a tax deduction for any publicly-held corporation for individual compensation exceeding One Million dollars in any taxable year for any of the named executive officers, other than compensation that is "performance based."The Compensation Committee applies this compensation philosophy in determining appropriate executive compensation levels and other compensation factors and the Compensation Committee reaches its decisions with a view towards the Company's overall financial performance.

Chief Executive Officer Compensation. For fiscal year 2001, Kenneth L. Schroeder served as Chief Executive Officer. In setting Mr. Schroeder's compensation for fiscal year 2001, the Committee considered the Company's revenue and profit in the prior fiscal year, the Company's market

capitalization and data from comparable companies supplied by the Company's compensation consultants. For fiscal year 2001 a bonus of \$959,894 was paid to Mr. Schroeder, based on the Company's performance as measured against a formula, which is based on meeting financial and strategic objectives as well as Company revenue growth objectives as compared to a peer group. This bonus formula was approved by the Compensation Committee and the Board of Directors last year.

Executive Officer Compensation. The Committee's approach is based upon a belief that a substantial portion of aggregate annual compensation for executive officers should be contingent upon the Company's performance and an individual's contribution to the Company's success. In addition, the Committee strives to align the interests of the Company's executive officers with the long-term interests of stockholders through stock option grants that can result in ownership of the Company's Common Stock. The Committee endeavors to structure each executive officer'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 Company provides its executive officers with a compensation package consisting of base salary, variable incentive pay and participation in benefit plans generally available to other employees. The Committee considers market information from published survey data provided to the Committee by the Company's Human Resources Staff. 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.

For the Company's previous fiscal year, the Committee reviewed and recommended a compensation structure, which had as an important component, the substantial economic and business challenges in the semiconductor and semiconductor capital equipment industries worldwide.

Base Salary. Salaries for executive officers are set with reference to salaries for comparable positions among other companies in the Company's industry or in industries that employ individuals of similar education and background to the executive officer based on data provided by the Company's Human Resources staff.

Management Incentive Plan. Each year since fiscal 1979, the Company has adopted a management incentive plan (the "Incentive Plan") which provides for payments to officers and key employees based on the financial performance of the Company or the relevant business unit, and on the achievement of key strategic objectives which are set by senior management and approved by the Board of Directors. The Incentive Plan is approved by the Compensation Committee and submitted to the Board of Directors for ratification. For fiscal year 2001 the Incentive Plan set goals for profitability, achievement of measurable objectives aimed at strategic corporate goals and achievement of objectives relating to managing the ratio of assets to sales.

Outstanding Corporate Performance Executive Bonus Plan. The Company continued to utilize its incentive plan (the "Outstanding Corporate Performance Plan"), which allows for an additional bonus to executives in years when the Company achieves certain levels of profitability and growth. For those executive officers that do not manage operating divisions, the matrix is based on the Company's pre-tax margin and the growth of the Company's aggregate revenues over the prior 12 months against a target group of public U.S. Companies over the same period. For those executive officers who manage operating divisions, the matrix is based on certain specified growth objectives for that division, and the Company's net operating margin. The target percentage for the Outstanding Corporate Performance Plan bonus is the same target percentage as utilized in determining the Incentive Plan bonus.

Half of each annual amount under the Outstanding Corporate Performance Plan is payable at the end of the fiscal year. The other half of each annual amount payable under the plan is contributed by the Company to the Executive Deferred Savings Plan (the "EDSP"). That vests over a one-year period. At the end of the year period, the executive officer has the choice of taking cash payment or leaving the contribution in the EDSP. If the executive officer leaves during that one-year period, the

12

contribution by the Company is forfeited. Although the executive officer is eligible to participate in both the Company's profit sharing plan and the Outstanding Corporate Performance Plan, any amounts contributed by the Company pursuant to the Outstanding Corporate Performance Plan will be reduced by the amount of profit sharing paid during the fiscal year.

Long-term Incentives. Longer term incentives are provided through the Stock Option Plan and the Excess Profit Stock Plan, each of which reward executive officers through the growth in value of the Company's Common Stock. The 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 executive officers are based upon each executive officer's relative position, responsibilities, historical and expected contributions to the Company, and the executive officer's existing stock ownership and previous option grants, with primary weight given to the executive officer's relative rank and responsibilities. Stock options are granted at market price on the date of grant and will provide value to the executive officers only when the price of the Company's Common Stock increases over the exercise price.

Edward W. Barnholt Robert T. Bond Lida Urbanek

13

#### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

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

The Company's Audit Committee ("Audit Committee") is composed of independent directors, all of whom meet the standards of independence set forth in Rule 4200(a)(14) of the National Association of Securities Dealers listing standards. For fiscal year 2001, the members of the Audit Committee are H. Raymond Bingham, Richard J. Elkus, Jr. and Dean O. Morton. Attached as Appendix I to this Proxy Statement is a copy of the Audit Committee Charter.

During each of its five meetings during fiscal year 2001, the Audit Committee met with the senior members of the Company's financial management team, the independent auditors and the Company's General Counsel when appropriate. The Audit Committee's chairman was responsible for preparing an agenda for each meeting. During the Committee's private sessions, the Audit Committee met with the Company's independent auditors and separately with the Company's Chief Financial Officer. The parties candidly discussed financial management, accounting and internal controls.

The Audit Committee recommended to the Board of Directors the engagement of PricewaterhouseCoopers LLP as the Company's independent auditors and reviewed with the Company's financial managers and the independent auditors the overall audit scopes and plans, the results of internal and external audit examinations, evaluations by the auditors of the Company's internal controls and the quality of the Company's financial reporting.

The Audit Committee has reviewed and discussed the audited financial statements to be included in the Company's Annual Report on Form 10-K with the Company's management including, without limitation, a discussion of the quality, not just the acceptability of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements. In addressing the quality of management's accounting judgments, members of the Audit Committee asked for management's representations that the audited consolidated financial statements of the Company have been prepared in conformity with generally accepted accounting principles, and have expressed to both management and auditors their general preference for conservative policies when a range of accounting options is available.

In its meetings with representatives of the independent auditors, the Audit Committee asked the representatives to address and discuss their responses to several questions that the Audit Committee believes are particularly relevant to its oversight. These questions included (1) whether there were any significant accounting judgments made by management in preparing the financial statements that would have been made differently had the auditors themselves prepared and been responsible for the financial statements; (2) whether, based on the auditor's experience, and their knowledge of the Company, the Company's financial statements fairly present to investors, with clarity and completeness, the Company's financial position and performance for the reporting period in accordance with generally accepted accounting principles and SEC disclosure requirements; and (3) whether, based on their experience, and their knowledge of the Company, they believe the Company has implemented internal controls and internal audit procedures that are appropriate for the Company.

The Audit Committee also discussed with the independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61 (Communication With Audit Committees). The Audit Committee received from the auditors the written disclosures and the letter from the auditors required by Independence Standards Board Standard No. 1, (Independence Discussions With Audit Committees), and the Company discussed with the auditors the auditor's independence,

which such discussion included, without limitation, the consideration of whether the provision of financial information systems design and implementation and other non-audit services provided by them to the Company during fiscal year 2001 was compatible with the auditor's independence.

In performing all of these functions, the Audit Committee acts only in an oversight capacity. The Audit Committee does not complete its reviews prior to the Company's public announcement of financial results and, necessarily, in its oversight role, the Audit Committee relies on the work and assurances of the Company's management, which has the primary responsibility for financial statements and reports, and of the independent auditors, who, in their report, express an opinion on the conformity of the Company's financial statements to generally accepted accounting principles.

Based on the reviews and discussions referred to above, the Audit Committee has recommended to the Board of Directors, and the Board has approved, that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2001, for filing with the Securities and Exchange Commission.

Members of the Audit Committee

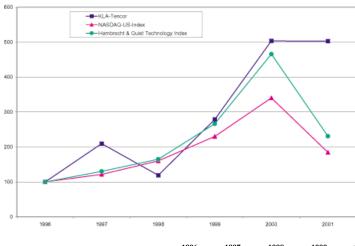
H. Raymond Bingham, *Chairman* Richard J. Elkus, Jr. Dean O. Morton

15

#### PERFORMANCE GRAPH

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

# Comparison of Five Year Cumulative Total Return Among KLA-Tencor Corporation, the Nasdaq-US Index and the Hambrecht & Quist Technology Index\*.



	1996	1997	1998	1999	2000	2001
KLA-Tencor Corporation	100.00	209.68	119.09	279.04	503.77	502.97
The NASDAQ-US Index	100.00	121.60	160.06	230.22	340.39	184.52
Hambrecht & Quist Technology Index	100.00	130.32	164.85	266.44	465.91	230.97

<sup>\*</sup> Assumes \$100 invested on June 30, 1996. The Company's fiscal year end is June 30.

#### CERTAIN TRANSACTIONS

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, with Messrs. Levy, Schroeder and Tompkins, all executive officers of the Company. The arrangements, as amended, provide that certain benefits would be paid if certain events took place after April 30, 1997. The purpose of these arrangements was to retain the services of Messrs. Levy, Schroeder and Tompkins to ensure the continued smooth transition associated with the Merger. The terms of those arrangements provide that if an individual 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 December 2000, the Company made a loan to John Kispert, the Company's Chief Financial Officer, in the amount of \$300,000. The loan was evidenced by a promissory note ("Note"). The Note incurs interest at a rate of 6.3% per annum and is repayable in December 2020. The Note is secured by a Third Deed of Trust on Mr. Kispert's real property.

In fiscal year 2001, the Company entered into a Bonus Agreement with Mr. Kispert, whereby Mr. Kispert will receive payments of \$93,000 a year, for the next four years.

# **Voluntary Stock Option Exchange Program**

On December 7, 2000, the Company announced a voluntary stock option exchange program for its employees who had stock options with an exercise price of \$55 per share or greater (the "Exchange Program"). Under the terms of the Exchange Program, eligible employees were given the opportunity to elect to cancel outstanding stock options issued to them for six months prior to the date of the Exchange Program in exchange for an equal number of new options, with the same vesting terms, to be granted more than six months and one day in the future. The new options were granted at an exercise price equal to the fair market value of the Company's Common Stock on July 10, 2001. No executive officers participated in the Exchange Program. Outside directors and consultants were not eligible to participate in the Exchange Program.

#### **Change in Control Agreements**

In fiscal year 2002, the Board of Directors approved individual "change-in-control" agreements for Messrs. Schroeder, Dickerson and Kispert (each, an "Executive"). The change-in-control provisions of these agreements take effect if the Executive's employment is terminated involuntarily or constructively within two years of a change in control of the Company. If the provisions become effective, the Executive becomes eligible to receive: (1) an amount equal to two times his annual compensation; (2) an amount equal to two times his bonus amount; (3) continuation of health benefits for two years; and (4) the acceleration of vesting for all options held. In addition, in the case of Mr. Schroeder, he would receive an option grant equal to his planned option grants for the forthcoming four years. For the purpose of these agreements, a change in control occurs upon merger

17

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. These arrangements have been approved by the Board of Directors, but have not been memorialized in agreements as of the date of this Proxy Statement.

#### Section 16(A) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, 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. Mr. Schroeder filed a Form 4 late for the month ending May 31, 2001 due to a processing error.

# OTHER MATTERS

The Company knows of no other matters to be submitted to the stockholders at the Annual Meeting. If any other matters properly come before the Annual Meeting, it is the intention of the persons named in the enclosed form of Proxy to vote the shares they represent as the Board of Directors may recommend.

#### Audit Committee Charter Kla-tencor Corporation, a Delaware Corporation

#### Purpose

The Audit Committee is appointed by the Board to assist the Board in monitoring (1) the integrity of the financial statements of the Company, (2) the compliance by the Company with legal and regulatory requirements and (3) the independence and performance of the Company's internal and external auditors.

In discharging its oversight role, the Committee is empowered to investigate any matter brought to its attention with full access to all books, records, facilities and personnel of the Company and the power to retain outside counsel, auditors or other experts for this purpose. The Board and the Committee are in place to represent the Company's shareholders; accordingly, the outside auditor is ultimately accountable to the Board and the Committee.

#### Membership and Meetings

The Committee shall be comprised of not less than three non-employee members of the Board. The Board shall appoint the members of the Committee, one of whom shall be designated a chairman of the Committee, such members shall serve at the discretion of the Board. The Committee's composition will meet the requirements of the Audit Committee Policy of the NASDAQ National Market.

Accordingly, all of the members will be directors who:

- · Each member shall be an independent director, as defined in NASDAQ Rule 4200; and
- Are financially literate or who become financially literate within a reasonable period of time after appointment to the Committee. In addition, at least one member of the Committee will have accounting or related financial management expertise.

The Committee shall meet at least four times annually or more frequently as the Committee may deem appropriate.

# **Key Responsibilities**

The following functions shall be the common recurring activities of the Committee in carrying out its oversight function. These functions are set forth as a guide with the understanding that the Committee may diverge from this guide as appropriate given the circumstances.

Review and discuss with management and the independent auditors the audited financial statements to be included in the Company's Annual Report on Form 10-K (or the Annual Report to Shareholders if distributed prior to the filing of Form 10-K). Review with the outside auditors the Company's interim financial results to be included in the Company's quarterly earnings release and quarterly reports to be filed with Securities and Exchange Commission prior to the Company's filing of the Form 10-Q.

- Review and consider with the outside auditors the requirements of Statement of Auditing Standards ('SAS')
   No. 61 as they relate to audited and interim financial statements.
- Discuss with management and the outside auditors the quality and adequacy of the Company's internal
  controls.
- Review the activities, organizational structure and qualifications of the Company's finance department.
- The audit committee shall review the independence and performance of the auditors. With respect to the independence of the independent auditors, the Committee shall:

A-1

- Request from the outside auditors annually, a formal written statement delineating all relationships between the auditor and the Company consistent with Independence Standards Board Standard Number 1;
- Discuss with the outside auditors any such disclosed relationships and their impact on the outside auditor's independence; and

 If circumstances require, recommend that the Board take appropriate action to oversee the independence of the outside auditor.

The Committee, subject to any action that may be taken by the full Board, shall have the ultimate authority and responsibility to select (or nominate for shareholder approval), evaluate and, where appropriate, replace the outside auditor. The Committee shall review its own structure, processes and membership requirements, including reviewing the adequacy of this Charter on an annual basis.

In addition to the above responsibilities, the Committee will undertake such other duties as the Board delegates to it, and will report, at least annually, to the Board regarding the Committee's examinations and recommendations.

The Committee is authorized to conduct any investigation appropriate to fulfilling its responsibilities and may retain, at the Company's expense, such consultants and experts as it deems necessary to assist it in conducting any such investigation.

#### Other Matters

The Committee shall prepare such reports as are required by the Securities and Exchange Commission for inclusion in the Company's annual proxy statement and maintain minutes of its meetings.

A-2



#### KLA-TENCOR CORPORATION

C/O PROXY SERVICES P.O. BOX 9112 FARMINGDALE, NY 11735

# 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 8, 2001. Have your proxy card in hand when you access the web site. You will be prompted to enter your 12-digit Control Number which is located below to obtain your records and to create an electronic voting instruction form.

#### VOTE BY TELEPHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time on November 8, 2001. Have your proxy card in hand when you call. You will be prompted to enter your 12-digit Control Number which is located below and then follow the simple instructions the Vote Voice provides you.

# 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.

# YOUR VOTE IS IMPORTANT

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

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

KLAPRX

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 Board Recommends a Vote "FOR" all Nominees for Director and "FOR" Proposal 2.

# **Vote On Directors**

- To elect three Class III directors to each serve for a three year term and until their successors are duly elected.
  - 01) Edward W. Barnholt, 02) Dean O. Morton, and 03) Kenneth L. Schroeder

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

# Vote on Proposal

2.	To ratify the appointment of PricewaterhouseCoopers LLP as independent accountants of the Company for the fiscal year ending June 30, 2002.							
	To transact suc adjournment th		ay properly	come before the meeting or any adjournment or				
	For	Against	Abstain					
		e proxy holders are au ljournment or postpon		ote on all such other matters as may properly come before f.				
reply	envelope provid	led. Please correct you	ır address be	certificate(s), date and return this Proxy promptly in the fore returning this Proxy. Persons signing in a fiduciary enants or as community property, both should sign.				
MAR	K HERE FOR A	ADDRESS CHANGE	AND NOTE	E AT RIGHT [_]				
MAR	K HERE IF YO	U PLAN TO ATTEN	D THE MEI	ETING []				
Signa	ture [PLEASE S	SIGN WITHIN BOX]	Date	Signature (Joint Owners) Date				
Vote	by Telephone			Vote by Internet				
	Coll-Free on a To-	ouch-Tone Phone						
<ol> <li>Re and</li> <li>Ca</li> <li>En on</li> </ol>	d Proxy Card. ill the toll-free iter your 12-dig the reverse sid	anying Proxy Statem number 1-800-690-69 git Control Number l	903.	Follow these four easy steps:  1. Read the accompanying Proxy Statement and Proxy Card.  2. Go to the Website:     http://www.proxyvote.com.  3. Enter your 12-digit Control Number located on the reverse side.  4. Follow the instructions provided.				
	vote is importa -800-690-6903!			Your vote is important! Go to http://www.proxyvote.com anytime!				

# DETACH PROXY CARD HERE

# THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

KLA-TENCOR CORPORATION Notice of Annual Meeting of Stockholders November 9, 2001

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 9, 2001 at 11:00 a.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 Kenneth Levy and John H. Kispert, 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 below, 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 AND FOR EACH PROPOSAL.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE

CONTINUED AND TO BE SIGNED ON REVERSE SIDE