

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported)

January 14, 1997

KLA INSTRUMENTS CORPORATION

(Exact Name of Registrant as Specified in Charter)

DELAWARE

(State or other jurisdiction of incorporation)

000-09992

04-2564110

(Commission File No.)

(IRS Employer Identification Number)

160 RIO ROBLES
SAN JOSE, CA 95161

(Address of Principal Executive Offices)

(408) 468-4200

(Registrant's Telephone Number, Including Area Code)

Item 5. OTHER EVENTS.

On January 14, 1997 KLA Instruments Corporation, a Delaware corporation ("KLA") and Tencor Instruments, a California corporation ("Tencor"), entered into an Agreement and Plan of Reorganization (the "Merger Agreement") among KLA, Tiger Acquisition Corp., a California corporation and a wholly-owned subsidiary of KLA ("Merger Sub"), and Tencor, a California corporation. Pursuant to the Merger Agreement, and subject to the conditions set forth therein (including approval of the transaction by the stockholders and shareholders, respectively, of KLA and Tencor), Merger Sub will be merged with and into Tencor (the "Merger"). At the effective time of the Merger (the "Effective Time"), the separate existence of Merger Sub will cease and Tencor will continue as the surviving corporation and as a wholly-owned subsidiary of KLA ("Surviving Corporation"). In connection with the Merger, holders of outstanding Tencor Common Stock will receive, in exchange for each share of Tencor Common Stock held by them, one share of KLA Common Stock. The Merger is intended to be a tax-free reorganization under Section 368(a) of the Internal Revenue Code of 1986, as amended, and is intended to be treated as a pooling of interests for financial reporting purposes in accordance with generally accepted accounting principles. A copy of the press release issued by KLA and Tencor regarding the Merger Agreement is filed herewith as Exhibit 99.1 and incorporated by reference herein. A copy of the Merger Agreement together with all of the exhibits thereto is filed herewith as Exhibit 2.1 and is incorporated by reference herein.

As an inducement to Tencor to enter into the Merger Agreement, KLA and Tencor entered into a Stock Option Agreement dated January 14, 1997 ("KLA Stock Option Agreement") pursuant to which KLA granted Tencor the right, under certain conditions, to acquire shares of KLA Common Stock up to a number of shares sufficient to give Tencor 19.9% of KLA's outstanding Common Stock. A copy of the Tencor Stock Option Agreement and all exhibits thereto is included as Exhibit 99.2 hereto and is incorporated by reference herein.

As an inducement to KLA to enter into the Merger Agreement, KLA and Tencor entered into a Stock Option Agreement dated January 14, 1997 ("Tencor Stock Option Agreement") pursuant to which Tencor granted KLA the right, under certain conditions, to acquire shares of Tencor Common Stock up to a number of shares sufficient to give KLA 19.9% of Tencor's outstanding Common Stock. A copy of the KLA Stock Option Agreement and all exhibits thereto is included as Exhibit 99.3 hereto and is incorporated by reference herein.

Item 7. FINANCIAL STATEMENTS AND EXHIBITS.

(c) Exhibits.

- 2.1 Agreement and Plan of Reorganization dated January 14, 1997 by and among KLA, a Delaware corporation, Tiger Acquisition Corp., a California corporation and wholly-owned subsidiary of KLA, and Tencor, a California corporation.
- 99.1 Press Release dated January 14, 1997
- 99.2 Stock Option Agreement dated January 14, 1997 by and between Tencor, a California corporation and KLA, a Delaware corporation.
- 99.3 Stock Option Agreement dated January 14, 1997 by and between KLA, a Delaware corporation, and Tencor, a California corporation.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

KLA Instruments Corporation

Dated: January 21, 1997

By: /s/ Kenneth Levy

Kenneth Levy
Chairman and CEO

AGREEMENT AND PLAN OF REORGANIZATION

BY AND AMONG

TENCOR INSTRUMENTS

TIGER ACQUISITION CORP.

AND

KLA INSTRUMENTS CORPORATION

Dated as of January 14, 1997

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AGREEMENT AND PLAN OF REORGANIZATION

This AGREEMENT AND PLAN OF REORGANIZATION is made and entered into as of January 14, 1997 among KLA Instruments Corporation, a Delaware corporation ("KLA"), Tiger Acquisition Corp., a California corporation and a wholly-owned

subsidiary of KLA ("MERGER SUB"), and Tencor Instruments, a California corporation ("TENCOR").

RECITALS

A. Upon the terms and subject to the conditions of this Agreement (as defined in Section 1.2 below) and in accordance with the California General Corporation Law ("CALIFORNIA LAW"), KLA and Tencor intend to enter into a business combination transaction to pursue their long-term business strategies.

B. The combined company following the Merger (as defined in Section 1.1) will be called KLA-Tencor Corporation. In addition, immediately upon the effectiveness of the Merger, the Board of Directors of the combined company would consist of 12 members, with designees of Tencor to hold five of such seats and designees of KLA to hold seven of such seats. It is also contemplated that the senior management of the combined company would consist of senior management from both Tencor and KLA.

C. The Board of Directors of Tencor (i) has determined that the Merger is consistent with and in furtherance of the long-term business strategy of Tencor and fair to, and in the best interests of, Tencor and its shareholders, (ii) has approved this Agreement, the Merger and the other transactions contemplated by this Agreement and (iii) has determined to recommend that the shareholders of Tencor adopt and approve this Agreement and approve the Merger.

D. The Board of Directors of KLA (i) has determined that the Merger is consistent with and in furtherance of the long-term business strategy of KLA and fair to, and in the best interests of, KLA and its stockholders, (ii) has approved this Agreement, the Merger and the other transactions contemplated by this Agreement and (iii) has determined to recommend that the stockholders of KLA vote to approve the issuance of shares of KLA Common Stock (as defined below) to the shareholders of Tencor pursuant to the terms of the Merger.

E. Concurrently with the execution of this Agreement, and as a condition and inducement to Tencor's and KLA's willingness to enter into this Agreement, KLA shall execute and deliver a Stock Option Agreement in favor of Tencor in substantially the form attached hereto as Exhibit A (the "KLA STOCK OPTION AGREEMENT") and Tencor shall execute and deliver a Stock Option Agreement in favor of KLA in substantially the form attached hereto as Exhibit B (the "TENCOR STOCK OPTION AGREEMENT" and, together with the KLA Stock Option Agreement, the "STOCK OPTION AGREEMENTS"). The Board of Directors of KLA and Tencor have each approved the Stock Option Agreements.

F. The parties intend, by executing this Agreement, to adopt a plan of reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended (the "CODE").

G. It is also intended by the parties hereto that the Merger shall qualify for accounting treatment as a pooling of interests.

NOW, THEREFORE, in consideration of the covenants, promises and representations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I THE MERGER

1.1 The Merger. At the Effective Time (as defined in Section 1.2) and subject to and upon the terms and conditions of this Agreement and the applicable provisions of California Law, Merger Sub shall be merged with and into Tencor (the "MERGER"), the separate corporate existence of Merger Sub shall cease and Tencor shall continue as the surviving corporation. Tencor as the surviving corporation after the Merger is hereinafter sometimes referred to as the "SURVIVING CORPORATION."

1.2 Effective Time; Closing. Subject to the provisions of this Agreement, the parties hereto shall cause the Merger to be consummated by filing an Agreement of Merger, substantially in the form of Exhibit C hereto (the "AGREEMENT OF MERGER"), with the Secretary of State of the State of California in accordance with the relevant provisions of California Law (the time of such filing (or such later time as may be agreed in writing by the parties and specified in the Agreement of Merger) being the "EFFECTIVE TIME") as soon as practicable on or after the Closing Date (as herein defined). Unless the context otherwise requires, the term "AGREEMENT" as used herein refers collectively to this Agreement and Plan of Reorganization and the Agreement of Merger. The closing of the Merger (the "CLOSING") shall take place at the offices of Wilson, Sonsini, Goodrich & Rosati, Professional Corporation at a time and date to be specified by the parties, which shall be no later than the second business day after the satisfaction or waiver of the conditions set forth in Article VI, or at such other time, date and location as the parties hereto agree in writing (the "CLOSING DATE").

1.3 Effect of the Merger. At the Effective Time, the effect of the

Merger shall be as provided in this Agreement and the applicable provisions of California Law. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time all the property, rights, privileges, powers and franchises of Tencor and Merger Sub shall vest in the Surviving Corporation, and all debts, liabilities and duties of Tencor and Merger Sub shall become the debts, liabilities and duties of the Surviving Corporation.

1.4 Articles of Incorporation; Bylaws.

(a) At the Effective Time, the Articles of Incorporation of Merger Sub, as in effect immediately prior to the Effective Time, shall be the Articles of Incorporation of the Surviving Corporation until thereafter amended as provided by law and such Articles of Incorporation of the Surviving Corporation; provided, however, that at the Effective Time the Articles of Incorporation of the Surviving Corporation shall be amended so that the name of the Surviving Corporation shall be Tencor Instruments.

(b) The Bylaws of Merger Sub, as in effect immediately prior to the Effective Time, shall be, at the Effective Time, the Bylaws of the Surviving Corporation until thereafter amended.

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1.5 Directors and Officers. The initial directors of the Surviving Corporation shall be the directors of Merger Sub immediately prior to the Effective Time, until their respective successors are duly elected or appointed and qualified. The initial officers of the Surviving Corporation shall be the officers of Merger Sub immediately prior to the Effective Time, until their respective successors are duly appointed.

1.6 Effect on Capital Stock. At the Effective Time, by virtue of the Merger and without any action on the part of Merger Sub, Tencor or the holders of any of the following securities:

(a) Conversion of Tencor Common Stock. Each share of Common Stock, no par value, of Tencor (the "TENCOR COMMON STOCK") issued and outstanding immediately prior to the Effective Time, (other than any shares of Tencor Common Stock to be canceled pursuant to Section 1.6(b) and any Dissenting Shares (as defined in and to the extent provided in Section 1.7(a)) will be canceled and extinguished and automatically converted (subject to Sections 1.6(e) and (f)) into the right to receive one (1) (the "EXCHANGE RATIO") share of Common Stock, par value \$0.001 per share, of KLA (the "KLA COMMON STOCK") upon surrender of the certificate representing such share of Tencor Common Stock in the manner provided in Section 1.8 (or in the case of a lost, stolen or destroyed certificate, upon delivery of an affidavit (and bond, if required) in the manner provided in Section 1.10), including, with respect to each whole share of KLA Common Stock to be received, the associated Rights (as defined in that certain Amended and Restated Rights Agreement (the "KLA RIGHTS PLAN") dated as of April 25, 1996, between KLA and First National Bank of Boston, as Rights Agent).

(b) Cancellation of KLA-Owned Stock. Each share of Tencor Common Stock held by Tencor or owned by Merger Sub, KLA or any direct or indirect wholly owned subsidiary of Tencor or of KLA immediately prior to the Effective Time shall be canceled and extinguished without any conversion thereof.

(c) Stock Options; Employee Stock Purchase Plans. At the Effective Time, all options to purchase Tencor Common Stock then outstanding under Tencor's Second Amended and Restated 1984 Stock Option Plan, the Prometrix 1983 Employee Incentive Stock Option Plan, as amended, the Prometrix 1993 Employee Incentive Stock Option Plan, Tencor's 1993 Equity Incentive Plan and Tencor's 1993 Non-Employee Director Stock Plan (collectively, the "TENCOR STOCK OPTION PLANS") shall be assumed by KLA in accordance with Section 5.11 hereof. At the Effective Time, in accordance with the terms of Tencor's 1993 Employee Stock Purchase Plan and 1993 Foreign Employee Stock Purchase Plan (the "TENCOR EMPLOYEE STOCK PURCHASE PLANS"), the option periods then in progress shall be shortened by setting a new purchase date which shall be the trading day immediately preceding the Effective Time (the "NEW PURCHASE DATE"). The Tencor Employee Stock Purchase Plans shall terminate immediately following the purchase of shares on the New Purchase Date.

(d) Capital Stock of Merger Sub. Each share of Common Stock, no par value, of Merger Sub (the "MERGER SUB COMMON STOCK") issued and outstanding immediately prior to the Effective Time shall be converted into one validly issued, fully paid and nonassessable share of Common Stock, no par value, of the Surviving Corporation. Each certificate evidencing ownership

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of shares of Merger Sub Common Stock shall continue to evidence ownership of such shares of capital stock of the Surviving Corporation.

(e) Adjustments to Exchange Ratio. The Exchange Ratio shall be adjusted to reflect appropriately the effect of any stock split, reverse stock split, stock dividend (including any dividend or distribution of securities convertible into KLA Common Stock or Tencor Common Stock), reorganization,

recapitalization or other like change with respect to KLA Common Stock or Tencor Common Stock occurring on or after the date hereof and prior to the Effective Time.

(f) Fractional Shares. No fraction of a share of KLA Common Stock will be issued by virtue of the Merger, but in lieu thereof each holder of shares of Tencor Common Stock who would otherwise be entitled to a fraction of a share of KLA Common Stock (after aggregating all fractional shares of KLA Common Stock to be received by such holder) shall receive from KLA an amount of cash (rounded to the nearest whole cent) equal to the product of (i) such fraction, multiplied by (ii) the average closing price of one share of KLA Common Stock for the ten most recent days that KLA Common Stock has traded ending on the trading day immediately prior to the Effective Time, as reported on the Nasdaq National Market.

1.7 Dissenting Shares.

(a) Notwithstanding any provision of this Agreement to the contrary, the shares of any holder of Tencor Common Stock who has demanded and perfected appraisal rights for such shares in accordance with California Law and who, as of the Effective Time, has not effectively withdrawn or lost such appraisal rights ("DISSENTING SHARES"), shall not be converted into or represent a right to receive KLA Common Stock pursuant to Section 1.6, but the holder thereof shall only be entitled to such rights as are granted by California Law.

(b) Notwithstanding the foregoing, if any holder of shares of Tencor Common Stock who demands appraisal of such shares under California Law shall effectively withdraw or lose (through failure to perfect or otherwise) the right to appraisal, then, as of the later of the Effective Time or the occurrence of such event, such holder's shares shall automatically be converted into and represent only the right to receive KLA Common Stock and cash in lieu of fractional shares of KLA Common Stock in accordance with Section 1.6 hereof, without interest thereon, upon surrender of the certificate representing such shares of Tencor Common Stock in the manner provided in Section 1.8 (or in the case of a lost, stolen or destroyed certificate, upon delivery of an affidavit (and bond, if required) in the manner provided in Section 1.10), including, with respect to each whole share of KLA Common Stock to be received, the associated Right under the KLA Rights Plan).

(c) Tencor shall give KLA (i) prompt notice of any written demands for appraisal of any shares of Tencor Common Stock, withdrawals of such demands, and any other instruments served pursuant to California Law and received by Tencor which relate to any such demand for appraisal and (ii) the opportunity to participate in all negotiations and proceedings which take place prior to the Effective Time with respect to demands for appraisal under California Law. Tencor shall not, except with the prior written consent of KLA or as may be required by applicable law, voluntarily make any payment with respect to any demands for appraisal of Tencor Common Stock or offer to

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settle or settle any such demands. Any payments made in respect of Dissenting Shares shall be made by Tencor or the Surviving Corporation as the case may be.

1.8 Surrender of Certificates.

(a) Exchange Agent. KLA shall select an institution reasonably satisfactory to Tencor to act as the exchange agent (the "EXCHANGE AGENT") in the Merger.

(b) KLA to Provide Common Stock. Promptly after the Effective Time, KLA shall make available to the Exchange Agent for exchange in accordance with this Article I, the shares of KLA Common Stock issuable pursuant to Section 1.6 in exchange for outstanding shares of Tencor Common Stock, and cash in an amount sufficient for payment in lieu of fractional shares pursuant to Section 1.6(f) and any dividends or distributions which holders of shares of Tencor Common Stock may be entitled pursuant to Section 1.8(d).

(c) Exchange Procedures. Promptly after the Effective Time, KLA shall cause the Exchange Agent to mail to each holder of record (as of the Effective Time) of a certificate or certificates (the "CERTIFICATES") which immediately prior to the Effective Time represented outstanding shares of Tencor Common Stock whose shares were converted into the right to receive shares of KLA Common Stock pursuant to Section 1.6, cash in lieu of any fractional shares pursuant to Section 1.6(f) and any dividends or other distributions pursuant to Section 1.8(d), (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Certificates shall pass, only upon delivery of the Certificates to the Exchange Agent and shall be in such form and have such other provisions as KLA may reasonably specify) and (ii) instructions for use in effecting the surrender of the Certificates in exchange for certificates representing shares of KLA Common Stock, cash in lieu of any fractional shares pursuant to Section 1.6(f) and any dividends or other distributions pursuant to Section 1.8(d). Upon surrender of Certificates for cancellation to the Exchange Agent or to such other agent or agents as may be appointed by KLA, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto, the holders of

such Certificates shall be entitled to receive in exchange therefor certificates representing the number of whole shares of KLA Common Stock, payment in lieu of fractional shares which such holders have the right to receive pursuant to Section 1.6(f) and any dividends or distributions payable pursuant to Section 1.8(d), and the Certificates so surrendered shall forthwith be canceled. Until so surrendered, outstanding Certificates will be deemed from and after the Effective Time, for all corporate purposes, subject to Section 1.8(d) as to the payment of dividends, to evidence the ownership of the number of full shares of KLA Common Stock into which such shares of Tencor Common Stock shall have been so converted and the right to receive an amount in cash in lieu of the issuance of any fractional shares in accordance with Section 1.6(f) and any dividends or distributions payable pursuant to Section 1.8(d).

(d) Distributions With Respect to Unexchanged Shares. No dividends or other distributions declared or made after the date of this Agreement with respect to KLA Common Stock with a record date after the Effective Time will be paid to the holders of any unsurrendered Certificates with respect to the shares of KLA Common Stock represented thereby until the holders of record of such Certificates shall surrender such Certificates. Subject to applicable law, following surrender of any such Certificates, the Exchange Agent shall deliver to the record holders thereof,

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without interest, certificates representing whole shares of KLA Common Stock issued in exchange therefor along with payment in lieu of fractional shares pursuant to Section 1.6(f) hereof and the amount of any such dividends or other distributions with a record date after the Effective Time payable with respect to such whole shares of KLA Common Stock.

(e) Transfers of Ownership. If certificates for shares of KLA Common Stock are to be issued in a name other than that in which the Certificates surrendered in exchange therefor are registered, it will be a condition of the issuance thereof that the Certificates so surrendered will be properly endorsed and otherwise in proper form for transfer and that the persons requesting such exchange will have paid to KLA or any agent designated by it any transfer or other taxes required by reason of the issuance of certificates for shares of KLA Common Stock in any name other than that of the registered holder of the Certificates surrendered, or established to the satisfaction of KLA or any agent designated by it that such tax has been paid or is not payable.

(f) No Liability. Notwithstanding anything to the contrary in this Section 1.8, neither the Exchange Agent, KLA, the Surviving Corporation nor any party hereto shall be liable to a holder of shares of KLA Common Stock or Tencor Common Stock for any amount properly paid to a public official pursuant to any applicable abandoned property, escheat or similar law.

1.9 No Further Ownership Rights in Tencor Common Stock. All shares of KLA Common Stock issued upon the surrender for exchange of shares of Tencor Common Stock in accordance with the terms hereof (including any cash paid in respect thereof pursuant to Section 1.6(f) and 1.8(d)) shall be deemed to have been issued in full satisfaction of all rights pertaining to such shares of Tencor Common Stock, and there shall be no further registration of transfers on the records of the Surviving Corporation of shares of Tencor Common Stock which were outstanding immediately prior to the Effective Time. If after the Effective Time Certificates are presented to the Surviving Corporation for any reason, they shall be canceled and exchanged as provided in this Article I.

1.10 Lost, Stolen or Destroyed Certificates. In the event any Certificates shall have been lost, stolen or destroyed, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Certificates, upon the making of an affidavit of that fact by the holder thereof, such shares of KLA Common Stock, cash for fractional shares, if any, as may be required pursuant to Section 1.6(f) and any dividends or distributions payable pursuant to Section 1.8(d); provided, however, that KLA may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed Certificates to deliver a bond in such sum as it may reasonably direct as indemnity against any claim that may be made against KLA, Tencor or the Exchange Agent with respect to the Certificates alleged to have been lost, stolen or destroyed.

1.11 Tax and Accounting Consequences.

(a) It is intended by the parties hereto that the Merger shall constitute a reorganization within the meaning of Section 368 of the Code. The parties hereto adopt this Agreement as a "plan of reorganization" within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Income Tax Regulations.

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(b) It is intended by the parties hereto that the Merger shall qualify for accounting treatment as a pooling of interests.

1.12 Taking of Necessary Action; Further Action. If, at any time after the Effective Time, any further action is necessary or desirable to carry out

the purposes of this Agreement and to vest the Surviving Corporation with full right, title and possession to all assets, property, rights, privileges, powers and franchises of Tencor and Merger Sub, the officers and directors of Tencor and Merger Sub will take all such lawful and necessary action, so long as such action is consistent with this Agreement.

ARTICLE II
REPRESENTATIONS AND WARRANTIES OF TENCOR

Tencor represents and warrants to KLA and Merger Sub, subject to the exceptions specifically disclosed in writing in the disclosure letter supplied by Tencor to KLA dated as of the date hereof and certified by a duly authorized officer of Tencor (the "TENCOR SCHEDULES"), as follows:

2.1 Organization of Tencor.

(a) Tencor and each of its subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation; has the corporate power and authority to own, lease and operate its assets and property and to carry on its business as now being conducted and as proposed to be conducted; and is duly qualified or licensed to do business and is in good standing in each jurisdiction where the character of the properties owned, leased or operated by it or the nature of its activities makes such qualification or licensing necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below) on Tencor.

(b) Tencor has delivered to KLA a true and complete list of all of Tencor's subsidiaries, indicating the jurisdiction of incorporation of each subsidiary and Tencor's equity interest therein.

(c) Tencor has delivered or made available to KLA a true and correct copy of the Articles of Incorporation and Bylaws of Tencor and similar governing instruments of each of its subsidiaries, each as amended to date, and each such instrument is in full force and effect. Neither Tencor nor any of its subsidiaries is in violation of any of the provisions of its Articles of Incorporation or Bylaws or equivalent governing instruments.

(d) When used in connection with Tencor, the term "MATERIAL ADVERSE EFFECT" means, for purposes of this Agreement, any change, event or effect that is materially adverse to the business, assets (including intangible assets), financial condition or results of operations of Tencor and its subsidiaries taken as a whole (except for those changes, events and effects that are directly caused by (i) conditions affecting the United States economy as a whole, or (ii) conditions affecting the semiconductor capital equipment manufacturing industry as a whole, which conditions (in the case of clause (i) or (ii)) do not affect Tencor in a disproportionate manner).

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2.2 Tencor Capital Structure. The authorized capital stock of Tencor consists of 60,000,000 shares of Common Stock, no par value, of which there were 31,073,715 shares issued and outstanding as of January 10, 1997 and 1,000,000 shares of Preferred Stock, no par value, of which no shares are issued or outstanding. All outstanding shares of Tencor Common Stock are duly authorized, validly issued, fully paid and nonassessable and are not subject to preemptive rights created by statute, the Articles of Incorporation or Bylaws of Tencor or any agreement or document to which Tencor is a party or by which it is bound. As of December 31, 1996, Tencor had reserved an aggregate of 3,930,073 shares and 137,365 shares, respectively, of Tencor Common Stock, net of exercises, for issuance to employees, consultants and non-employee directors pursuant to the Tencor 1993 Equity Incentive Plan and the Tencor 1993 Non-Employee Director Stock Plan, under which options are outstanding for an aggregate of 2,677,860 shares and 87,365 shares, respectively, and under which 1,262,295 shares and 50,000 shares, respectively, are available for grant as of December 31, 1996. As of December 31, 1996, Tencor had reserved an aggregate of, and there were outstanding options for 309,130 shares, 98,576 shares and 49,153 shares, respectively, of Tencor Common Stock for issuance pursuant to the Second Amended and Restated 1984 Stock Option Plan, the Prometrix 1983 Employee Incentive Stock Option Plan, as amended, and the Prometrix 1993 Employee Incentive Stock Option Plan. All shares of Tencor Common Stock subject to issuance as aforesaid, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and nonassessable. The Tencor Schedules list for each person who held in the aggregate options to acquire 10,000 or more shares of Tencor Common Stock at on or about January 10, 1997, the name of the holder of such option, the exercise price of such option, the number of shares as to which such option will have vested at such date, the vesting schedule for such option and whether the exercisability of such option will be accelerated in any way by the transactions contemplated by this Agreement, and indicate the extent of acceleration, if any. As of December 31, 1996, an aggregate of 522,919 shares of Tencor Common Stock were reserved for issuance pursuant to Tencor's 1993 Employee Stock Purchase Plan and Tencor's 1993 Foreign Employee Stock Purchase Plan, on a combined basis.

2.3 Obligations With Respect to Capital Stock. Except as set forth in Section 2.2, there are no equity securities, partnership interests or similar ownership interests of any class of Tencor, or any securities exchangeable or convertible into or exercisable for such equity securities, partnership interests or similar ownership interests, issued, reserved for issuance or outstanding. Except for securities Tencor owns, directly or indirectly through one or more subsidiaries, there are no equity securities, partnership interests or similar ownership interests of any class of any subsidiary of Tencor, or any security exchangeable or convertible into or exercisable for such equity securities, partnership interests or similar ownership interests, issued, reserved for issuance or outstanding. Except as set forth in Section 2.2, there are no options, warrants, equity securities, partnership interests or similar ownership interests, calls, rights (including preemptive rights), commitments or agreements of any character to which Tencor or any of its subsidiaries is a party or by which it is bound obligating Tencor or any of its subsidiaries to issue, deliver or sell, or cause to be issued, delivered or sold, or repurchase, redeem or otherwise acquire, or cause the repurchase, redemption or acquisition, of any shares of capital stock, partnership interests or similar ownership interests of Tencor or any of its subsidiaries or obligating Tencor or any of its subsidiaries to grant, extend, accelerate the vesting of or enter into any such option, warrant, equity security, call, right, commitment or agreement. There are no registration rights and, to the knowledge of Tencor, as of the date of this Agreement, there are no voting trusts, proxies or other agreements or understandings with respect to any equity security of

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any class of Tencor or with respect to any equity security, partnership interest or similar ownership interest of any class of any of its subsidiaries.

2.4 Authority.

(a) Tencor has all requisite corporate power and authority to enter into this Agreement and the Tencor Stock Option Agreement and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby, and the execution and delivery of the Tencor Stock Option Agreement and the consummation of the transactions contemplated thereby, have been duly authorized by all necessary corporate action on the part of Tencor, subject only to the approval and adoption of this Agreement and the approval of the Merger by Tencor's shareholders and the filing and recordation of the Agreement of Merger pursuant to California Law. A vote of the holders of at least a majority of the outstanding shares of the Tencor Common Stock is required for Tencor's shareholders to approve and adopt this Agreement and approve the Merger. This Agreement and the Tencor Stock Option Agreement have been duly executed and delivered by Tencor and, assuming the due authorization, execution and delivery by KLA and, if applicable, Merger Sub, constitute valid and binding obligations of Tencor, enforceable in accordance with their respective terms, except as enforceability may be limited by bankruptcy and other similar laws and general principles of equity. The execution and delivery of this Agreement and the Tencor Stock Option Agreement by Tencor do not, and the performance of this Agreement and the Tencor Stock Option Agreement by Tencor will not, (i) conflict with or violate the Articles of Incorporation or Bylaws of Tencor or the equivalent organizational documents of any of its subsidiaries, (ii) subject to obtaining the approval and adoption of this Agreement and the approval of the Merger by Tencor's shareholders as contemplated in Section 5.2 and compliance with the requirements set forth in Section 2.4(b) below, conflict with or violate any law, rule, regulation, order, judgment or decree applicable to Tencor or any of its subsidiaries or by which its or any of their respective properties is bound or affected, or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair Tencor's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the properties or assets of Tencor or any of its subsidiaries pursuant to, any material note, bond, mortgage, indenture, contract, agreement, lease, license, permit, franchise or other instrument or obligation to which Tencor or any of its subsidiaries is a party or by which Tencor or any of its subsidiaries or its or any of their respective properties are bound or affected. The Tencor Schedules list all material consents, waivers and approvals under any of Tencor's or any of its subsidiaries' agreements, contracts, licenses or leases required to be obtained in connection with the consummation of the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with any court, administrative agency or commission or other governmental authority or instrumentality, foreign or domestic ("GOVERNMENTAL ENTITY"), is required by or with respect to Tencor in connection with the execution and delivery of this Agreement and the Tencor Stock Option Agreement or the consummation of the Merger, except for (i) the filing of the Agreement of Merger with the Secretary of State of the State of California, (ii) the filing of the Proxy Statement (as defined in Section 2.19) with the Securities and Exchange Commission ("SEC") in accordance with the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), (iii) such consents, approvals,

orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities laws and the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR ACT") and the securities or antitrust laws of any foreign country, and (iv) such other consents, authorizations, filings, approvals and registrations which if not obtained or made would not be material to Tencor or KLA or have a material adverse effect on the ability of the parties to consummate the Merger.

2.5 SEC Filings; Tencor Financial Statements.

(a) Tencor has filed all forms, reports and documents required to be filed with the SEC since January 1, 1994, and has made available to KLA such forms, reports and documents in the form filed with the SEC. All such required forms, reports and documents (including those that Tencor may file subsequent to the date hereof) are referred to herein as the "TENCOR SEC REPORTS." As of their respective dates, the Tencor SEC Reports (i) were prepared in accordance with the requirements of the Securities Act of 1933, as amended (the "SECURITIES ACT"), or the Exchange Act, as the case may be, and the rules and regulations of the SEC thereunder applicable to such Tencor SEC Reports, and (ii) did not at the time they were filed (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. None of Tencor's subsidiaries is required to file any forms, reports or other documents with the SEC.

(b) Each of the consolidated financial statements (including, in each case, any related notes thereto) contained in Tencor SEC Reports (the "TENCOR FINANCIALS"), including any Tencor SEC Reports filed after the date hereof until the Closing, (x) complied as to form in all material respects with the published rules and regulations of the SEC with respect thereto, (y) was prepared in accordance with generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited interim financial statements, as may be permitted by the SEC on Form 10-Q under the Exchange Act) and (z) fairly presented the consolidated financial position of Tencor and its subsidiaries as at the respective dates thereof and the consolidated results of Tencor's operations and cash flows for the periods indicated, except that the unaudited interim financial statements were or are subject to normal and recurring year-end adjustments. The balance sheet of Tencor contained in Tencor SEC Reports as of September 30, 1996 is hereinafter referred to as the "TENCOR BALANCE SHEET." Except as disclosed in the Tencor Financials, since the date of the Tencor Balance Sheet neither Tencor nor any of its subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be disclosed on a balance sheet or in the related notes to the consolidated financial statements prepared in accordance with GAAP which are, individually or in the aggregate, material to the business, results of operations or financial condition of Tencor and its subsidiaries taken as a whole, except liabilities (i) provided for in the Tencor Balance Sheet, or (ii) incurred since the date of the Tencor Balance Sheet in the ordinary course of business consistent with past practices and immaterial in the aggregate.

(c) Tencor has heretofore furnished to KLA a complete and correct copy of any amendments or modifications, which have not yet been filed with the SEC but which are required to

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be filed, to agreements, documents or other instruments which previously had been filed by Tencor with the SEC pursuant to the Securities Act or the Exchange Act.

2.6 Absence of Certain Changes or Events. Since the date of the Tencor Balance Sheet through the date of this Agreement, there has not been: (i) any Material Adverse Effect on Tencor, (ii) any material change by Tencor in its accounting methods, principles or practices, except as required by concurrent changes in GAAP, or (iii) any material revaluation by Tencor of any of its assets, including, without limitation, writing down the value of capitalized inventory or writing off notes or accounts receivable other than in the ordinary course of business.

2.7 Taxes.

(a) Definition of Taxes. For the purposes of this Agreement, "TAX" or "TAXES" refers to any and all federal, state, local and foreign taxes, assessments and other governmental charges, duties, impositions and liabilities relating to taxes, including taxes based upon or measured by gross receipts, income, profits, sales, use and occupation, and value added, ad valorem, transfer, franchise, withholding, payroll, recapture, employment, excise and property taxes, together with all interest, penalties and additions imposed with respect to such amounts and any obligations under any agreements or arrangements with any other person with respect to such amounts and including any liability for taxes of a predecessor entity.

(b) Tax Returns and Audits.

(i) Tencor and each of its subsidiaries have timely filed all federal, state, local and foreign returns, estimates, information statements and reports ("RETURNS") relating to Taxes required to be filed by Tencor and each of its subsidiaries, except such Returns which are not material to Tencor, and have paid all Taxes shown to be due on such Returns.

(ii) Except as is not material to Tencor, Tencor and each of its subsidiaries as of the Effective Time will have withheld with respect to its employees all federal and state income taxes, FICA, FUTA and other Taxes required to be withheld.

(iii) Except as is not material to Tencor, neither Tencor nor any of its subsidiaries has been delinquent in the payment of any Tax nor is there any Tax deficiency outstanding, proposed or assessed against Tencor or any of its subsidiaries, nor has Tencor or any of its subsidiaries executed any waiver of any statute of limitations on or extending the period for the assessment or collection of any Tax.

(iv) Except as is not material to Tencor, no audit or other examination of any Return of Tencor or any of its subsidiaries is presently in progress, nor has Tencor or any of its subsidiaries been notified of any request for such an audit or other examination.

(v) Except as is not material to Tencor, no adjustment relating to any Returns filed by Tencor or any of its subsidiaries has been proposed formally or informally by any Tax authority to Tencor or any of its subsidiaries or any representative thereof and, to the knowledge of Tencor, no basis exists for any such adjustment which would be material to Tencor.

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(vi) Neither Tencor nor any of its subsidiaries has any liability for unpaid Taxes which has not been accrued for or reserved on the Tencor Balance Sheet, whether asserted or unasserted, contingent or otherwise, which is material to Tencor.

(vii) None of Tencor's assets are treated as "tax-exempt use property" within the meaning of Section 168(h) of the Code.

(viii) There is no contract, agreement, plan or arrangement, including but not limited to the provisions of this Agreement, covering any employee or former employee of Tencor or any of its subsidiaries that, individually or collectively, could give rise to the payment of any amount that would not be deductible pursuant to Sections 280G, 404 or 162 of the Code.

(ix) Neither Tencor nor any of its subsidiaries has filed any consent agreement under Section 341(f) of the Code or agreed to have Section 341(f)(2) of the Code apply to any disposition of a subsection (f) asset (as defined in Section 341(f)(4) of the Code) owned by Tencor.

(x) Tencor is not, and has not been at any time, a "United States real property holding corporation" within the meaning of Section 897(c)(2) of the Code.

(xi) No power of attorney that is currently in force has been granted with respect to any matter relating to Taxes payable by Tencor or any of its subsidiaries.

(xii) Neither Tencor nor any of its subsidiaries is party to or affected by any tax-sharing or allocation agreement or arrangement.

(xiii) The Tencor Schedules list (y) any Tax exemption, Tax holiday or other Tax-sparing arrangement that Tencor or any of its subsidiaries has in any jurisdiction, including the nature, amount and lengths of such Tax exemption, Tax holiday or other Tax-sparing arrangement and (z) any expatriate tax programs or policies affecting Tencor or any of its subsidiaries. Each of Tencor and its subsidiaries is in full compliance with all terms and conditions of any Tax exemption, Tax holiday or other Tax-sparing arrangement or order of any Governmental Entity and the consummation of the transactions contemplated hereby will not have any adverse effect on the continued validity and effectiveness of any such Tax exemption, Tax holiday or other Tax-sparing arrangement or order.

2.8 Intellectual Property.

(a) Tencor and its subsidiaries own, or have the right to use, sell or license all intellectual property necessary or required for the conduct of their respective businesses as presently conducted (such intellectual property and the rights thereto are collectively referred to herein as the "TENCOR IP RIGHTS").

(b) The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby will not constitute

a material breach of any instrument or agreement governing any Tencor IP Rights, will not cause the forfeiture or termination

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or give rise to a right of forfeiture or termination of any Tencor IP Rights or materially impair the right of Tencor, the Surviving Corporation or KLA to use, sell or license any Tencor IP Rights or portion thereof.

(c) Neither the manufacture, marketing, license, sale or intended use of any product or technology currently licensed or sold or under development by Tencor or any of its subsidiaries violates in any material respect any license or agreement between Tencor or any of its subsidiaries and any third party or infringes in any material respect any intellectual property right of any other party; and there is no pending or, to the knowledge of Tencor, threatened claim or litigation contesting the validity, ownership or right to use, sell, license or dispose of any Tencor IP Rights, nor has Tencor received any written notice asserting that any Tencor IP Rights or the proposed use, sale, license or disposition thereof conflicts or will conflict with the rights of any other party.

(d) Tencor has taken reasonable and practicable steps designed to safeguard and maintain the secrecy and confidentiality of, and its proprietary rights in, all Tencor IP Rights.

2.9 Compliance; Permits; Restrictions.

(a) Neither Tencor nor any of its subsidiaries is, in any material respect, in conflict with, or in default or violation of (i) any law, rule, regulation, order, judgment or decree applicable to Tencor or any of its subsidiaries or by which Tencor or any of its subsidiaries or any of their respective properties is bound or affected, or (ii) any material note, bond, mortgage, indenture, contract, agreement, lease, license, permit, franchise or other instrument or obligation to which Tencor or any of its subsidiaries is a party or by which Tencor or any of its subsidiaries or its or any of their respective properties is bound or affected. To the knowledge of Tencor, no investigation or review by any Governmental Entity is pending or threatened against Tencor or any of its subsidiaries, nor has any Governmental Entity indicated an intention to conduct the same. There is no material agreement, judgment, injunction, order or decree binding upon Tencor or any of its subsidiaries which has or could reasonably be expected to have the effect of prohibiting or materially impairing any business practice of Tencor or any of its subsidiaries, any acquisition of material property by Tencor or any of its subsidiaries or the conduct of business by Tencor as currently conducted.

(b) Tencor and its subsidiaries hold all permits, licenses, variances, exemptions, orders and approvals from governmental authorities which are material to the operation of the business of Tencor (collectively, the "TENCOR PERMITS"). Tencor and its subsidiaries are in compliance in all material respects with the terms of the Tencor Permits.

2.10 Litigation. There is no action, suit, proceeding, claim, arbitration or investigation pending, or as to which Tencor or any of its subsidiaries has received any notice of assertion nor, to Tencor's knowledge, is there a threatened action, suit, proceeding, claim, arbitration or investigation against Tencor or any of its subsidiaries which reasonably would be likely to be material to Tencor, or which in any manner challenges or seeks to prevent, enjoin, alter or delay any of the transactions contemplated by this Agreement.

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2.11 Brokers' and Finders' Fees. Except for fees payable to Lehman Brothers Inc. pursuant to an engagement letter dated January 9, 1996, a copy of which has been provided to KLA, Tencor has not incurred, nor will it incur, directly or indirectly, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement or any transaction contemplated hereby.

2.12 Employee Benefit Plans.

(a) With respect to each material employee benefit plan, program, arrangement and contract (including, without limitation, any "employee benefit plan" as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA")) maintained or contributed to by Tencor or any trade or business (an "ERISA AFFILIATE") which is under common control with Tencor within the meaning of Section 414 of the Code (the "TENCOR EMPLOYEE PLANS"), Tencor has made available to KLA a true and complete copy of, to the extent applicable, (i) such Tencor Employee Plan, (ii) the most recent annual report (Form 5500), (iii) each trust agreement related to such Tencor Employee Plan, (iv) the most recent summary plan description for each Tencor Employee Plan for which such a description is required, (v) the most recent actuarial report relating to any Tencor Employee Plan subject to Title IV of ERISA and (vi) the most recent United States Internal Revenue Service ("IRS") determination letter issued with respect to any Tencor Employee Plan.

(b) Each Tencor Employee Plan which is intended to be

qualified under Section 401(a) of the Code has received a favorable determination from the IRS covering the provisions of the Tax Reform Act of 1986 stating that such Tencor Employee Plan is so qualified and nothing has occurred since the date of such letter that could reasonably be expected to affect the qualified status of such plan. Each Tencor Employee Plan has been operated in all material respects in accordance with its terms and the requirements of applicable law. Neither Tencor nor any ERISA Affiliate of Tencor has incurred or is reasonably expected to incur any material liability under Title IV of ERISA in connection with any Tencor Employee Plan.

2.13 Absence of Liens and Encumbrances. Tencor and each of its subsidiaries has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all of its material tangible properties and assets, real, personal and mixed, used in its business, free and clear of any liens or encumbrances except as reflected in the Tencor Financials and except for liens for taxes not yet due and payable and such imperfections of title and encumbrances, if any, which would not be material to Tencor.

2.14 Environmental Matters.

(a) Hazardous Material. Except as reasonably would not be likely to result in a material liability to Tencor, no underground storage tanks and no amount of any substance that has been designated by any Governmental Entity or by applicable federal, state or local law to be radioactive, toxic, hazardous or otherwise a danger to health or the environment, including, without limitation, PCBs, asbestos, petroleum, urea-formaldehyde and all substances listed as hazardous substances pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, or defined as a hazardous waste pursuant to the United States Resource

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Conservation and Recovery Act of 1976, as amended, and the regulations promulgated pursuant to said laws, (a "HAZARDOUS MATERIAL"), but excluding office and janitorial supplies, are present, as a result of the actions of Tencor or any of its subsidiaries or any affiliate of Tencor, or, to Tencor's knowledge, as a result of any actions of any third party or otherwise, in, on or under any property, including the land and the improvements, ground water and surface water thereof, that Tencor or any of its subsidiaries has at any time owned, operated, occupied or leased.

(b) Hazardous Materials Activities. Except as reasonably would not be likely to result in a material liability to Tencor, neither Tencor nor any of its subsidiaries has transported, stored, used, manufactured, disposed of, released or exposed its employees or others to Hazardous Materials in violation of any law in effect on or before the Closing Date, nor has Tencor or any of its subsidiaries disposed of, transported, sold, used, released, exposed its employees or others to or manufactured any product containing a Hazardous Material (collectively "HAZARDOUS MATERIALS ACTIVITIES") in violation of any rule, regulation, treaty or statute promulgated by any Governmental Entity in effect prior to or as of the date hereof to prohibit, regulate or control Hazardous Materials or any Hazardous Material Activity.

(c) Permits. Tencor and its subsidiaries currently hold all environmental approvals, permits, licenses, clearances and consents (the "TENCOR ENVIRONMENTAL PERMITS") necessary for the conduct of Tencor's and its subsidiaries' Hazardous Material Activities and other businesses of Tencor and its subsidiaries as such activities and businesses are currently being conducted.

(d) Environmental Liabilities. No material action, proceeding, revocation proceeding, amendment procedure, writ, injunction or claim is pending, or to Tencor's knowledge, threatened concerning any Tencor Environmental Permit, Hazardous Material or any Hazardous Materials Activity of Tencor or any of its subsidiaries. Tencor is not aware of any fact or circumstance which could involve Tencor or any of its subsidiaries in any material environmental litigation or impose upon Tencor any material environmental liability.

2.15 Labor Matters. To Tencor's knowledge, there are no activities or proceedings of any labor union to organize any employees of Tencor or any of its subsidiaries and there are no strikes, or material slowdowns, work stoppages or lockouts, or threats thereof by or with respect to any employees of Tencor or any of its subsidiaries. Tencor and its subsidiaries are and have been in compliance in all material respects with all applicable laws regarding employment practices, terms and conditions of employment, and wages and hours (including, without limitation, ERISA, WARN or any similar state or local law).

2.16 Agreements, Contracts and Commitments. Except as set forth in the Tencor Schedules, neither Tencor nor any of its subsidiaries is a party to or is bound by:

(a) any employment or consulting agreement, contract or commitment with any officer or director level employee or member of Tencor's Board of Directors, other than those that are terminable by Tencor or any of its subsidiaries on no more than thirty days notice without liability or financial

obligation, except to the extent general principles of wrongful termination law may limit Tencor's or any of its subsidiaries' ability to terminate employees at will;

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(b) any agreement or plan, including, without limitation, any stock option plan, stock appreciation right plan or stock purchase plan, any of the benefits of which will be increased, or the vesting of benefits of which will be accelerated, by the occurrence of any of the transactions contemplated by this Agreement or the value of any of the benefits of which will be calculated on the basis of any of the transactions contemplated by this Agreement;

(c) any agreement of indemnification or guaranty not entered into in the ordinary course of business other than indemnification agreements between Tencor or any of its subsidiaries and any of its officers or directors;

(d) any agreement, contract or commitment containing any covenant limiting the freedom of Tencor or any of its subsidiaries to engage in any line of business or compete with any person or granting any exclusive distribution rights;

(e) any agreement, contract or commitment currently in force relating to the disposition or acquisition of assets not in the ordinary course of business or any ownership interest in any corporation, partnership, joint venture or other business enterprise; or

(f) any material joint marketing or development agreement.

Neither Tencor nor any of its subsidiaries, nor to Tencor's knowledge any other party to a Tencor Contract (as defined below), has breached, violated or defaulted under, or received notice that it has breached violated or defaulted under, any of the material terms or conditions of any of the agreements, contracts or commitments to which Tencor or any of its subsidiaries is a party or by which it is bound of the type described in clauses (a) through (l) above (any such agreement, contract or commitment, a "Tencor Contract") in such a manner as would permit any other party to cancel or terminate any such Tencor Contract, or would permit any other party to seek damages, which would be reasonably likely to be material to Tencor.

2.17 Pooling of Interests. To the knowledge of Tencor, based on consultation with its independent accountants, neither Tencor nor any of its directors, officers, affiliates or shareholders has taken any action which would preclude KLA's ability to account for the Merger as a pooling of interests.

2.18 Change of Control Payments. The Tencor Schedules set forth each plan or agreement pursuant to which any material amounts may become payable (whether currently or in the future) to current or former officers and directors of Tencor as a result of or in connection with the Merger.

2.19 Statements; Proxy Statement/Prospectus. The information supplied by Tencor for inclusion in the Registration Statement (as defined in Section 3.4(b)) shall not at the time the Registration Statement is filed with the SEC and at the time it becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading. The information supplied by Tencor for inclusion in the proxy statement/prospectus to be sent to the shareholders of Tencor and stockholders of KLA in connection with the meeting of Tencor's shareholders to consider the approval and adoption of this Agreement and the approval of the Merger (the "TENCOR

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SHAREHOLDERS' MEETING") and in connection with the meeting of KLA's stockholders to consider the approval of (i) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (ii) the issuance of shares of KLA Common Stock by virtue of the Merger, and (iii) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name (subject to and conditional upon the effectiveness of the Merger) (the "KLA STOCKHOLDERS' MEETING") (such proxy statement/prospectus as amended or supplemented is referred to herein as the "PROXY STATEMENT") shall not, on the date the Proxy Statement is first mailed to Tencor's shareholders and KLA's stockholders, at the time of the Tencor Shareholders' Meeting or the KLA Stockholders' Meeting and at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not false or misleading; or omit to state any material fact necessary to correct any statement in any earlier communication with respect to the solicitation of proxies for the Tencor Shareholders' Meeting or the KLA Stockholders' Meeting which has become false or misleading. The Proxy Statement will comply as to form in all material respects with the provisions of the Exchange Act and the rules and regulations thereunder. If at any time prior to the Effective Time, any event relating to Tencor or any of its affiliates, officers or directors should be discovered by Tencor which should be set forth

in an amendment to the Registration Statement or a supplement to the Proxy Statement, Tencor shall promptly inform KLA. Notwithstanding the foregoing, Tencor makes no representation or warranty with respect to any information supplied by KLA or Merger Sub which is contained in any of the foregoing documents.

2.20 Board Approval. The Board of Directors of Tencor has, as of the date of this Agreement, determined (i) that the Merger is fair to, and in the best interests of Tencor and its shareholders, and (ii) to recommend that the shareholders of Tencor approve and adopt this Agreement and approve the Merger.

2.21 Fairness Opinion. Tencor has received a written opinion from Lehman Brothers Inc., dated as of the date hereof, to the effect that as of the date hereof, the Exchange Ratio is fair to Tencor's shareholders from a financial point of view and has delivered to KLA a copy of such opinion.

ARTICLE III REPRESENTATIONS AND WARRANTIES OF KLA AND MERGER SUB

KLA and Merger Sub represent and warrant to Tencor, subject to the exceptions specifically disclosed in writing in the disclosure letter supplied by KLA to Tencor dated as of the date hereof and certified by a duly authorized officer of KLA (the "KLA SCHEDULES"), as follows:

3.1 Organization of KLA.

(a) KLA and each of its subsidiaries is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation; has the corporate power and authority to own, lease and operate its assets and property and to carry on its business as now being conducted and as proposed to be conducted; and is duly qualified or licensed to do

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business and is in good standing in each jurisdiction where the character of the properties owned, leased or operated by it or the nature of its activities makes such qualification or licensing necessary, except where the failure to be so qualified would not have a Material Adverse Effect (as defined below) on KLA.

(b) KLA has delivered to Tencor a true and complete list of all of KLA's subsidiaries, indicating the jurisdiction of incorporation of each subsidiary and KLA's equity interest therein.

(c) KLA has delivered or made available to Tencor a true and correct copy of the Certificate of Incorporation and Bylaws of KLA and similar governing instruments of each of its subsidiaries, each as amended to date, and each such instrument is in full force and effect. Neither KLA nor any of its subsidiaries is in violation of any of the provisions of its Certificate of Incorporation or Bylaws or equivalent governing instruments.

(d) When used in connection with KLA, the term "MATERIAL ADVERSE EFFECT" means, for purposes of this Agreement, any change, event or effect that is materially adverse to the business, assets (including intangible assets), financial condition or results of operations of KLA and its subsidiaries taken as a whole (except for those changes, events and effects that are directly caused by (i) conditions affecting the United States economy as a whole, or (ii) conditions affecting the semiconductor capital equipment manufacturing industry as a whole, which conditions (in the case of clause (i) or (ii)) do not affect KLA in a disproportionate manner).

3.2 KLA and Merger Sub Capital Structure. The authorized capital stock of KLA consists of 75,000,000 shares of Common Stock, par value \$0.001 per share, 74,000,000 of which have been designated "Common Stock" of which there were 51,544,239 shares issued and outstanding as of January 10, 1997, including 110,000 shares held in the treasury of KLA, and 1,000,000 of which have been designated "Junior Common Stock," of which no shares are issued and outstanding; and 1,000,000 shares of Preferred Stock, par value \$0.001 per share, of which no shares are issued or outstanding. The authorized capital stock of Merger Sub consists of 1,000 shares of Common Stock, no par value, all of which, as of the date hereof, are issued and outstanding and are held by KLA. Merger Sub was formed on January 9, 1997, for the purpose of consummating the Merger and has no material assets or liabilities except as necessary for such purpose. All outstanding shares of KLA Common Stock are duly authorized, validly issued, fully paid and nonassessable and are not subject to preemptive rights created by statute, the Certificate of Incorporation or Bylaws of KLA or any agreement or document to which KLA is a party or by which it is bound. As of January 10, 1997, KLA had reserved an aggregate of 16,500,000 shares and 200,000 shares, respectively, of KLA Common Stock, net of exercises, for issuance to employees, consultants and non-employee directors pursuant to the KLA 1982 Stock Option Plan and the KLA 1990 Outside Directors Stock Option Plan, under which options are outstanding for an aggregate of 6,019,881 shares and 108,590 shares, respectively, and under which 2,161,788 shares and 31,669 shares, respectively, are available for grant as of January 10, 1997. In addition, as of January 10, 1997, options to purchase 4,772 shares of KLA Common Stock were outstanding and

904 shares of KLA Common Stock were available for grant pursuant to a stock plan assumed by KLA in connection with its acquisition of Metrologix Inc. All shares of KLA Common Stock subject to issuance as aforesaid, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, would be duly authorized,

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validly issued, fully paid and nonassessable. The KLA Schedules list for each person who held in the aggregate options to acquire 10,000 or more shares of KLA Common Stock at January 13, 1997, the name of the holder of such option, the number of shares subject to such option, the exercise price of such option, the number of shares as to which such option will have vested at such date, the vesting schedule for such option and whether the exercisability of such option will be accelerated in any way by the transactions contemplated by this Agreement, and indicate the extent of acceleration, if any. As of January 13, 1997, there were an aggregate of 4,800,000 shares of KLA Common Stock have been reserved for issuance pursuant to KLA's Employee Stock Purchase Plan (the "KLA EMPLOYEE STOCK PURCHASE PLAN").

3.3 Obligations With Respect to Capital Stock. Except as set forth in Section 3.2, and except pursuant to the KLA Rights Plan, there are no equity securities, partnership interests or similar ownership interests of any class of KLA, or any securities exchangeable or convertible into or exercisable for such equity securities, partnership interests or similar ownership interests, issued, reserved for issuance or outstanding. Except for securities KLA owns, directly or indirectly through one or more subsidiaries, there are no equity securities, partnership interests or similar ownership interests of any class of any subsidiary of KLA, or any security exchangeable or convertible into or exercisable for such equity securities, partnership interests or similar ownership interests, issued, reserved for issuance or outstanding. Except as set forth in Section 3.2 and except pursuant to the KLA Rights Plan, there are no options, warrants, equity securities, partnership interests or similar ownership interests, calls, rights (including preemptive rights), commitments or agreements of any character to which KLA or any of its subsidiaries is a party or by which it is bound obligating KLA or any of its subsidiaries to issue, deliver or sell, or cause to be issued, delivered or sold, or repurchase, redeem or otherwise acquire, or cause the repurchase, redemption or acquisition, of any shares of capital stock, partnership interests or similar ownership interests of KLA or any of its subsidiaries or obligating KLA or any of its subsidiaries to grant, extend, accelerate the vesting of or enter into any such option, warrant, equity security, call, right, commitment or agreement. There are no registration rights and, to the knowledge of KLA, as of the date of this Agreement, there are no voting trusts, proxies or other agreements or understandings with respect to any equity security of any class of KLA or with respect to any equity security, partnership interest or similar ownership interest of any class of any of its subsidiaries.

3.4 Authority.

(a) Each of KLA and Merger Sub has all requisite corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby and KLA has all requisite corporate power and authority to enter into the KLA Stock Option Agreement and to consummate the transactions contemplated thereby. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby, and the execution and delivery of the KLA Stock Option Agreement and the consummation of the transactions contemplated thereby, have been duly authorized by all necessary corporate action on the part of KLA and, in the case of this Agreement, Merger Sub, subject only to the filing and recordation of the Agreement of Merger pursuant to California Law and the approval by KLA's stockholders of (i) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (ii) the issuance of shares of KLA Common Stock by virtue of the Merger, and (iii) the amendment of KLA's Certificate of Incorporation to change

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KLA's corporate name (subject to and conditional upon the effectiveness of the Merger). A vote of the holders of at least a majority of the outstanding shares of the KLA Common Stock is required for KLA's stockholders to approve each of (i) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (ii) the issuance of shares of KLA Common Stock by virtue of the Merger, and (iii) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name (subject to and conditional upon the effectiveness of the Merger). This Agreement has been duly executed and delivered by each of KLA and Merger Sub and, assuming the due authorization, execution and delivery by Tencor, constitutes the valid and binding obligation of KLA, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy and other similar laws and general principles of equity. The KLA Stock Option Agreement has been duly executed and delivered by KLA and, assuming the due authorization, execution and delivery of the KLA Stock Option Agreement by Tencor, the KLA Stock Option Agreement constitutes the valid and binding obligation of KLA, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy and other similar laws and general principles of equity. The execution and delivery of this Agreement by

each of KLA and Merger Sub and the execution and delivery of the KLA Stock Option Agreement by KLA do not, and the performance of this Agreement by each of KLA and Merger Sub will not and the performance of the KLA Stock Option Agreement by KLA will not, (i) conflict with or violate the Certificate of Incorporation or Bylaws of KLA or the Articles of Incorporation or Bylaws of Merger Sub or the equivalent organizational documents of any of KLA's other subsidiaries, (ii) subject to obtaining the approval of KLA's stockholders of (x) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (y) the issuance of shares of KLA Common Stock by virtue of the Merger, and (z) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name (subject to and conditional upon the effectiveness of the Merger) as contemplated in Section 5.2 and compliance with the requirements set forth in Section 3.4(b) below, conflict with or violate any law, rule, regulation, order, judgment or decree applicable to KLA or any of its subsidiaries (including Merger Sub) or by which its or any of their respective properties is bound or affected, or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair KLA's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the properties or assets of KLA or any of its subsidiaries (including Merger Sub) pursuant to, any material note, bond, mortgage, indenture, contract, agreement, lease, license, permit, franchise or other instrument or obligation to which KLA or any of its subsidiaries (including Merger Sub) is a party or by which KLA or any of its subsidiaries or its or any of their respective properties are bound or affected. The KLA Schedules list all material consents, waivers and approvals under any of KLA's or any of its subsidiaries' agreements, contracts, licenses or leases required to be obtained in connection with the consummation of the transactions contemplated hereby.

(b) No consent, approval, order or authorization of, or registration, declaration or filing with any Governmental Entity is required by or with respect to KLA or Merger Sub in connection with the execution and delivery of this Agreement and the KLA Stock Option Agreement or the consummation of the Merger, except for (i) the filing of a Form S-4 Registration Statement (the "REGISTRATION STATEMENT") with the SEC in accordance with the Securities Act, (ii) the filing of the Agreement of Merger with the Secretary of State of the State of California, (iii) the filing of the

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Proxy Statement with the SEC in accordance with the Exchange Act, (iv) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal and state securities laws and the HSR Act and the securities or antitrust laws of any foreign country, and (v) such other consents, authorizations, filings, approvals and registrations which if not obtained or made would not be material to KLA or Tencor or have a material adverse effect on the ability of the parties to consummate the Merger.

3.5 Section 203 of the Delaware General Corporation Law Not Applicable. The Board of Directors of KLA has taken all actions so that the restrictions contained in Section 203 of the Delaware General Corporation Law applicable to a "business combination" (as defined in such Section 203) will not apply to the execution, delivery or performance of this Agreement or the Stock Option Agreements or to the consummation of the Merger or the other transactions contemplated by this Agreement or the Stock Option Agreements.

3.6 SEC Filings; KLA Financial Statements.

(a) KLA has filed all forms, reports and documents required to be filed with the SEC since January 1, 1994, and has made available to Tencor such forms, reports and documents in the form filed with the SEC. All such required forms, reports and documents (including those that KLA may file subsequent to the date hereof) are referred to herein as the "KLA SEC REPORTS." As of their respective dates, the KLA SEC Reports (i) were prepared in accordance with the requirements of the Securities Act or the Exchange Act, as the case may be, and the rules and regulations of the SEC thereunder applicable to such KLA SEC Reports, and (ii) did not at the time they were filed (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. None of KLA's subsidiaries is required to file any forms, reports or other documents with the SEC.

(b) Each of the consolidated financial statements (including, in each case, any related notes thereto) contained in KLA SEC Reports (the "KLA FINANCIALS"), including any KLA SEC Reports filed after the date hereof until the Closing, (x) complied as to form in all material respects with the published rules and regulations of the SEC with respect thereto, (y) was prepared in accordance with GAAP applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited interim financial statements, as may be permitted by the SEC on Form 10-Q under the Exchange Act) and (z) fairly presented the consolidated financial

position of KLA and its subsidiaries as at the respective dates thereof and the consolidated results of KLA's operations and cash flows for the periods indicated, except that the unaudited interim financial statements were or are subject to normal and recurring year-end adjustments. The balance sheet of KLA contained in KLA SEC Reports as of September 30, 1996 is hereinafter referred to as the "KLA BALANCE SHEET." Except as disclosed in the KLA Financials, since the date of the KLA Balance Sheet neither KLA nor any of its subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be disclosed on a balance sheet or in the related notes to the consolidated financial statements prepared in accordance with GAAP which are, individually or in the aggregate, material to the business, results of operations or financial condition of KLA and its subsidiaries taken as a whole, except liabilities (i) provided for in the KLA

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Balance Sheet, or (ii) incurred since the date of the KLA Balance Sheet in the ordinary course of business consistent with past practices and immaterial in the aggregate.

(c) KLA has heretofore furnished to Tencor a complete and correct copy of any amendments or modifications, which have not yet been filed with the SEC but which are required to be filed, to agreements, documents or other instruments which previously had been filed by KLA with the SEC pursuant to the Securities Act or the Exchange Act.

3.7 Absence of Certain Changes or Events. Since the date of the KLA Balance Sheet through the date of this Agreement, there has not been: (i) any Material Adverse Effect on KLA, (ii) any material change by KLA in its accounting methods, principles or practices, except as required by concurrent changes in GAAP, or (iii) any material revaluation by KLA of any of its assets, including, without limitation, writing down the value of capitalized inventory or writing off notes or accounts receivable other than in the ordinary course of business.

3.8 Taxes.

(a) Tax Returns and Audits.

(i) KLA and each of its subsidiaries have timely filed all Returns relating to Taxes required to be filed by KLA and each of its subsidiaries, except such Returns which are not material to KLA, and have paid all Taxes shown to be due on such Returns.

(ii) Except as is not material to KLA, KLA and each of its subsidiaries as of the Effective Time will have withheld with respect to its employees all federal and state income taxes, FICA, FUTA and other Taxes required to be withheld.

(iii) Except as is not material to KLA, neither KLA nor any of its subsidiaries has been delinquent in the payment of any Tax nor is there any Tax deficiency outstanding, proposed or assessed against KLA or any of its subsidiaries, nor has KLA or any of its subsidiaries executed any waiver of any statute of limitations on or extending the period for the assessment or collection of any Tax.

(iv) Except as is not material to KLA, no audit or other examination of any Return of KLA or any of its subsidiaries is presently in progress, nor has KLA or any of its subsidiaries been notified of any request for such an audit or other examination.

(v) Except as is not material to KLA, no adjustment relating to any Returns filed by KLA or any of its subsidiaries has been proposed formally or informally by any Tax authority to KLA or any of its subsidiaries or any representative thereof and, to the knowledge of KLA, no basis exists for any such adjustment which would be material to KLA.

(vi) Neither KLA nor any of its subsidiaries has any liability for unpaid Taxes which has not been accrued for or reserved on the KLA Balance Sheet, whether asserted or unasserted, contingent or otherwise, which is material to KLA.

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(vii) None of KLA's assets are treated as "tax-exempt use property" within the meaning of Section 168(h) of the Code.

(viii) There is no contract, agreement, plan or arrangement, including but not limited to the provisions of this Agreement, covering any employee or former employee of KLA or any of its subsidiaries that, individually or collectively, could give rise to the payment of any amount that would not be deductible pursuant to Sections 280G, 404 or 162 of the Code.

(ix) Neither KLA nor any of its subsidiaries has filed any consent agreement under Section 341(f) of the Code or agreed to have Section 341(f)(2) of the Code apply to any disposition of a subsection (f) asset

(as defined in Section 341(f)(4) of the Code) owned by KLA.

(x) KLA is not, and has not been at any time, a "United States real property holding corporation" within the meaning of Section 897(c)(2) of the Code.

(xi) No power of attorney that is currently in force has been granted with respect to any matter relating to Taxes payable by KLA or any of its subsidiaries.

(xii) Neither KLA nor any of its subsidiaries is party to or affected by any tax-sharing or allocation agreement or arrangement.

(xiii) The KLA Schedules list (y) any Tax exemption, Tax holiday or other Tax-sparing arrangement that KLA or any of its subsidiaries has in any jurisdiction, including the nature, amount and lengths of such Tax exemption, Tax holiday or other Tax-sparing arrangement and (z) any expatriate tax programs or policies affecting KLA or any of its subsidiaries. Each of KLA and its subsidiaries is in full compliance with all terms and conditions of any Tax exemption, Tax holiday or other Tax-sparing arrangement or order of any Governmental Entity and the consummation of the transactions contemplated hereby will not have any adverse effect on the continued validity and effectiveness of any such Tax exemption, Tax holiday or other Tax-sparing arrangement or order.

3.9 Intellectual Property.

(a) KLA and its subsidiaries own, or have the right to use, sell or license all intellectual property necessary or required for the conduct of their respective businesses as presently conducted (such intellectual property and the rights thereto are collectively referred to herein as the "KLA IP RIGHTS").

(b) The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby will not constitute a material breach of any instrument or agreement governing any KLA IP Rights, will not cause the forfeiture or termination or give rise to a right of forfeiture or termination of any KLA IP Rights or materially impair the right of KLA, the Surviving Corporation or Tencor to use, sell or license any KLA IP Rights or portion thereof.

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(c) Neither the manufacture, marketing, license, sale or intended use of any product or technology currently licensed or sold or under development by KLA or any of its subsidiaries violates in any material respect any license or agreement between KLA or any of its subsidiaries and any third party or infringes in any material respect any intellectual property right of any other party; and there is no pending or, to the knowledge of KLA, threatened claim or litigation contesting the validity, ownership or right to use, sell, license or dispose of any KLA IP Rights, nor has KLA received any written notice asserting that any KLA IP Rights or the proposed use, sale, license or disposition thereof conflicts or will conflict with the rights of any other party.

(d) KLA has taken reasonable and practicable steps designed to safeguard and maintain the secrecy and confidentiality of, and its proprietary rights in, all KLA IP Rights.

3.10 Compliance; Permits; Restrictions.

(a) Neither KLA nor any of its subsidiaries is, in any material respect, in conflict with, or in default or violation of (i) any law, rule, regulation, order, judgment or decree applicable to KLA or any of its subsidiaries or by which KLA or any of its subsidiaries or any of their respective properties is bound or affected, or (ii) any material note, bond, mortgage, indenture, contract, agreement, lease, license, permit, franchise or other instrument or obligation to which KLA or any of its subsidiaries is a party or by which KLA or any of its subsidiaries or its or any of their respective properties is bound or affected. To the knowledge of KLA, no investigation or review by any Governmental Entity is pending or threatened against KLA or any of its subsidiaries, nor has any Governmental Entity indicated an intention to conduct the same. There is no material agreement, judgment, injunction, order or decree binding upon KLA or any of its subsidiaries which has or could reasonably be expected to have the effect of prohibiting or materially impairing any business practice of KLA or any of its subsidiaries, any acquisition of material property by KLA or any of its subsidiaries or the conduct of business by KLA as currently conducted.

(b) KLA and its subsidiaries hold all permits, licenses, variances, exemptions, orders and approvals from governmental authorities which are material to the operation of the business of KLA (collectively, the "KLA PERMITS"). KLA and its subsidiaries are in compliance in all material respects with the terms of the KLA Permits.

3.11 Litigation. There is no action, suit, proceeding, claim, arbitration or investigation pending, or as to which KLA or any of its subsidiaries has received any notice of assertion nor, to KLA's knowledge, is there a threatened action, suit, proceeding, claim, arbitration or investigation against KLA or any of its subsidiaries which reasonably would be likely to be material to KLA, or which in any manner challenges or seeks to prevent, enjoin, alter or delay any of the transactions contemplated by this Agreement.

3.12 Brokers' and Finders' Fees. Except for fees payable to Merrill Lynch pursuant to an engagement letter dated December 20, 1996, and Deutsche Morgan Grenfell Technology Group pursuant to an engagement letter dated December 16, 1996, a copy of each of which has been provided to Tencor, KLA has not incurred, nor will it incur, directly or indirectly, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement or any transaction contemplated hereby.

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3.13 Employee Benefit Plans.

(a) With respect to each material employee benefit plan, program, arrangement and contract (including, without limitation, any "employee benefit plan" as defined in Section 3(3) of ERISA) maintained or contributed to by KLA or any trade or business which is under common control with KLA within the meaning of Section 414 of the Code (the "KLA EMPLOYEE PLANS"), KLA has made available to Tencor a true and complete copy of, to the extent applicable, (i) such KLA Employee Plan, (ii) the most recent annual report (Form 5500), (iii) each trust agreement related to such KLA Employee Plan, (iv) the most recent summary plan description for each KLA Employee Plan for which such a description is required, (v) the most recent actuarial report relating to any KLA Employee Plan subject to Title IV of ERISA and (vi) the most recent IRS determination letter issued with respect to any KLA Employee Plan.

(b) Each KLA Employee Plan which is intended to be qualified under Section 401(a) of the Code has received a favorable determination from the IRS covering the provisions of the Tax Reform Act of 1986 stating that such KLA Employee Plan is so qualified and nothing has occurred since the date of such letter that could reasonably be expected to affect the qualified status of such plan. Each KLA Employee Plan has been operated in all material respects in accordance with its terms and the requirements of applicable law. Neither KLA nor any ERISA Affiliate of KLA has incurred or is reasonably expected to incur any material liability under Title IV of ERISA in connection with any KLA Employee Plan.

3.14 Absence of Liens and Encumbrances. KLA and each of its subsidiaries has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all of its material tangible properties and assets, real, personal and mixed, used in its business, free and clear of any liens or encumbrances except as reflected in the KLA Financials and except for liens for taxes not yet due and payable and such imperfections of title and encumbrances, if any, which would not be material to KLA.

3.15 Environmental Matters.

(a) Hazardous Material. Except as reasonably would not be likely to result in a material liability to KLA, no underground storage tanks and no amount of any Hazardous Material, but excluding office and janitorial supplies, are present, as a result of the actions of KLA or any of its subsidiaries or any affiliate of KLA, or, to KLA's knowledge, as a result of any actions of any third party or otherwise, in, on or under any property, including the land and the improvements, ground water and surface water thereof, that KLA or any of its subsidiaries has at any time owned, operated, occupied or leased.

(b) Hazardous Materials Activities. Except as reasonably would not be likely to result in a material liability to KLA, neither KLA nor any of its subsidiaries has transported, stored, used, manufactured, disposed of, released or exposed its employees or others to Hazardous Materials in violation of any law in effect on or before the Closing Date, nor has KLA or any of its subsidiaries engaged in any Hazardous Materials Activities in violation of any rule, regulation, treaty or statute promulgated by any Governmental Entity in effect prior to or as of the date hereof to prohibit, regulate or control Hazardous Materials or any Hazardous Material Activity.

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(c) Permits. KLA and its subsidiaries currently hold all environmental approvals, permits, licenses, clearances and consents (the "KLA ENVIRONMENTAL PERMITS") necessary for the conduct of KLA's and its subsidiaries' Hazardous Material Activities and other businesses of KLA and its subsidiaries as such activities and businesses are currently being conducted.

(d) Environmental Liabilities. No material action, proceeding, revocation proceeding, amendment procedure, writ, injunction or claim is pending, or to KLA's knowledge, threatened concerning any KLA Environmental

Permit, Hazardous Material or any Hazardous Materials Activity of KLA or any of its subsidiaries. KLA is not aware of any fact or circumstance which could involve KLA or any of its subsidiaries in any material environmental litigation or impose upon KLA any material environmental liability.

3.16 Labor Matters. To KLA's knowledge, there are no activities or proceedings of any labor union to organize any employees of KLA or any of its subsidiaries and there are no strikes, or material slowdowns, work stoppages or lockouts, or threats thereof by or with respect to any employees of KLA or any of its subsidiaries. KLA and its subsidiaries are and have been in compliance in all material respects with all applicable laws regarding employment practices, terms and conditions of employment, and wages and hours (including, without limitation, ERISA, WARN or any similar state or local law).

3.17 Agreements, Contracts and Commitments. Except as set forth in the KLA Schedules, neither KLA nor any of its subsidiaries is a party to or is bound by:

(a) any employment or consulting agreement, contract or commitment with any officer or director level employee or member of KLA's Board of Directors, other than those that are terminable by KLA or any of its subsidiaries on no more than thirty days notice without liability or financial obligation, except to the extent general principles of wrongful termination law may limit KLA's or any of its subsidiaries' ability to terminate employees at will;

(b) any agreement or plan, including, without limitation, any stock option plan, stock appreciation right plan or stock purchase plan, any of the benefits of which will be increased, or the vesting of benefits of which will be accelerated, by the occurrence of any of the transactions contemplated by this Agreement or the value of any of the benefits of which will be calculated on the basis of any of the transactions contemplated by this Agreement;

(c) any agreement of indemnification or guaranty not entered into in the ordinary course of business other than indemnification agreements between KLA or any of its subsidiaries and any of its officers or directors;

(d) any agreement, contract or commitment containing any covenant limiting the freedom of KLA or any of its subsidiaries to engage in any line of business or compete with any person or granting any exclusive distribution rights;

(e) any agreement, contract or commitment currently in force relating to the disposition or acquisition of assets not in the ordinary course of business or any ownership interest in any corporation, partnership, joint venture or other business enterprise; or

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(f) any material joint marketing or development agreement.

Neither KLA nor any of its subsidiaries, nor to KLA's knowledge any other party to a KLA Contract (as defined below), has breached, violated or defaulted under, or received notice that it has breached violated or defaulted under, any of the material terms or conditions of any of the agreements, contracts or commitments to which KLA or any of its subsidiaries is a party or by which it is bound of the type described in clauses (a) through (f) above (any such agreement, contract or commitment, a "KLA CONTRACT") in such a manner as would permit any other party to cancel or terminate any such KLA Contract, or would permit any other party to seek damages, which would be reasonably likely to be material to KLA.

3.18 Pooling of Interests. To the knowledge of KLA, based on consultation with its independent accountants, neither KLA nor any of its directors, officers, affiliates or stockholders has taken any action which would preclude KLA's ability to account for the Merger as a pooling of interests.

3.19 Change of Control Payments. The KLA Schedules set forth each plan or agreement pursuant to which any material amounts may become payable (whether currently or in the future) to current or former officers and directors of KLA as a result of or in connection with the Merger.

3.20 Statements; Proxy Statement/Prospectus. The information supplied by KLA for inclusion in the Registration Statement shall not at the time the Registration Statement is filed with the SEC and at the time it becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading. The information supplied by KLA for inclusion in the Proxy Statement shall not, on the date the Proxy Statement is first mailed to KLA's stockholders and Tencor's shareholders, at the time of the KLA Stockholders' Meeting or the Tencor Shareholders' Meeting and at the Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein

or necessary in order to make the statements therein, in light of the circumstances under which they are made, not false or misleading; or omit to state any material fact necessary to correct any statement in any earlier communication with respect to the solicitation of proxies for the KLA Stockholders' Meeting or the Tencor Shareholders' Meeting which has become false or misleading. The Proxy Statement will comply as to form in all material respects with the provisions of the Exchange Act and the rules and regulations thereunder. If at any time prior to the Effective Time, any event relating to KLA or any of its affiliates, officers or directors should be discovered by KLA which should be set forth in an amendment to the Registration Statement or a supplement to the Proxy Statement, KLA shall promptly inform Tencor. Notwithstanding the foregoing, KLA makes no representation or warranty with respect to any information supplied by Tencor which is contained in any of the foregoing documents.

3.21 Board Approval. The Board of Directors of KLA has, as of the date of this Agreement, determined (i) that the Merger is fair to, and in the best interests of KLA and its stockholders, and (ii) to recommend that the stockholders of KLA approve (x) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (y) the issuance of shares of KLA Common

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Stock by virtue of the Merger, and (z) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name (subject to and conditional upon the effectiveness of the Merger).

3.22 Fairness Opinion. KLA has received written opinions from each of Merrill Lynch and Deutsche Morgan Grenfell Technology Group, dated as of the date hereof, to the effect that as of the date hereof, the Exchange Ratio is fair to KLA from a financial point of view and has delivered to Tencor a copy of such opinions.

ARTICLE IV CONDUCT PRIOR TO THE EFFECTIVE TIME

4.1 Conduct of Business. During the period from the date of this Agreement and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Effective Time, Tencor (which for the purposes of this Article 4 shall include Tencor and each of its subsidiaries) and KLA (which for the purposes of this Article 4 shall include KLA and each of its subsidiaries) agree, except (i) in the case of Tencor as provided in Article 4 of the Tencor Schedules and in the case of KLA as provided in Article 4 of the KLA Schedules, or (ii) to the extent that the other of them shall otherwise consent in writing, to carry on its business diligently and in accordance with good commercial practice and to carry on its business in the usual, regular and ordinary course, in substantially the same manner as heretofore conducted and in compliance with all applicable laws and regulations, to pay its debts and taxes when due subject to good faith disputes over such debts or taxes, to pay or perform other material obligations when due, and use its commercially reasonable efforts consistent with past practices and policies to preserve intact its present business organization, keep available the services of its present officers and employees and preserve its relationships with customers, suppliers, distributors, licensors, licensees, and others with which it has business dealings. In addition, each of Tencor and KLA will promptly notify the other of any material event involving its business or operations. Furthermore, Tencor and KLA agree that during the period prior to the Effective Time they will exchange monthly summary financial data and that their respective senior management groups will participate in informational meetings on a monthly basis, at such time and place as shall be mutually agreeable. No information or knowledge obtained in any investigation will affect or be deemed to modify any representation or warranty contained herein or the conditions to the obligations of the parties to consummate the Merger.

In addition, except as permitted by the terms of this Agreement or the Stock Option Agreements, and except in the case of Tencor as provided in Article 4 of the Tencor Schedules, and except in the case of KLA in connection with the KLA Rights Plan or as provided in Article 4 of the KLA Schedules, without the prior written consent of the other, neither Tencor nor KLA shall do any of the following, and neither Tencor nor KLA shall permit its subsidiaries to do any of the following:

(a) Waive any stock repurchase rights, accelerate, amend or change the period of exercisability of options or restricted stock, or reprice options granted under any employee, consultant or director stock plans or authorize cash payments in exchange for any options granted under any of such plans;

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(b) Grant any severance or termination pay to any officer or employee except payments in amounts consistent with policies and past practices or pursuant to written agreements outstanding, or policies existing, on the date

hereof and as previously disclosed in writing to the other, or adopt any new severance plan;

(c) Transfer or license to any person or entity or otherwise extend, amend or modify in any material respect any rights to the Tencor IP Rights or the KLA IP Rights, as the case may be, or enter into grants to future patent rights, other than in the ordinary course of business;

(d) Declare or pay any dividends on or make any other distributions (whether in cash, stock or property) in respect of any capital stock or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than pursuant to the KLA Rights Plan;

(e) Repurchase or otherwise acquire, directly or indirectly, any shares of capital stock except pursuant to rights of repurchase of any such shares under any employee, consultant or director stock plan existing on the date hereof, and other than pursuant to the KLA Rights Plan;

(f) Issue, deliver, sell, authorize or propose the issuance, delivery or sale of, any shares of capital stock or any securities convertible into shares of capital stock, or subscriptions, rights, warrants or options to acquire any shares of capital stock or any securities convertible into shares of capital stock, or enter into other agreements or commitments of any character obligating it to issue any such shares or convertible securities, other than (i) the issuance of shares of Tencor Common Stock or KLA Common Stock, as the case may be, pursuant to the exercise of stock options therefor outstanding as of the date of this Agreement, (ii) options to purchase shares of Tencor Common Stock or KLA Common Stock, as the case may be, to be granted at fair market value in the ordinary course of business, consistent with past practice and in accordance with stock option plans existing on the date hereof, (iii) shares of Tencor Common Stock or KLA Common Stock, as the case may be, issuable upon the exercise of the options referred to in clause (ii), (iv) shares of Tencor Common Stock or KLA Common Stock, as the case may be, issuable to participants in the KLA Employee Stock Purchase Plan or the Tencor Employee Stock Purchase Plans consistent with past practice and the terms thereof, (v) shares of Tencor Common Stock or KLA Common Stock, as the case may be, issuable pursuant to the Stock Option Agreements, and (vi) pursuant to the KLA Rights Plan;

(g) Cause, permit or propose any amendments to any charter document or Bylaw (or similar governing instruments of any subsidiaries);

(h) Acquire or agree to acquire by merging or consolidating with, or by purchasing any equity interest in or a material portion of the assets of, or by any other manner, any business or any corporation, partnership interest, association or other business organization or division thereof, or otherwise acquire or agree to acquire any assets which are material, individually or in the aggregate, to the business of Tencor or KLA, as the case may be, or enter into any material joint ventures, strategic partnerships or alliances;

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(i) Sell, lease, license, encumber or otherwise dispose of any properties or assets which are material, individually or in the aggregate, to the business of Tencor or KLA, as the case may be, except in the ordinary course of business consistent with past practice;

(j) Incur any indebtedness for borrowed money (other than ordinary course trade payables or pursuant to existing credit facilities in the ordinary course of business) or guarantee any such indebtedness or issue or sell any debt securities or warrants or rights to acquire debt securities of Tencor or KLA, as the case may be, or guarantee any debt securities of others;

(k) Adopt or amend any employee benefit or employee stock purchase or employee option plan, or enter into any employment contract, pay any special bonus or special remuneration to any director or employee, or increase the salaries or wage rates of its officers or employees other than in the ordinary course of business, consistent with past practice, or change in any material respect any management policies or procedures;

(l) Pay, discharge or satisfy any claim, liability or obligation (absolute, accrued, asserted or unasserted, contingent or otherwise), other than the payment, discharge or satisfaction in the ordinary course of business;

(m) Make any grant of exclusive rights to any third party;

(n) Take any action that would be reasonably likely to interfere with KLA's ability to account for the Merger as a pooling of interests; or

(o) Agree in writing or otherwise to take any of the actions described in Article 4 (a) through (n) above.

ARTICLE V
ADDITIONAL AGREEMENTS

5.1 Proxy Statement/Prospectus; Registration Statement; Other Filings; Board Recommendations.

(a) As promptly as practicable after the execution of this Agreement, Tencor and KLA will prepare, and file with the SEC, the Proxy Statement and KLA will prepare and file with the SEC the Registration Statement in which the Proxy Statement will be included as a prospectus. Each of Tencor and KLA will respond to any comments of the SEC, will use its respective best efforts to have the Registration Statement declared effective under the Securities Act as promptly as practicable after such filing and will cause the Proxy Statement to be mailed to its respective stockholders or shareholders, as the case may be, at the earliest practicable time. As promptly as practicable after the date of this Agreement, Tencor and KLA will prepare and file any other filings required under the Exchange Act, the Securities Act or any other Federal, foreign or Blue Sky laws relating to the Merger and the transactions contemplated by this Agreement (the "OTHER FILINGS"). Each of Tencor and KLA will notify the other promptly upon the receipt of any comments from the SEC or its staff and of any request by the SEC or its staff or any other government officials for amendments or

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supplements to the Registration Statement, the Proxy Statement or any Other Filing or for additional information and will supply the other with copies of all correspondence between such party or any of its representatives, on the one hand, and the SEC, or its staff or any other government officials, on the other hand, with respect to the Registration Statement, the Proxy Statement, the Merger or any Other Filing. The Proxy Statement, the Registration Statement and the Other Filings will comply in all material respects with all applicable requirements of law and the rules and regulations promulgated thereunder. Whenever any event occurs which is required to be set forth in an amendment or supplement to the Proxy Statement, the Registration Statement or any Other Filing, Tencor or KLA, as the case may be, will promptly inform the other of such occurrence and cooperate in filing with the SEC or its staff or any other government officials, and/or mailing to shareholders of Tencor or stockholders of KLA, such amendment or supplement.

(b) The Proxy Statement will include the recommendation of the Board of Directors of Tencor in favor of adoption and approval of this Agreement and approval of the Merger (except that the Board of Directors of Tencor may withdraw, modify or refrain from making such recommendation to the extent that the Board determines, in good faith, after consultation with outside legal counsel, that compliance with the Board's fiduciary duties under applicable law would require it to do so). In addition, the Proxy Statement will include the recommendations of the Board of Directors of KLA in favor of (x) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (y) the issuance of shares of KLA Common Stock by virtue of the Merger, and (z) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name, subject to and conditional upon the effectiveness of the Merger (except that the Board of Directors of KLA may withdraw, modify or refrain from making such recommendations to the extent that the Board determines, in good faith, after consultation with outside legal counsel, that compliance with the Board's fiduciary duties under applicable law would require it to do so).

5.2 Meetings of Shareholders and Stockholders. Promptly after the date hereof, Tencor will take all action necessary in accordance with California Law and its Articles of Incorporation and Bylaws to convene the Tencor Shareholders' Meeting to be held as promptly as practicable, and in any event (to the extent permissible under applicable law) within 45 days after the declaration of effectiveness of the Registration Statement, for the purpose of voting upon this Agreement. Tencor will consult with KLA and use its best efforts to hold the Tencor Shareholders' Meeting on the same day as the KLA Stockholders' Meeting. Promptly after the date hereof, KLA will take all action necessary in accordance with the Delaware General Corporation Law and its Certificate of Incorporation and Bylaws to convene the KLA Stockholders' Meeting to be held as promptly as practicable, and in any event (to the extent permissible under applicable law) within 45 days after the declaration of effectiveness of the Registration Statement, for the purpose of (i) amending its Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (ii) voting upon the issuance of shares of KLA Common Stock by virtue of the Merger, and (iii) amending its Certificate of Incorporation to change its corporate name (subject to and conditional upon the effectiveness of the Merger). KLA will consult with Tencor and will use its best efforts to hold the KLA Stockholders' Meeting on the same day as the Tencor Shareholders' Meeting. For so long as the Board of Directors of Tencor continues to make the recommendation set forth in Section 5.1, Tencor will use its best efforts to solicit from its shareholders proxies in favor of the adoption and approval of this Agreement and the approval of the Merger and

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will take all other action necessary or advisable to secure the vote or consent

of its shareholders required by the rules of the National Association of Securities Dealers, Inc. or California Law to obtain such approvals. For so long as the Board of Directors of KLA continues to make the recommendations set forth in Section 5.1, KLA will use its best efforts to solicit from its stockholders proxies in favor of (i) the amendment of KLA's Certificate of Incorporation to increase its authorized share capital to allow for the issuance of shares of KLA Common Stock by virtue of the Merger, (ii) the issuance of shares of KLA Common Stock by virtue of the Merger, and (iii) the amendment of KLA's Certificate of Incorporation to change KLA's corporate name (subject to and conditional upon the effectiveness of the Merger) and will take all other action necessary or advisable to secure the vote or consent of its stockholders required by the rules of the National Association of Securities Dealers, Inc. or the Delaware General Corporation Law to obtain such approvals.

5.3 Confidentiality. The parties acknowledge that Tencor and KLA have previously executed a Confidentiality Agreement, dated January 6, 1996 (the "Confidentiality Agreement"), which Confidentiality Agreement will continue in full force and effect in accordance with its terms.

5.4 No Solicitation.

(a) Restrictions on KLA.

(i) From and after the date of this Agreement until the earlier of the Effective Time or termination of this Agreement pursuant to its terms, KLA and its subsidiaries shall not, and will instruct their respective directors, officers, employees, representatives, investment bankers, agents and affiliates not to, directly or indirectly, (i) solicit or knowingly encourage submission of, any proposals or offers by any person, entity or group (other than Tencor and its affiliates, agents and representatives), or (ii) participate in any discussions or negotiations with, or disclose any non-public information concerning KLA or any of its subsidiaries to, or afford any access to the properties, books or records of KLA or any of its subsidiaries to, or otherwise assist or facilitate, or enter into any agreement or understanding with, any person, entity or group (other than Tencor and its affiliates, agents and representatives), in connection with any Acquisition Proposal with respect to KLA. For the purposes of this Agreement, an "ACQUISITION PROPOSAL" with respect to an entity means any proposal or offer relating to (i) any merger, consolidation, sale of substantial assets or similar transactions involving the entity or any subsidiaries of the entity (other than sales of assets or inventory in the ordinary course of business or as permitted under the terms of this Agreement), (ii) sale of 15% or more of the outstanding shares of capital stock of the entity (including without limitation by way of a tender offer or an exchange offer), (iii) the acquisition by any person of beneficial ownership or a right to acquire beneficial ownership of, or the formation of any "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) which beneficially owns, or has the right to acquire beneficial ownership of, 15% or more of the then outstanding shares of capital stock of the entity (except for acquisitions for passive investment purposes only in circumstances where the person or group qualifies for and files a Schedule 13G with respect thereto); or (iv) any public announcement of a proposal, plan or intention to do any of the foregoing or any agreement to engage in any of the foregoing. KLA will immediately cease any and all existing activities, discussions or negotiations with any parties conducted heretofore with respect to any of the foregoing. KLA will (i) notify Tencor as promptly as practicable if any inquiry or proposal is made or any information or access is requested in writing in connection with an

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Acquisition Proposal or potential Acquisition Proposal and (ii) as promptly as practicable notify Tencor of the significant terms and conditions of any such Acquisition Proposal. In addition, subject to the other provisions of this Section 5.4(a), from and after the date of this Agreement until the earlier of the Effective Time and termination of this Agreement pursuant to its terms, KLA and its subsidiaries will not, and will instruct their respective directors, officers, employees, representatives, investment bankers, agents and affiliates not to, directly or indirectly, make or authorize any public statement, recommendation or solicitation in support of any Acquisition Proposal made by any person, entity or group (other than Tencor); provided, however, that nothing herein shall prohibit KLA's Board of Directors from taking and disclosing to KLA's stockholders a position with respect to a tender offer pursuant to Rules 14d-9 and 14e-2 promulgated under the Exchange Act.

(ii) Notwithstanding the provisions of paragraph (a)(i) above, prior to the Effective Time, KLA may, to the extent the Board of Directors of KLA determines, in good faith, after consultation with outside legal counsel, that the Board's fiduciary duties under applicable law require it to do so, participate in discussions or negotiations with, and, subject to the requirements of paragraph (a)(iii), below, furnish information to any person, entity or group after such person, entity or group has delivered to KLA in writing, an unsolicited bona fide Acquisition Proposal which the Board of Directors of KLA in its good faith reasonable judgment determines, after consultation with its independent financial advisors, would result in a transaction more favorable than the Merger to the stockholders of KLA (a "KLA

SUPERIOR PROPOSAL"). In addition, notwithstanding the provisions of paragraph (a) (i) above, in connection with a possible Acquisition Proposal, KLA may refer any third party to this Section 5.4(a) or make a copy of this Section 5.4(a) available to a third party. In the event KLA receives a KLA Superior Proposal, nothing contained in this Agreement (but subject to the terms hereof) will prevent the Board of Directors of KLA from recommending such KLA Superior Proposal to KLA's stockholders, if the Board determines, in good faith, after consultation with outside legal counsel, that such action is required by its fiduciary duties under applicable law; in such case, the Board of Directors of KLA may withdraw, modify or refrain from making its recommendations set forth in Section 5.1(b), and, to the extent it does so, KLA may refrain from soliciting proxies and taking such other action necessary to secure the vote of its stockholders as may be required by Section 5.2; provided, however, that KLA shall not recommend to its stockholders a KLA Superior Proposal for a period of not less than 48 hours after Tencor's receipt of a copy of such KLA Superior Proposal (or a description of the significant terms and conditions thereof, if not in writing); and provided further, that nothing contained in this Section shall limit KLA's obligation to hold and convene the KLA Stockholders Meeting (regardless of whether the recommendations of the Board of Directors of KLA shall have been withdrawn, modified or not yet made).

(iii) Notwithstanding anything to the contrary herein, KLA will not provide any non-public information to a third party unless: (x) KLA provides such non-public information pursuant to a nondisclosure agreement with terms regarding the protection of confidential information at least as restrictive as such terms in the Confidentiality Agreement; and (y) such non-public information is the same information previously delivered to Tencor.

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(b) Restrictions on Tencor.

(i) From and after the date of this Agreement the earlier of the Effective Time or termination of this Agreement pursuant to its terms, Tencor and its subsidiaries will not, and will instruct their respective directors, officers, employees, representatives, investment bankers, agents and affiliates not to, directly or indirectly, (i) solicit or knowingly encourage submission of, any proposals or offers by any person, entity or group (other than KLA and its affiliates, agents and representatives), or (ii) participate in any discussions or negotiations with, or disclose any non-public information concerning Tencor or any of its subsidiaries to, or afford any access to the properties, books or records of Tencor or any of its subsidiaries to, or otherwise assist or facilitate, or enter into any agreement or understanding with, any person, entity or group (other than KLA and its affiliates, agents and representatives), in connection with any Acquisition Proposal with respect to Tencor. Tencor will immediately cease any and all existing activities, discussions or negotiations with any parties conducted heretofore with respect to any of the foregoing. Tencor will (i) notify KLA as promptly as practicable if any inquiry or proposal is made or any information or access is requested in writing in connection with an Acquisition Proposal or potential Acquisition Proposal and (ii) as promptly as practicable notify KLA of the significant terms and conditions of any such Acquisition Proposal. In addition, subject to the other provisions of this Section 5.4(b), from and after the date of this Agreement until the earlier of the Effective Time and termination of this Agreement pursuant to its terms, Tencor and its subsidiaries will not, and will instruct their respective directors, officers, employees, representatives, investment bankers, agents and affiliates not to, directly or indirectly, make or authorize any public statement, recommendation or solicitation in support of any Acquisition Proposal made by any person, entity or group (other than KLA); provided, however, that nothing herein shall prohibit Tencor's Board of Directors from taking and disclosing to Tencor's shareholders a position with respect to a tender offer pursuant to Rules 14d-9 and 14e-2 promulgated under the Exchange Act.

(ii) Notwithstanding the provisions of paragraph (b) (i) above, prior to the Effective Time, Tencor may, to the extent the Board of Directors of Tencor determines, in good faith, after consultation with outside legal counsel, that the Board's fiduciary duties under applicable law require it to do so, participate in discussions or negotiations with, and, subject to the requirements of paragraph (b) (iii), below, furnish information to any person, entity or group after such person, entity or group has delivered to Tencor in writing, an unsolicited bona fide Acquisition Proposal which the Board of Directors of Tencor in its good faith reasonable judgment determines, after consultation with its independent financial advisors, would result in a transaction more favorable than the Merger to the shareholders of Tencor (a "TENCOR SUPERIOR PROPOSAL"). In addition, notwithstanding the provisions of paragraph (b) (i) above, in connection with a possible Acquisition Proposal, Tencor may refer any third party to this Section 5.4(b) or make a copy of this Section 5.4(b) available to a third party. In the event Tencor receives a Tencor Superior Proposal, nothing contained in this Agreement (but subject to the terms hereof) will prevent the Board of Directors of Tencor from recommending such Tencor Superior Proposal to its stockholders, if the Board determines, in good faith, after consultation with outside legal counsel, that such action is required by its fiduciary duties under applicable law; in such

case, the Board of Directors of Tencor may withdraw, modify or refrain from making its recommendation set forth in Section 5.1(b), and, to the extent it does so, Tencor may refrain from soliciting proxies and taking such other action necessary to secure the vote of its shareholders as may be required by Section 5.2; provided, however, that Tencor shall not recommend

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to its shareholders a Tencor Superior Proposal for a period of not less than 48 hours after KLA's receipt of a copy of such Tencor Superior Proposal (or a description of the significant terms and conditions thereof, if not in writing); and provided further, that nothing contained in this Section shall limit Tencor's obligation to hold and convene the Tencor Shareholders Meeting (regardless of whether the recommendation of the Board of Directors of Tencor shall have been withdrawn, modified or not yet made).

(iii) Notwithstanding anything to the contrary in paragraph (b), Tencor will not provide any non-public information to a third party unless: (x) Tencor provides such non-public information pursuant to a nondisclosure agreement with terms regarding the protection of confidential information at least as restrictive as such terms in the Confidentiality Agreement; and (y) such non-public information is the same information previously delivered to KLA.

5.5 Public Disclosure. KLA and Tencor will consult with each other before issuing any press release or otherwise making any public statement with respect to the Merger, this Agreement or an Acquisition Proposal and will not issue any such press release or make any such public statement prior to such consultation, except as may be required by law or any listing agreement with a national securities exchange or the Nasdaq Stock Market.

5.6 Legal Requirements. Each of KLA, Merger Sub and Tencor will take all reasonable actions necessary or desirable to comply promptly with all legal requirements which may be imposed on them with respect to the consummation of the transactions contemplated by this Agreement (including furnishing all information required in connection with approvals by or filings with any Governmental Entity, and prompt resolution of any litigation prompted hereby) and will promptly cooperate with and furnish information to any party hereto necessary in connection with any such filings with or investigations by any Governmental Entity, and any other such requirements imposed upon any of them or their respective subsidiaries in connection with the consummation of the transactions contemplated by this Agreement. KLA will use its commercially reasonable efforts to take such steps as may be necessary to comply with the securities and blue sky laws of all jurisdictions which are applicable to the issuance of KLA Common Stock pursuant hereto. Tencor will use its commercially reasonable efforts to assist KLA as may be necessary to comply with the securities and blue sky laws of all jurisdictions which are applicable in connection with the issuance of KLA Common Stock pursuant hereto.

5.7 Third Party Consents. As soon as practicable following the date hereof, KLA and Tencor will each use its commercially reasonable efforts to obtain all material consents, waivers and approvals under any of its or its subsidiaries' agreements, contracts, licenses or leases required to be obtained in connection with the consummation of the transactions contemplated hereby.

5.8 FIRPTA. At or prior to the Closing, Tencor, if requested by KLA, shall deliver to the IRS a notice that the Tencor Common Stock is not a "U.S. Real Property Interest" as defined and in accordance with the requirements of Treasury Regulation Section 1.897-2(h)(2).

5.9 Notification of Certain Matters. KLA and Merger Sub will give prompt notice to Tencor, and Tencor will give prompt notice to KLA, of the occurrence, or failure to occur, of any event, which occurrence or failure to occur would be reasonably likely to cause (a) any representation

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or warranty contained in this Agreement and made by it to be untrue or inaccurate in any material respect at any time from the date of this Agreement to the Effective Time such that the conditions set forth in Section 6.2(a) or 6.3(a), as the case may be, would not be satisfied as a result thereof or (b) any material failure of KLA and Merger Sub or Tencor, as the case may be, or of any officer, director, employee or agent thereof, to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it under this Agreement. Notwithstanding the above, the delivery of any notice pursuant to this section will not limit or otherwise affect the remedies available hereunder to the party receiving such notice.

5.10 Best Efforts and Further Assurances. Subject to the respective rights and obligations of KLA and Tencor under this Agreement, each of the parties to this Agreement will use its best efforts to effectuate the Merger and the other transactions contemplated hereby and to fulfill and cause to be fulfilled the conditions to closing under this Agreement; provided that neither KLA nor Tencor nor any subsidiary or affiliate thereof will be required to agree to any divestiture by itself or any of its affiliates of shares of capital stock or of any business, assets or property, or the imposition of any material limitation on the ability of any of them to conduct their businesses or to own or exercise control of such assets, properties and stock. Subject to the

foregoing, each party hereto, at the reasonable request of another party hereto, will execute and deliver such other instruments and do and perform such other acts and things as may be necessary or desirable for effecting completely the consummation of the transactions contemplated hereby.

5.11 Stock Options and Employee Benefits.

(a) At the Effective Time, each outstanding option to purchase shares of Tencor Common Stock (each a "Tencor Stock Option") under the Tencor Stock Option Plans, whether or not exercisable, will be assumed by KLA. Each Tencor Stock Option so assumed by KLA under this Agreement will continue to have, and be subject to, the same terms and conditions set forth in the applicable Tencor Stock Option Plan immediately prior to the Effective Time (including, without limitation, any repurchase rights), except that (i) each Tencor Stock Option will be exercisable (or will become exercisable in accordance with its terms) for that number of whole shares of KLA Common Stock equal to the product of the number of shares of Tencor Common Stock that were issuable upon exercise of such Tencor Stock Option immediately prior to the Effective Time multiplied by the Exchange Ratio, rounded down to the nearest whole number of shares of KLA Common Stock, and (ii) the per share exercise price for the shares of KLA Common Stock issuable upon exercise of such assumed Tencor Stock Option will be equal to the quotient determined by dividing the exercise price per share of Tencor Common Stock at which such Tencor Stock Option was exercisable immediately prior to the Effective Time by the Exchange Ratio, rounded up to the nearest whole cent. After the Effective Time, KLA will issue to each holder of an outstanding Tencor Stock Option a notice describing the foregoing assumption of such Tencor Stock Option by KLA.

(b) Tencor Stock Options assumed by KLA shall qualify following the Effective Time as incentive stock options as defined in Section 422 of the Code to the extent Tencor Stock Options qualified as incentive stock options immediately prior to the Effective Time.

(c) KLA will reserve sufficient shares of KLA Common Stock for issuance under Section 5.11(a) and under Section 1.6(c) hereof.

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(d) For a period of one year following the Effective Time, the combined company following the Merger will provide the persons employed by Tencor immediately prior to the Effective Time, for so long as such persons remain employed by KLA or the Surviving Corporation, with salary and benefits in the aggregate which are substantially comparable to those provided to such persons by Tencor immediately prior to the Effective Time.

5.12 Form S-8. KLA agrees to file a registration statement on Form S-8 for the shares of KLA Common Stock issuable with respect to assumed Tencor Stock Options no later than two (2) business days after the Closing Date.

5.13 Indemnification and Insurance.

(a) From and after the Effective Time, KLA will cause the Surviving Corporation to fulfill and honor in all respects the obligations of Tencor pursuant to any indemnification agreements between Tencor and its directors and officers existing prior to the date hereof. The Articles of Incorporation and By-laws of the Surviving Corporation will contain the provisions with respect to indemnification set forth in the Articles of Incorporation and By-laws of Tencor, which provisions will not be amended, repealed or otherwise modified for a period of six years from the Effective Time in any manner that would adversely affect the rights thereunder of individuals who, immediately prior to the Effective Time, were directors, officers, employees or agents of Tencor, unless such modification is required by law.

(b) After the Effective Time KLA will cause the Surviving Corporation, to the fullest extent permitted under applicable law or under the Surviving Corporation's Articles of Incorporation or By-laws, to indemnify and hold harmless, each present director or officer of Tencor (collectively, the "INDEMNIFIED PARTIES") against any costs or expenses (including attorneys' fees), judgments, fines, losses, claims, damages, liabilities and amounts paid in settlement in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, to the extent arising out of or pertaining to any action or omission in his or her capacity as a director or officer of Tencor arising out of or pertaining to the transactions contemplated by this Agreement for a period of six years after the date hereof. In the event of any such claim, action, suit, proceeding or investigation (whether arising before or after the Effective Time), (i) any counsel retained by the Indemnified Parties for any period after the Effective Time must be reasonably satisfactory to the Surviving Corporation and KLA, (ii) after the Effective Time, KLA will cause the Surviving Corporation to pay the reasonable fees and expenses of such counsel, promptly after statements therefor are received and (iii) KLA will cause the Surviving Corporation to cooperate in the defense of any such matter; provided, however, that neither KLA nor the Surviving Corporation will be liable for any settlement effected without its written consent (which consent will not be unreasonably withheld); and provided, further, that, in the event that any claim or claims for

indemnification are asserted or made within such six-year period, all rights to indemnification in respect of any such claim or claims will continue until the disposition of any and all such claims; provided, further, that any determination required to be made with respect to whether an Indemnified Party's conduct complies with the standards set forth under California Law, Tencor's articles of incorporation or bylaws or such agreements, as the case may be, shall be made by independent legal counsel selected by the Indemnified Party and reasonably acceptable to KLA; and provided, further,

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that nothing in this Section 5.13 shall impair any rights or obligations of any present or former employees, agents, directors or officers of Tencor. The Indemnified Parties as a group may retain only one law firm (in addition to local counsel) to represent them with respect to any single action unless there is, under applicable standards of professional conduct, a conflict on any significant issue between the positions of any two or more Indemnified Parties. In the event KLA or the Surviving Corporation or any of their respective successors or assigns (i) consolidates with or merges into any other person and shall not be the continuing or surviving corporation or entity of such consolidation or merger, or (ii) transfers or conveys all or substantially all of its properties and assets to any person, then, and in each such case, to the extent necessary to effectuate the purposes of this Section 5.13, proper provision shall be made so that the successors and assigns of KLA and Tencor assume the obligations set forth in this Section 5.13 and none of the actions described in clause (i) or (ii) shall be taken until such provision is made.

(c) For a period of six years after the Effective Time, KLA will cause the Surviving Corporation to use its commercially reasonable efforts to maintain in effect, if available, directors' and officers' liability insurance covering those persons who are currently covered by Tencor's directors' and officers' liability insurance policy on terms comparable to those applicable to the then current directors and officers of KLA; provided, however, that in no event will KLA or the Surviving Corporation be required to expend in excess of 200% of the annual premium currently paid by Tencor for such coverage (or such coverage as is available for such 200% of the annual premium).

(d) This Section 5.13 will survive any termination of this Agreement and the consummation of the Merger at the Effective Time, is intended to benefit Tencor, the Surviving Corporation and the Indemnified Parties, and will be binding on all successors and assigns of the Surviving Corporation.

5.14 NMS Listing. KLA agrees to authorize for listing on the Nasdaq National Market the shares of KLA Common Stock issuable, and those required to be reserved for issuance, in connection with the Merger, upon official notice of issuance.

5.15 KLA Affiliate Agreement. Set forth on the KLA Schedules is a list of those persons who may be deemed to be, in KLA's reasonable judgment, affiliates of KLA within the meaning of Rule 145 promulgated under the Securities Act (each a "KLA AFFILIATE"). KLA will provide Tencor with such information and documents as Tencor reasonably requests for purposes of reviewing such list. KLA will use its best efforts to deliver or cause to be delivered to Tencor, as promptly as practicable on or following the date hereof, from each KLA Affiliate an executed affiliate agreement in substantially the form attached hereto as Exhibit D, each of which will be in full force and effect as of the Effective Time.

5.16 Tencor Affiliate Agreement. Set forth on the Tencor Schedules is a list of those persons who may be deemed to be, in Tencor's reasonable judgment, affiliates of Tencor within the meaning of Rule 145 promulgated under the Securities Act (each a "TENCOR AFFILIATE"). Tencor will provide KLA with such information and documents as KLA reasonably requests for purposes of reviewing such list. Tencor will use its best efforts to deliver or cause to be delivered to KLA, as promptly as practicable on or following the date hereof, from each Tencor Affiliate an executed affiliate agreement in substantially the form attached hereto as Exhibit E (the "TENCOR AFFILIATE

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AGREEMENT"), each of which will be in full force and effect as of the Effective Time. KLA will be entitled to place appropriate legends on the certificates evidencing any KLA Common Stock to be received by a Tencor Affiliate pursuant to the terms of this Agreement, and to issue appropriate stop transfer instructions to the transfer agent for the KLA Common Stock, consistent with the terms of the Tencor Affiliate Agreement.

5.17 Regulatory Filings; Reasonable Efforts. As soon as may be reasonably practicable, Tencor and KLA each shall file with the United States Federal Trade Commission (the "FTC") and the Antitrust Division of the United States Department of Justice ("DOJ") Notification and Report Forms relating to the transactions contemplated herein as required by the HSR Act, as well as comparable pre-merger notification forms required by the merger notification or control laws and regulations of any applicable jurisdiction, as agreed to by the parties. Tencor and KLA each shall promptly (a) supply the other with any

information which may be required in order to effectuate such filings and (b) supply any additional information which reasonably may be required by the FTC, the DOJ or the competition or merger control authorities of any other jurisdiction and which the parties may reasonably deem appropriate.

5.18 Board of Directors of the Combined Company. The Board of Directors of KLA will take all actions necessary to cause the Board of Directors of KLA, immediately after the Effective Time, to consist of 12 persons, seven of whom shall have served on the Board of Directors of KLA immediately prior to the Effective Time, and five of whom shall have served on the Board of Directors of Tencor immediately prior to the Effective Time (including Jon D. Tompkins and Lida Urbanek). Of the five designees of Tencor, one person shall be considered a Class II director, two persons shall be designated Class III directors and two persons shall be designated Class I directors. If, prior to the Effective Time, any of the Tencor or KLA designees shall decline or be unable to serve as a Tencor or KLA director, Tencor (if such person was designated by Tencor) or KLA (if such person was designated by KLA) shall designate another person to serve in such person's stead, which person shall be reasonably acceptable to the other party.

5.19 Committees of the Board of Directors of KLA. The Board of Directors of KLA will take all actions necessary to cause the Compensation Committee of the Board of Directors of KLA, immediately after the Effective Time, to consist of three members, two of whom shall have served on the Board of Directors of Tencor immediately prior to the Effective Time and one who shall have served on the Board of Directors of KLA immediately prior to the Effective Time. In addition, the Board of Directors of KLA will take all actions necessary to cause the Audit Committee of the Board of Directors of KLA, immediately after the Effective Time, to consist of three members, two of whom shall have served on the Board of Directors of KLA immediately prior to the Effective Time and one who shall have served on the Board of Directors of Tencor immediately prior to the Effective Time. Furthermore, the Board of Directors of KLA will take all actions necessary to cause one person who shall have served on the Board of Directors of Tencor immediately prior to the Effective Time to serve on the Nominating Committee of the Board of Directors of KLA, immediately after the Effective Time.

5.20 Officers of Combined Company; Executive Committee. At the Effective Time, Ken Levy will be offered a position as the Chairman of the Board of KLA, Jon D. Tompkins will be offered a position as the Chief Executive Officer of KLA and Ken Schroeder will be offered a position

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as the President and Chief Operating Officer of KLA. It is contemplated that following the Effective Time an executive committee comprised of senior management from both Tencor and KLA would be formed to jointly determine the management of KLA following the Effective Time; the executive committee would meet regularly to review the overall strategy, product direction and operations of the new combined company.

5.21 Change of Name; Increase in Authorized Shares. Subject to the terms hereof, at the KLA Stockholders' Meeting KLA shall propose and recommend that its Certificate of Incorporation be amended at the Effective Time to change its name to "KLA-Tencor Corporation." In addition, subject to the terms hereof, at the KLA Stockholders' Meeting KLA shall propose and recommend that its Certificate of Incorporation be amended to increase the authorized number of shares of Common Stock thereunder to 250 million shares, provided that KLA may propose and recommend an increase of such lesser number as in good faith it determines (provided that, subject to the terms hereof, such lesser number is not less than the number required to issue shares by virtue of the Merger and the other transactions contemplated hereby).

ARTICLE VI CONDITIONS TO THE MERGER

6.1 Conditions to Obligations of Each Party to Effect the Merger. The respective obligations of each party to this Agreement to effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of the following conditions:

(a) Stockholder and Shareholder Approval. This Agreement shall have been approved and adopted, and the Merger shall have been duly approved, by the requisite vote under applicable law, by the shareholders of Tencor; and an increase in the authorized number of shares of KLA Common Stock so as to permit the issuance of shares of KLA Common Stock by virtue of the Merger, as well as such issuance, shall have been duly approved by the requisite vote under applicable law and the rules of the National Association of Securities Dealers, Inc. by the stockholders of KLA.

(b) Registration Statement Effective; Proxy Statement. The SEC shall have declared the Registration Statement effective. No stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose, and no similar proceeding in respect of the Proxy Statement, shall have been initiated or

threatened in writing by the SEC.

(c) No Order; HSR Act. No Governmental Entity shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which has the effect of making the Merger illegal or otherwise prohibiting consummation of the Merger. All waiting periods under the HSR Act relating to the transactions contemplated hereby will have expired or terminated early.

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(d) Tax Opinions. KLA and Tencor shall each have received written opinions from their respective counsel, Wilson, Sonsini, Goodrich & Rosati, Professional Corporation, and Heller, Ehrman, White & McAuliffe, to the effect that the Merger will constitute a reorganization within the meaning of Section 368(a) of the Code; provided, however, that if the counsel to either KLA or Tencor does not render such opinion, this condition shall nonetheless be deemed to be satisfied with respect to such party if counsel to the other party renders such opinion to such party. The parties to this Agreement agree to make reasonable representations as requested by such counsel for the purpose of rendering such opinions.

(e) Nasdaq Listing. The shares of KLA Common Stock issuable to shareholders of Tencor pursuant to this Agreement and such other shares required to be reserved for issuance in connection with the Merger shall have been authorized for listing on the Nasdaq National Market upon official notice of issuance.

(f) Opinion of Accountants. Each of KLA and Tencor shall have received a letter from Price Waterhouse LLP, dated within two (2) business days prior to the Effective Time, regarding that firm's concurrence with KLA's managements' and Tencor's managements' conclusions as to the appropriateness of pooling of interest accounting for the Merger under Accounting Principles Board Opinion No. 16, if the Merger is consummated in accordance with this Agreement.

6.2 Additional Conditions to Obligations of Tencor. The obligation of Tencor to consummate and effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by Tencor:

(a) Representations and Warranties. The representations and warranties of KLA and Merger Sub contained in this Agreement shall have been true and correct in all material respects as of the date of this Agreement. In addition, the representations and warranties of KLA and Merger Sub contained in this Agreement shall be true and correct in all material respects on and as of the Effective Time except for changes contemplated by this Agreement and except for those representations and warranties which address matters only as of a particular date (which shall remain true and correct as of such particular date), with the same force and effect as if made on and as of the Effective Time, except in such cases (other than the representations in Sections 3.2, 3.3 and 3.22) where the failure to be so true and correct would not have a Material Adverse Effect on KLA. Tencor shall have received a certificate with respect to the foregoing signed on behalf of KLA by the Chief Executive Officer and the Chief Financial Officer of KLA;

(b) Agreements and Covenants. KLA and Merger Sub shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by them on or prior to the Effective Time, and Tencor shall have received a certificate to such effect signed on behalf of KLA by the Chief Executive Officer and the Chief Financial Officer of KLA; and

(c) Material Adverse Effect. No Material Adverse Effect with respect to KLA shall have occurred since the date of this Agreement.

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6.3 Additional Conditions to the Obligations of KLA and Merger Sub. The obligations of KLA and Merger Sub to consummate and effect the Merger shall be subject to the satisfaction at or prior to the Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by KLA:

(a) Representations and Warranties. The representations and warranties of Tencor contained in this Agreement shall have been true and correct in all material respects as of the date of this Agreement. In addition, the representations and warranties of Tencor contained in this Agreement shall be true and correct in all material respects on and as of the Effective Time except for changes contemplated by this Agreement and except for those representations and warranties which address matters only as of a particular date (which shall remain true and correct as of such particular date), with the same force and effect as if made on and as of the Effective Time, except in such cases (other than the representations in Sections 2.2, 2.3 and 2.21) where the failure to be so true and correct would not have a Material Adverse Effect on

Tencor. KLA shall have received a certificate with respect to the foregoing signed on behalf of Tencor by the President and the Chief Financial Officer of Tencor;

(b) Agreements and Covenants. Tencor shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by it on or prior to the Effective Time, and the KLA shall have received a certificate to such effect signed on behalf of Tencor by the President and the Chief Financial Officer of Tencor; and

(c) Material Adverse Effect. No Material Adverse Effect with respect to Tencor shall have occurred since the date of this Agreement.

ARTICLE VII
TERMINATION, AMENDMENT AND WAIVER

7.1 Termination. This Agreement may be terminated at any time prior to the Effective Time of the Merger, whether before or after approval of the Merger by the shareholders of Tencor or the approval of the issuance of KLA Common Stock in connection with the Merger by the stockholders of KLA:

(a) by mutual written consent duly authorized by the Boards of Directors of KLA and Tencor;

(b) by either Tencor or KLA if the Merger shall not have been consummated by July 31, 1997; provided, however, that the right to terminate this Agreement under this Section 7.1(b) shall not be available to any party whose action or failure to act has been a principal cause of or resulted in the failure of the Merger to occur on or before such date and such action or failure to act constitutes a breach of this Agreement;

(c) by either Tencor or KLA if a Governmental Entity shall have issued an order, decree or ruling or taken any other action (an "ORDER"), in any case having the effect of permanently

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restraining, enjoining or otherwise prohibiting the Merger, which order, decree or ruling is final and nonappealable;

(d) by either Tencor or KLA if the required approvals of the shareholders of Tencor or the stockholders of KLA contemplated by this Agreement shall not have been obtained by reason of the failure to obtain the required vote upon a vote taken at a meeting of shareholders or stockholders, as the case may be, duly convened therefor or at any adjournment thereof (provided that the right to terminate this Agreement under this Section 7.1(d) shall not be available to any party where the failure to obtain shareholder or stockholder approval of such party shall have been caused by the action or failure to act of such party in breach of this Agreement);

(e) by KLA, if the Board of Directors of Tencor recommends a Tencor Superior Proposal to the shareholders of Tencor, or if the Board of Directors of Tencor shall have withheld, withdrawn or modified in a manner adverse to KLA its recommendation in favor of adoption and approval of this Agreement and approval of the Merger;

(f) by Tencor, if the Board of Directors of KLA recommends a KLA Superior Proposal to the stockholders of KLA, or if the Board of Directors of KLA shall have withheld, withdrawn or modified in a manner adverse to Tencor its recommendation in favor of approving the issuance of the shares of KLA Common Stock by virtue of the Merger;

(g) by Tencor, upon a breach of any representation, warranty, covenant or agreement on the part of KLA set forth in this Agreement, or if any representation or warranty of KLA shall have become untrue, in either case such that the conditions set forth in Section 6.2(a) or Section 6.2(b) would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, provided that if such inaccuracy in KLA's representations and warranties or breach by KLA is curable by KLA through the exercise of its commercially reasonable efforts, then Tencor may not terminate this Agreement under this Section 7.1(i) provided KLA continues to exercise such commercially reasonable efforts to cure such breach; or

(h) by KLA, upon a breach of any representation, warranty, covenant or agreement on the part of Tencor set forth in this Agreement, or if any representation or warranty of Tencor shall have become untrue, in either case such that the conditions set forth in Section 6.3(a) or Section 6.3(b) would not be satisfied as of the time of such breach or as of the time such representation or warranty shall have become untrue, provided, that if such inaccuracy in Tencor's representations and warranties or breach by Tencor is curable by Tencor through the exercise of its commercially reasonable efforts, then KLA may not terminate this Agreement under this Section 7.1(j) provided Tencor continues to exercise such commercially reasonable efforts to cure such

breach.

7.2 Notice of Termination; Effect of Termination. Any termination of this Agreement under Section 7.1 above will be effective immediately upon the delivery of written notice of the terminating party to the other parties hereto. In the event of the termination of this Agreement as provided in Section 7.1, this Agreement shall be of no further force or effect, except (i) as set forth in this Section 7.2, Section 7.3 and Article 8 (miscellaneous), each of which shall survive the termination

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of this Agreement, and (ii) nothing herein shall relieve any party from liability for any breach of this Agreement. No termination of this Agreement shall affect the obligations of the parties contained in the Confidentiality Agreement or the Stock Option Agreements, all of which obligations shall survive termination of this Agreement in accordance with their terms.

7.3 Fees and Expenses.

(a) General. Except as set forth in this Section 7.3, all fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such expenses whether or not the Merger is consummated; provided, however, that KLA and Tencor shall share equally all fees and expenses, other than attorneys' and accountants fees and expenses, incurred in relation to the printing and filing of the Proxy Statement (including any preliminary materials related thereto) and the Registration Statement (including financial statements and exhibits) and any amendments or supplements thereto.

(b) Tencor Payments.

(i) If (x) the Board of Directors of Tencor shall have withheld, withdrawn or modified in a manner adverse to KLA its recommendation in favor of adoption and approval of this Agreement and approval of the Merger and at that time there shall not have occurred a Material Adverse Effect on KLA, or (y) the Board of Directors of Tencor recommends a Tencor Superior Proposal to the shareholders of Tencor, Tencor shall pay to KLA an amount equal to \$40 million within one business day following the earlier to occur of (A) termination of this Agreement pursuant to Section 7.1(e) hereof and (B) a Tencor Negative Vote (as defined below);

(ii) If no payment shall be required pursuant to clause 7.3(b)(i) above, and if (x) the vote of the shareholders of Tencor approving and adopting this Agreement and approving the Merger shall not have been obtained by reason of the failure to obtain the required vote upon a vote taken at a meeting of shareholders duly convened therefor or at any adjournment thereof (a "TENCOR NEGATIVE VOTE") and (y) prior to such Tencor Negative Vote there shall have occurred an Acquisition Proposal with respect to Tencor which shall have been publicly disclosed and not withdrawn (a "TENCOR COMPETING PROPOSAL") and (z) within 12 months following such Tencor Negative Vote Tencor shall enter into a definitive agreement with respect to an Acquisition Proposal with the party (or any affiliate of the party) that made the Tencor Competing Proposal or an Acquisition Proposal with such party (or any such affiliate) shall have been consummated, then, provided that there shall have not occurred a Material Adverse Effect on KLA prior to the Tencor Negative Vote, Tencor shall pay to KLA an amount equal to \$40 million within one business day following demand therefor; and

(iii) If no payment shall be required pursuant to clauses 7.3(b)(i) or (ii) above and if there shall be a Tencor Negative Vote then Tencor shall pay to KLA an amount equal to \$5 million within one business day following demand therefor.

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(c) KLA Payments.

(i) If (x) the Board of Directors of KLA shall have withheld, withdrawn or modified in a manner adverse to Tencor its recommendation in favor of approving the issuance of the shares of KLA Common Stock by virtue of the Merger and at that time there shall not have occurred a Material Adverse Effect on Tencor, or (y) the Board of Directors of KLA recommends a KLA Superior Proposal to the shareholders of KLA, KLA shall pay to Tencor an amount equal to \$60 million within one business day following the earlier to occur of (A) termination of this Agreement pursuant to Section 7.1(f) hereof and (B) a KLA Negative Vote (as defined below);

(ii) If no payment shall be required pursuant to clause 7.3(c)(i) above, and if (x) the vote of the stockholders of KLA in favor of an increase in the authorized number of shares of KLA Common Stock so as to permit the issuance of shares of KLA Common Stock by virtue of the Merger, as well as such issuance, shall not have been obtained by reason of the failure to obtain the required vote upon a vote taken at a meeting of stockholders duly convened therefor or at any adjournment thereof (a "KLA NEGATIVE VOTE") and (y) prior to such KLA Negative Vote there shall have occurred an Acquisition Proposal with respect to KLA which shall have been publicly disclosed and not

withdrawn (a "KLA COMPETING PROPOSAL") and (z) within 12 months following such KLA Negative Vote Tencor shall enter into a definitive agreement with respect to an Acquisition Proposal with the party (or any affiliate of the party) that made the KLA Competing Proposal or an Acquisition Proposal with such party (or any such affiliate) shall have been consummated, then, provided that there shall not have occurred a Material Adverse Effect on Tencor prior to the KLA Negative Vote, KLA shall pay to Tencor an amount equal to \$60 million within one business day following demand therefor; and

(iii) If no payment shall be required pursuant to clauses 7.3(c)(i) or (ii) above and if there shall be a KLA Negative Vote then KLA shall pay to Tencor an amount equal to \$5 million within one business day following demand therefor.

(d) Payment of the fees described in Section 7.3(b) and (c) above shall not be in lieu of damages incurred in the event of breach of this Agreement.

7.4 Amendment. Subject to applicable law, this Agreement may be amended by the parties hereto at any time by execution of an instrument in writing signed on behalf of each of the parties hereto.

7.5 Extension; Waiver. At any time prior to the Effective Time any party hereto may, to the extent legally allowed, (i) extend the time for the performance of any of the obligations or other acts of the other parties hereto, (ii) waive any inaccuracies in the representations and warranties made to such party contained herein or in any document delivered pursuant hereto and (iii) waive compliance with any of the agreements or conditions for the benefit of such party contained herein. Any agreement on the part of a party hereto to any such extension or waiver shall be valid only if set forth in an instrument in writing signed on behalf of such party. Delay in exercising any right under this Agreement shall not constitute a waiver of such right.

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ARTICLE VIII
GENERAL PROVISIONS

8.1 Non-Survival of Representations and Warranties. The representations and warranties of Tencor, KLA and Merger Sub contained in this Agreement shall terminate at the Effective Time, and only the covenants that by their terms survive the Effective Time shall survive the Effective Time.

8.2 Notices. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or by commercial delivery service, or sent via telecopy (receipt confirmed) to the parties at the following addresses or telecopy numbers (or at such other address or telecopy numbers for a party as shall be specified by like notice):

(a) if to KLA or Merger Sub, to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: Chief Executive Officer
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

with a copy to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: General Counsel
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

with another copy to:

Wilson, Sonsini, Goodrich & Rosati, P.C.
650 Page Mill Road
Palo Alto, California 94304-1050
Attention: Larry W. Sonsini, Esq.
Telephone No.: (415) 493-9300
Telecopy No.: (415) 493-6811

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(b) if to Tencor, to:

Tencor Instruments
One Technology Drive
Milpitas, California 95035

Attention: President
Telephone No.: (408) 970-9500
Telecopy No.: (408) 988-6420

with a copy to:

Heller, Ehrman, White & McAuliffe
525 University Avenue
Palo Alto, CA 94301
Attention: Sarah A. O'Dowd, Esq.
Telephone No.: (415) 324-7045
Telecopy No.: (415) 324-0638

8.3 Interpretation; Knowledge.

(a) When a reference is made in this Agreement to Exhibits, such reference shall be to an Exhibit to this Agreement unless otherwise indicated. The words "INCLUDE," "INCLUDES" and "INCLUDING" when used herein shall be deemed in each case to be followed by the words "without limitation." The table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. When reference is made herein to "THE BUSINESS OF" an entity, such reference shall be deemed to include the business of all direct and indirect subsidiaries of such entity. Reference to the subsidiaries of an entity shall be deemed to include all direct and indirect subsidiaries of such entity.

(b) For purposes of this Agreement, the term "KNOWLEDGE" means, with respect to any matter in question, that any of the Chief Executive Officer, Chief Operating Officer, Chief Financial Officer or Controller of Tencor or KLA, as the case may be, have actual knowledge of such matter.

8.4 Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

8.5 Entire Agreement; Third Party Beneficiaries. This Agreement and the documents and instruments and other agreements among the parties hereto as contemplated by or referred to herein, including Tencor Schedules and the KLA Schedules (a) constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof, it being understood that the Confidentiality Agreement shall continue in full force and effect until the Closing and shall survive any termination of this Agreement; and (b) are not intended to confer upon

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any other person any rights or remedies hereunder, except with respect to the matters set forth in Section 5.13.

8.6 Severability. In the event that any provision of this Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to replace such void or unenforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the extent possible, the economic, business and other purposes of such void or unenforceable provision.

8.7 Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at law or in equity.

8.8 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof; provided that issues involving the corporate governance of any of the parties hereto shall be governed by their respective jurisdictions of incorporation. Each of the parties hereto irrevocably consents to the exclusive jurisdiction of any state or federal court within the Northern District of California, in connection with any matter based upon or arising out of this Agreement or the matters contemplated herein, other than issues involving the corporate governance of any of the parties hereto, agrees that process may be served upon them in any manner authorized by the laws of the State of California for such

persons and waives and covenants not to assert or plead any objection which they might otherwise have to such jurisdiction and such process.

8.9 Rules of Construction. The parties hereto agree that they have been represented by counsel during the negotiation and execution of this Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.

8.10 Assignment. No party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the of the parties. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized respective officers as of the date first written above.

TENCOR INSTRUMENTS

By: _____
Name: Jon D. Tompkins
Title: President and Chief Executive Officer

KLA INSTRUMENTS CORPORATION

By: _____
Name: Kenneth Levy
Title: Chief Executive Officer

TIGER ACQUISITION CORP.

By: _____
Name: Kenneth Levy
Title: President

**** REORGANIZATION AGREEMENT ****
ANNEX 1 - CERTAIN DEFINITIONS

<TABLE>
<CAPTION>

Term ----	Section in which Term is defined -----
<S>	<C>
"Acquisition Proposal"	Section 5.4 (a) (i)
"Agreement"	Section 1.2
"Agreement of Merger"	Section 1.2
"California Law"	Recitals
"Certificates"	Section 1.8 (c)
"Closing"	Section 1.2
"Closing Date"	Section 1.2
"Code"	Recitals
"Confidentiality Agreement"	Section 5.3 (b)

"Dissenting Shares"	Section 1.7 (a)
"DOJ"	Section 5.17
"Effective Time"	Section 1.2
"ERISA"	Section 2.12 (a)
"ERISA Affiliate"	Section 2.12 (a)
"Exchange Act"	Section 2.4 (b)
"Exchange Agent"	Section 1.8 (a)
"Exchange Ratio"	Section 1.6 (a)
"FTC"	Section 5.17
"GAAP"	Section 2.5 (b)
"Governmental Entity"	Section 2.4 (b)
"Hazardous Material"	Section 2.14 (a)
"Hazardous Materials Activities"	Section 2.14 (b)
"HSR Act"	Section 2.4 (b)
"include"	Section 8.3 (a)
"includes"	Section 8.3 (a)
"including"	Section 8.3 (a)
"Indemnified Parties"	Section 5.13 (b)
"IRS"	Section 2.12 (a)

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<S>	<C>
"KLA"	Preamble
"KLA Affiliate"	Section 5.15
"KLA Balance Sheet"	Section 3.6 (b)
"KLA Common Stock"	Section 1.6 (a)
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Exhibit C

AGREEMENT OF MERGER
OF
TIGER ACQUISITION CORP.
AND
TENCOR INSTRUMENTS

This Agreement of Merger, dated as of the ____ day of _____ 1997 ("MERGER AGREEMENT"), by and among Tiger Acquisition Corp. ("SUB"), a California corporation and a wholly owned subsidiary of KLA Instruments Corporation, a Delaware corporation ("KLA"), and Tencor Instruments, a California corporation ("TENCOR" or the "SURVIVING CORPORATION").

RECITALS

A. Tencor was incorporated in the State of California on _____, and on the date hereof has _____ shares of its Common Stock, no par value, outstanding ("TENCOR COMMON").

B. Sub was incorporated in the State of California on January 9, 1997, and on the date hereof has 1,000 shares of its Common Stock, no par value, outstanding, all which are owned by KLA.

C. KLA, Sub and Tencor have entered into an Agreement and Plan of Reorganization dated as of January 14, 1997 (the "REORGANIZATION AGREEMENT") providing for certain representations, warranties, covenants and agreements in connection with the transactions contemplated hereby. This Merger Agreement and the Reorganization Agreement are intended to be construed together to effectuate their purpose.

D. The shareholders of Tencor and Sub and the Board of Directors of KLA deem it advisable and in their mutual best interests and in the best interests of the shareholders of Tencor and Sub, respectively, that Sub be merged with and into Tencor (the "MERGER").

E. The Boards of Directors of KLA, Tencor and Sub and the shareholders of Sub and Tencor have approved the Merger. The shareholders of KLA have approved the issuance of shares of Common Stock, par value \$0.001 per share, of KLA ("KLA COMMON") by virtue of the Merger.

AGREEMENTS

The parties hereto hereby agree as follows:

1. Sub shall be merged with and into Tencor, and Tencor shall be the surviving corporation.

2. The Merger shall become effective on such date (the "EFFECTIVE TIME") as this Merger Agreement is filed with the Secretary of State of the State of California.

3. As of the Effective Time, each outstanding share of Common Stock, no par value, of Sub shall be converted into and exchanged for one (1) share of Common Stock, no par value, of the Surviving Corporation. Each stock certificate of Sub evidencing ownership of any such Sub shares shall continue to evidence ownership of such shares of capital stock of the Surviving Corporation immediately following the Effective Time.

4. Upon the Effective Time of the Merger, each outstanding share of Tencor Common shall be converted automatically into and exchanged for the right to receive one (1) share of KLA Common ("MERGER CONSIDERATION"). All shares of Tencor Common that are owned directly or indirectly by Tencor, KLA or any subsidiary of Tencor or KLA shall be canceled, and no cash or securities of KLA or other consideration shall be delivered in exchange therefor.

5. As of the Effective Time, all certificates representing shares of Tencor Common, issued and outstanding immediately prior to the Effective Time, shall no longer be outstanding and shall automatically be canceled and retired and shall cease to exist, and each holder of a certificate representing any such shares of Tencor Common shall cease to have any rights with respect thereto except the right to receive the appropriate portion of the Merger Consideration upon surrender of such certificate.

6. Any shares ("DISSENTING SHARES") of any holder of Tencor Common who has demanded and perfected appraisal rights for such shares in accordance with the California General Corporation Law and who, as of the Effective Time, has not effectively withdrawn or lost such appraisal rights, shall not be converted into Merger Consideration but shall be converted into the right to receive such consideration as may be determined to be due with respect to such Dissenting Shares pursuant to the California General Corporation Law. If after the Effective Time any Dissenting Shares shall lose their status as Dissenting Shares, then as of the occurrence of the event which causes the loss of such status, such shares shall be converted into Merger Consideration in accordance with Section 4 hereof.

7. Notwithstanding any other term or provision hereof, no fraction of a share of KLA Common will be issued by virtue of the Merger, but in lieu thereof each holder of shares of Tencor Common who would otherwise be entitled to a fraction of a share of KLA Common (after aggregating all fractional shares of KLA Common to be received by such holder) shall receive from KLA an amount of cash (rounded to the nearest whole cent) equal to the product of (i) such fraction, multiplied by (ii) the average closing price of a share of KLA Common for the ten most recent days that KLA Common has traded ending on the trading day immediately prior to the Effective Time, as reported on the Nasdaq National Market.

8. The conversion of Tencor Common as provided by this Merger Agreement shall occur automatically at the Effective Time of the Merger without action by the holders thereof. Each holder of Tencor Common shall thereupon be entitled to receive Merger Consideration in accordance with Section 4 hereof. Promptly after the Effective Time, such shareholder shall be entitled to receive certificates that represent the number of shares of KLA Common Stock issuable to such shareholder under this Merger Agreement upon surrender as set forth in the Reorganization Agreement of such shareholder's certificates which immediately prior to the Effective Time represented outstanding shares of Tencor Common Stock.

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No dividends or other distributions on KLA Common declared or made after the Effective Time shall be paid to the holder of any unsurrendered certificate until the holder of record of such certificate shall surrender such certificate. Subject to the effect, if any, of applicable laws, following surrender of any certificate, there shall be delivered to the person entitled thereto, without interest, the amount of dividends theretofore paid with respect to the KLA Common so withheld as of any date subsequent to the Effective Time of the Merger and prior to such date of delivery.

All Merger Consideration and cash paid in accordance with Section 7 hereof delivered upon the surrender for exchange of shares of Tencor Common in accordance with the terms hereof shall be deemed to have been delivered in full satisfaction of all rights pertaining to such Tencor Common. If, after the Effective Time of the Merger, certificates are presented to the Surviving Corporation for any reason, they shall be canceled and exchanged as provided in this Section 8.

9. At the Effective Time of the Merger, the separate existence of Sub shall cease, and Tencor shall succeed, without other transfer, to all of the rights and properties of Sub and shall be subject to all the debts and liabilities thereof in the same manner as if Tencor had itself incurred them.

10. Upon the Merger becoming effective, the Articles of Incorporation of the Surviving Corporation shall be amended in full to read as set forth in Exhibit A attached hereto.

11. (a) Notwithstanding the approval of this Merger Agreement by the shareholders of Tencor and Sub, this Merger Agreement may be terminated at any time prior to the Effective Time of the Merger by mutual agreement of the Boards of Directors of KLA and Tencor, and the shareholders of Tencor.

(b) Notwithstanding the approval of this Merger Agreement by the shareholders of Tencor and Sub, this Merger Agreement shall terminate forthwith in the event that the Reorganization Agreement shall be terminated as therein provided.

(c) In the event of the termination of this Merger Agreement as provided above, this Merger Agreement shall forthwith become void and there shall be no liability on the part of Tencor, KLA or Sub or their respective officers or directors, except as otherwise provided in the Reorganization Agreement.

(d) This Merger Agreement may be signed in one or more counterparts, each of which shall be deemed an original and all of which shall constitute one agreement.

(e) This Merger Agreement may be amended by the parties hereto any time before or after approval hereof by the shareholders of Tencor and Sub, but, after such approval, no amendments shall be made which by law require the further approval of such shareholders without obtaining such approval. This Merger Agreement may not be amended except by an instrument in writing signed on behalf of each of the parties hereto.

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IN WITNESS WHEREOF, the parties have executed this Merger Agreement as of the date first written above.

TIGER ACQUISITION CORP.

President

Secretary

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TENCOR INSTRUMENTS

President

Secretary

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EXHIBIT A

ARTICLES OF INCORPORATION OF THE SURVIVING CORPORATION

OFFICERS' CERTIFICATE
OF
TENCOR INSTRUMENTS

Jon D. Tompkins, President, and Claudia Casey, Secretary, of Tencor Instruments, a corporation duly organized and existing under the laws of the State of California (the "CORPORATION"), do hereby certify:

1. They are the duly elected, acting and qualified President and the Secretary, respectively, of the Corporation.

2. The authorized capital stock of the Corporation consists of 60,000,000 shares of Common Stock, no par value, of which there are _____ shares outstanding and entitled to vote on the Agreement of Merger in the form attached, and 1,000,000 shares of Preferred Stock, no par value, of which no shares are issued or outstanding or entitled to vote on the Agreement of Merger in the form attached.

3. The Agreement of Merger in the form attached was duly approved by the shareholders of the Corporation in accordance with the General Corporation Law of the State of California.

4. The shareholder approval was by the holders of _____% of the outstanding shares of the Corporation. The required vote was a majority of the outstanding shares of Common Stock, no par value, of the Corporation.

Each of the undersigned declares under penalty of perjury that the statements contained in the foregoing certificate are true of their own knowledge. Executed in _____, on _____, 1997.

President

Secretary

OFFICERS' CERTIFICATE
OF
TIGER ACQUISITION CORP.

Ken Levy, President and, Lisa Berry, Secretary, of Tiger Acquisition Corp., a corporation duly organized and existing under the laws of the State of California (the "CORPORATION"), do hereby certify that:

1. They are the duly elected, acting and qualified President and the Secretary, respectively, of the Corporation.

2. There is only one authorized class of shares of the Corporation, consisting of 1,000 shares of Common Stock, no par value, and the total number of issued and outstanding shares is 1,000.

3. The Agreement of Merger in the form attached was approved by the board of directors and the shareholder of the Corporation in accordance with the General Corporation Law of the State of California.

4. The shareholder approval was by the holder of 100% of the outstanding shares of the Corporation. The required vote was a majority of the outstanding shares of Common Stock, no par value, of the Corporation.

5. No vote of the stockholders of KLA Instruments Corporation ("KLA") (the sole shareholder of the Corporation and the parent of the Corporation) was required by the General Corporation Law of the State of California or by the Articles of Incorporation or Bylaws of KLA or the Corporation. The stockholders of KLA have approved the issuance of shares of Common Stock, par value \$0.001 per share, of KLA by virtue of the Merger.

The undersigned declare under penalty of perjury that the statements contained in the foregoing certificate are true of their own knowledge. Executed in _____, on _____, 1997.

President

Secretary

Exhibit D

KLA INSTRUMENTS CORPORATION

AFFILIATE AGREEMENT

This KLA INSTRUMENTS CORPORATION AFFILIATE AGREEMENT ("AGREEMENT") is dated as of January 14, 1997, between KLA Instruments Corporation, a Delaware corporation ("KLA") and the undersigned affiliate ("AFFILIATE") of KLA.

WHEREAS, KLA and Tencor Instruments, a California corporation ("TENCOR") propose to enter into an Agreement and Plan of Reorganization ("MERGER AGREEMENT") pursuant to which Tencor and KLA intend to enter into a business combination transaction to pursue their long term business strategies (the "MERGER") (capitalized terms used and not otherwise defined herein shall have the respective meanings ascribed to them in the Merger Agreement);

WHEREAS, Affiliate has been advised that Affiliate may be deemed to be an "Affiliate" of KLA, as the term "Affiliate" is used in Accounting Series Releases 130 and 135, as amended, although nothing contained herein shall be construed as an admission by Affiliate that Affiliate is in fact an Affiliate of KLA;

WHEREAS, it will be a condition to effectiveness of the Merger pursuant to the Merger Agreement that the independent accounting firms that audit the annual financial statements of Tencor and KLA will have delivered their written concurrences with the conclusions of management of Tencor and KLA to the effect that the Merger will be accounted for as a pooling of interests under Accounting Principles Board Opinion No. 16;

WHEREAS, the execution and delivery of this Agreement by Affiliate is a material inducement to KLA to enter into the Merger Agreement.

NOW, THEREFORE, intending to be legally bound, the parties hereby agree as follows:

1. Acknowledgments by Affiliate. Affiliate acknowledges and understands that the representations, warranties and covenants by Affiliate set forth herein will be relied upon by KLA, Tencor, and their respective Affiliates, counsel and accounting firms, and that substantial losses and damages may be incurred by these persons if Affiliate's representations, warranties or covenants are breached. Affiliate has carefully read this Agreement and the Merger Agreement and has discussed the requirements of this Agreement with Affiliate's professional advisors, who are qualified to advise him with regard to such matters.

2. Covenants Related to Pooling of Interests. During the period beginning from the date hereof and ending on the second day after the day that KLA publicly announces financial results covering at least 30 days of combined operations of KLA and Tencor, Affiliate will not sell, exchange, transfer, pledge, distribute, make any gift or otherwise dispose of or grant any option, establish any "short" or put-equivalent position with respect to or enter into any similar transaction (through derivatives or otherwise) intended or having the effect, directly or indirectly, to reduce

Affiliate's risk relative to any shares of KLA Common Stock. KLA may, at its discretion, place a stock transfer notice consistent with the foregoing with its transfer agent with respect to Affiliate's shares. Notwithstanding the foregoing, Affiliate will not be prohibited by the foregoing from selling or disposing of shares so long as such sale or disposition is in accordance with the "de minimis" test set forth in SEC Staff Accounting Bulletin No. 76.

3. Beneficial Ownership of Stock. Except for the KLA Common Stock and options to purchase KLA Common Stock set forth on the last page of this Agreement, Affiliate does not beneficially own any shares of KLA Common Stock or any other equity securities of KLA or any options, warrants or other rights to acquire any equity securities of KLA.

4. Miscellaneous.

(a) For the convenience of the parties hereto, this Agreement may be executed in one or more counterparts, each of which shall be deemed an original,

but all of which together shall constitute one and the same document.

(b) This Agreement shall be enforceable by, and shall inure to the benefit of and be binding upon, the parties hereto and their respective successors and assigns. As used herein, the term "successors and assigns" shall mean, where the context so permits, heirs, executors, administrators, trustees and successor trustees, and personal and other representatives.

(c) This Agreement shall be governed by and construed, interpreted and enforced in accordance with the internal laws of the State of California.

(d) If a court of competent jurisdiction determines that any provision of this Agreement is not enforceable or enforceable only if limited in time and/or scope, this Agreement shall continue in full force and effect with such provision stricken or so limited.

(e) Counsel to and accountants for the parties to the Agreement shall be entitled to rely upon this Agreement as needed.

(f) This Agreement shall not be modified or amended, or any right hereunder waived or any obligation excused, except by a written agreement signed by both parties.

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Executed as of the date shown on the first page of this Agreement.

KLA INSTRUMENTS CORPORATION

By: _____

Name: _____

Title: _____

AFFILIATE

By: _____

Name of Affiliate: _____

Name of Signatory (if different from name of Affiliate): _____

Title of Signatory (if applicable): _____

Number of shares of KLA Common Stock beneficially owned by Affiliate:

Number of shares of KLA Common Stock subject to options beneficially owned by Affiliate:

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KLA AFFILIATE AGREEMENT

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Exhibit E

TENCOR INSTRUMENTS

AFFILIATE AGREEMENT

This TENCOR INSTRUMENTS AFFILIATE AGREEMENT ("AGREEMENT") is dated as of January 14, 1997, between KLA Instruments Corporation, a Delaware corporation ("KLA") and the undersigned affiliate ("AFFILIATE") of Tencor Instruments, a California corporation ("TENCOR").

WHEREAS, Tencor and KLA propose to enter into an Agreement and Plan of

Reorganization ("MERGER AGREEMENT") pursuant to which Tencor and KLA intend to enter into a business combination transaction to pursue their long term business strategies (the "MERGER") (capitalized terms used and not otherwise defined herein shall have the respective meanings ascribed to them in the Merger Agreement);

WHEREAS, pursuant to the Merger, at the Effective Time outstanding shares of Tencor Capital Stock, including any shares owned by Affiliate, will be converted into the right to receive shares of KLA Common Stock as set forth in the Merger Agreement;

WHEREAS, Affiliate has been advised that Affiliate may be deemed to be an "affiliate" of Tencor, as the term "affiliate" is used (i) for purposes of paragraphs (c) and (d) of Rule 145 of the Rules and Regulations of the Securities and Exchange Commission (the "SEC") and (ii) in the SEC's Accounting Series Releases 130 and 135, as amended, although nothing contained herein shall be construed as an admission by Affiliate that Affiliate is in fact an affiliate of Tencor;

WHEREAS, it will be a condition to consummation of the Merger pursuant to the Merger Agreement that (i) the attorneys for each of KLA and Tencor will have delivered written opinions that the Merger will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986 as amended (the "CODE"), and (ii) the independent accounting firms that audit the annual financial statements of Tencor and KLA will have delivered their written concurrences with the conclusions of management of Tencor and KLA to the effect that the Merger will be accounted for as a pooling of interests under Accounting Principles Board Opinion No. 16;

WHEREAS, the execution and delivery of this Agreement by Affiliate is a material inducement to KLA to enter into the Merger Agreement;.

NOW, THEREFORE, intending to be legally bound, the parties hereby agree as follows:

1. Acknowledgments by Affiliate. Affiliate acknowledges and understands that the representations, warranties and covenants by Affiliate set forth herein will be relied upon by KLA, Tencor, and their respective affiliates, counsel and accounting firms, and that substantial losses and damages may be incurred by these persons if Affiliate's representations, warranties or covenants are breached. Affiliate has carefully read this Agreement and the Merger Agreement and has discussed

the requirements of this Agreement with Affiliate's professional advisors, who are qualified to advise Affiliate with regard to such matters.

2. Compliance with Rule 145 and the Act.

(a) Affiliate has been advised that (i) the issuance of shares of KLA Common Stock in connection with the Merger is expected to be effected pursuant to a Registration Statement on Form S-4 under the Securities Act of 1933 as amended (the "ACT") and as such will not be deemed "restricted securities" within the meaning of Rule 144 promulgated thereunder and resale of such shares will not be subject to any restrictions other than as set forth in Rule 145 of the Act unless otherwise transferred pursuant to an effective registration statement under the Act or an appropriate exemption from registration, (ii) Affiliate may be deemed to be an affiliate of Tencor, (iii) no sale, transfer or other disposition by Affiliate of any KLA Common Stock received by Affiliate will be registered under the Act. Affiliate accordingly agrees not to sell, transfer or otherwise dispose of any KLA Common Stock issued to Affiliate in the Merger unless (i) such sale, transfer or other disposition is made in conformity with the requirements of Rule 145(d) promulgated under the Act, or (ii) Affiliate delivers to KLA a written opinion of counsel, reasonably acceptable to KLA in form and substance, that such sale, transfer or other disposition is otherwise exempt from registration under the Act.

(b) KLA will give stop transfer instructions to its transfer agent with respect to any KLA Common Stock received by Affiliate pursuant to the Merger and there will be placed on the certificates representing such KLA Common Stock, or any substitutions therefor, a legend stating in substance:

"THE SHARES REPRESENTED BY THIS CERTIFICATE WERE ISSUED IN A TRANSACTION TO WHICH RULE 145 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, APPLIES AND MAY ONLY BE TRANSFERRED IN CONFORMITY WITH RULE 145(d) UNDER SUCH ACT OR IN ACCORDANCE WITH A WRITTEN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO THE ISSUER IN FORM AND SUBSTANCE THAT SUCH TRANSFER IS EXEMPT FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED."

The legend set forth above shall be removed (by delivery of a substitute certificate without such legend) and KLA shall so instruct its transfer agent, if Affiliate delivers to KLA (i) satisfactory written evidence that the shares have been sold in compliance with Rule 145 (in which case, the substitute certificate will be issued in the name of the transferee), or (ii) an opinion of

counsel, in form and substance reasonably satisfactory to KLA, to the effect that public sale of the shares by the holder thereof is no longer subject to Rule 145.

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(c) To the extent required by applicable securities laws, KLA agrees, for a period of two years from the date of this Agreement, to file with the SEC in a timely manner all reports and other documents required of KLA under the Act and the Securities Exchange Act of 1934, as amended.

3. Covenants Related to Pooling of Interests. During the period beginning from the date hereof and ending on the second day after the day that KLA publicly announces financial results covering at least 30 days of combined operations of KLA and Tencor, Affiliate will not sell, exchange, transfer, pledge, distribute, or otherwise dispose of or grant any option, establish any "short" or put-equivalent position with respect to or enter into any similar transaction (through derivatives or otherwise) intended or having the effect, directly or indirectly, to reduce its risk relative to any securities, or shares of KLA Common Stock received by Affiliate in connection with the Merger. KLA may, at its discretion, cause a restrictive legend to the foregoing effect to be placed on KLA Common Stock certificates issued to Affiliate in the Merger and place a stock transfer notice consistent with the foregoing with its transfer agent with respect to the certificates, provided that such restrictive legend shall be removed and/or such notice shall be countermanded promptly upon expiration of the necessity therefor at the request of Affiliate. Notwithstanding the foregoing, Affiliate will not be prohibited by the foregoing from selling or disposing of shares so long as such sale or disposition is in accordance with the "de minimis" test set forth in SEC Staff Accounting Bulletin No. 76 and so long as Affiliate has obtained KLA's prior written approval of such sale or disposition.

4. Representations, Warranties and Covenants Related to Tax Effects of the Merger.

(a) Affiliate is the beneficial owner of the number of shares of Tencor Common Stock (including shares issuable upon exercise of stock options) set forth on the last page of this Agreement and did not acquire any of the Tencor Common Stock in contemplation of the Merger;

(b) Affiliate has not engaged in a Sale (as defined below) of any shares of Tencor Common Stock in contemplation of the Merger;

(c) Affiliate has no plan or intention (a "PLAN") to engage in a sale, exchange, transfer, redemption or reduction in any way of Affiliate's risk of ownership by short sale or otherwise, or other disposition, directly or indirectly (such actions being collectively referred to herein as a "SALE") of more than 50% of the shares of KLA Common Stock to be received by Affiliate in the Merger;

(d) If Affiliate is a partnership, then the term "sale" as used in paragraph (c) above shall be deemed to include any distribution to the undersigned's partners unless no recipient of any such distribution will receive shares of Tencor Common Stock representing 1% or more of the shares of Tencor Common Stock presently outstanding;

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(e) Affiliate is not aware of, or participating in, any Plan on the part of the Affiliates of Tencor to engage in a Sale or Sales of the KLA Common Stock to be received in the Merger such that the aggregate fair market value, as of the Effective Date of the Merger, of the shares subject to such Sales would exceed 50% of the aggregate fair market value of all shares of outstanding Tencor Common Stock immediately prior to the Merger;

(f) Affiliate understands that Tencor, KLA and their respective affiliates, as well as legal counsel to Tencor and KLA (in connection with rendering their opinions that the Merger will be a "reorganization" within the meaning of Section 368(a) of the Code) will be relying on (a) the truth and accuracy of the representations contained herein and (b) Affiliate's performance of the obligations set forth herein.

5. Miscellaneous.

(a) For the convenience of the parties hereto, this Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document.

(b) This Agreement shall be enforceable by, and shall inure to the benefit of and be binding upon, the parties hereto and their respective successors and assigns. As used herein, the term "successors and assigns" shall mean, where the context so permits, heirs, executors, administrators, trustees and successor trustees, and personal and other representatives.

(c) This Agreement shall be governed by and construed, interpreted and enforced in accordance with the internal laws of the State of California.

(d) If a court of competent jurisdiction determines that any provision of this Agreement is not enforceable or enforceable only if limited in time and/or scope, this Agreement shall continue in full force and effect with such provision stricken or so limited.

(e) Counsel to and accountants for the parties to the Agreement shall be entitled to rely upon this Agreement as needed.

(f) This Agreement shall not be modified or amended, or any right hereunder waived or any obligation excused, except by a written agreement signed by both parties.

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Executed as of the date shown on the first page of this Agreement.

KLA INSTRUMENTS CORPORATION

By: _____

Name: _____

Title: _____

AFFILIATE

By: _____

Name of Affiliate: _____

Name of Signatory (if different from name of Affiliate): _____

Title of Signatory (if applicable): _____

Number of shares of Tencor Common Stock beneficially owned by Affiliate:

Number of shares of Tencor Common Stock subject to options beneficially owned by Affiliate:

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TENCOR AFFILIATE AGREEMENT

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KLA INSTRUMENTS AND
TENCOR INSTRUMENTS TO MERGE

Merger to Create Global Leader in Yield Management Solutions

San Jose, Calif. And Milpitas, Calif. - January 14, 1997 - KLA Instruments Corporation (NASDAQ:KLAC) and Tencor Instruments (NASDAQ:TNCR) jointly announced today a definitive merger agreement to create a combined company providing the most comprehensive measurement and analysis systems for yield management available to the semiconductor industry.

Under the terms of the merger agreement, shares and options for KLA Instruments common stock will be exchanged for all outstanding shares and options of Tencor Instruments on the basis of one share of KLA Instruments for each share of Tencor Instruments. The transaction will be accounted for as pooling of interests and structured to qualify as a tax-free reorganization. The transaction is conditioned on obtaining both companies' shareholder approval, regulatory clearance and other customary closing conditions. It is expected to close during the June 30, 1997 quarter.

The new company, KLA-Tencor, will combine complementary product lines to create a full line supplier with best-of-class yield management products and services for semiconductor manufacturers worldwide. The agreement, which was unanimously approved by the board of directors of each company, will create a combined company employing over 3,900 people worldwide with combined revenues in excess of \$1 billion.

"We believe our customers will benefit from this merger because we will be able to provide a complete set of integrated yield management solutions," said Ken Levy, KLA's chairman and chief executive officer. "In addition, our combined investments in future products will provide customers with the continued flow of cost effective solutions needed to meet the fast-paced demands of this industry."

"The industry's current emphasis on enhancing yield management make it very timely for Tencor and KLA to join forces," said Jon D. Tompkins, Tencor's chairman, president and chief executive officer. "As a single company, the combined KLA and Tencor will be significantly stronger and more efficient in developing and delivering a broader range of yield management solutions to customers worldwide."

Kenneth Levy, currently chairman and CEO of KLA Instruments, will be chairman of the board of directors of KLA-Tencor and Jon D. Tompkins, currently chairman, president and CEO of Tencor Instruments, will be the CEO of the new corporation. Kenneth L. Schroeder, currently president and chief operating officer of KLA Instruments, will retain the same positions in the new company. The board of directors of the combined company will consist of the seven current KLA Instruments directors, including Mr. Levy and Mr. Schroeder, and five of the current Tencor Instruments directors, including Mr. Tompkins.

KLA Instruments is the world's leading manufacturer of yield management and process control systems for the semiconductor industry. KLA is a publicly held corporation, traded on the NASDAQ National Market under the symbol "KLAC."

Tencor Instruments, founded in 1976, is a recognized leader in the design and manufacture of innovative wafer defect inspection, software-based yield management, film measurement and metrology systems used in semiconductor manufacturing and related industries. More than 1,400 employees are located at the company's corporate headquarters in Milpitas, Calif., and sales and service offices worldwide. Tencor's homepage can be found on the World Wide Web at <http://www.tencor.com>.

STOCK OPTION AGREEMENT

THIS STOCK OPTION AGREEMENT dated as of January 14, 1997 (the "AGREEMENT") is entered into by and between Tencor Instruments, a California corporation ("TENCOR"), and KLA Instruments Corporation, a Delaware corporation ("KLA").

RECITALS

WHEREAS, concurrently with the execution and delivery of this Agreement, Tencor, KLA and Tiger Acquisition Corp., a California corporation and a wholly owned subsidiary of KLA ("SUB"), are entering into an Agreement and Plan of Reorganization (the "MERGER AGREEMENT"), which provides that, among other things, upon the terms and subject to the conditions thereof, Tencor and KLA will to enter into a business combination transaction to pursue their long-term business strategies (the "MERGER"); and

WHEREAS, as a condition to Tencor's willingness to enter into the Merger Agreement, Tencor has requested that KLA agree, and KLA has so agreed, to grant to Tencor an option to acquire shares of KLA's Common Stock, no par value, upon the terms and subject to the conditions set forth herein;

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements set forth herein and in the Merger Agreement and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. GRANT OF OPTION

KLA hereby grants to Tencor an irrevocable option (the "OPTION") to acquire up to a number of shares of the Common Stock, par value \$0.001 per share, of KLA ("KLA SHARES") equal to 19.9% of the issued and outstanding shares as of the first date, if any, upon which an Exercise Event (as defined in Section 2(a) below) shall occur (the "OPTION SHARES") (provided that the Option Shares shall not upon timely issuance constitute more than 19.9% of the then issued and outstanding KLA Shares), in the manner set forth below (i) by paying cash at a price of \$40.00 per share (the "EXERCISE PRICE") and/or, at Tencor's election, (ii) by exchanging therefor shares of the Common Stock, no par value, of Tencor ("TENCOR SHARES") at a rate (the "EXERCISE RATIO"), for each Option Share, of a number of Tencor Shares equal to the Exercise Price divided by the closing sale price of Tencor Shares on the Nasdaq National Market for the trading day immediately preceding the date of

the Closing (as defined below) of the particular Option exercise. All references in this Agreement to KLA Shares or Option Shares issued to Tencor hereunder shall be deemed to include the associated KLA Rights. Capitalized terms used in this Agreement but not defined herein shall have the meanings ascribed thereto in the Merger Agreement.

2. EXERCISE OF OPTION; MAXIMUM PROCEEDS

(a) The Option may be exercised by Tencor, in whole or in part, at any time or from time to time, (i) immediately prior to the consummation of a tender or exchange offer for 25% or more of any class of KLA's capital stock, (ii) upon the occurrence of all of the events specified in Section 7.3(c)(ii) of the Merger Agreement, (iii) if and when the Board of Directors of KLA shall have withheld, withdrawn or modified in a manner adverse to Tencor its recommendation in favor of approving the issuance of the shares of KLA Common Stock by virtue of the Merger after receipt of and in connection with an Acquisition Proposal with respect to KLA or (iv) if and when the Board of Directors of KLA recommends a KLA Superior Proposal to the shareholders of KLA (any of the events specified in clauses (i), (ii), (iii) or (iv) of this sentence being referred to herein as an "EXERCISE EVENT"). In the event Tencor wishes to exercise the Option, Tencor shall deliver to KLA a written notice (each an "EXERCISE NOTICE") specifying the total number of Option Shares it wishes to acquire and the form of consideration to be paid. Each closing of a purchase of Option Shares (a "CLOSING") shall occur on a date and at a time prior to the termination of the Option designated by Tencor in an Exercise Notice delivered at least two business days prior to the date of such Closing, which Closing shall be held at the principal offices of KLA.

(b) Notwithstanding the foregoing, upon the commencement of a tender or exchange offer for 25% or more of any class of KLA's capital stock (and/or during any time which such a tender or exchange offer remains open), Tencor may

deliver to KLA an Exercise Notice (a "CONDITIONAL EXERCISE NOTICE") specifying that it wishes to exercise and close a purchase of Option Shares immediately prior to the consummation of such tender or exchange offer. Unless the Conditional Exercise Notice is withdrawn by Tencor, the Closing of a purchase of Option Shares specified in a Conditional Exercise Notice shall take place immediately prior to the consummation of such tender or exchange offer. In the event that such tender or exchange offer is not consummated prior to termination of the Option, such Conditional Exercise Notice shall be void and of no further force and effect.

(c) The Option shall terminate upon the earliest of (i) the Effective Time, (ii) 180 days following the termination of the Merger Agreement pursuant to Article VII thereof if an Exercise Event shall have occurred on or prior to the date of such termination, (iii) 12 months following the date on which the Merger Agreement is terminated pursuant to Article VII thereof if (x) there shall have been a KLA Negative Vote and (y) prior to such KLA Negative Vote there shall have occurred an Acquisition Proposal with respect to KLA which shall have been publicly disclosed and not withdrawn, (iv) 12 months following the date on which the Merger Agreement is terminated pursuant to Article VII thereof if prior thereto there shall have commenced a tender or exchange offer for 25% or more of any class of KLA's capital stock and (v) the date on which the Merger Agreement is terminated if neither an Exercise Event, nor both of the events specified in subclauses (x) and (y)

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of clause (iii), nor the commencement of a tender or exchange offer for 25% or more of any class of KLA's capital stock shall have occurred on or prior to such date of termination; provided, however, that if the Option cannot be exercised by reason of any applicable government order or because the waiting period related to the issuance of the Option Shares under the HSR Act shall not have expired or been terminated, then the Option shall not terminate until the tenth business day after such impediment to exercise shall have been removed or shall have become final and not subject to appeal. Notwithstanding the foregoing, the Option may not be exercised if (i) Tencor shall have breached in any material respect any of its covenants or agreements contained in the Merger Agreement or (ii) the representations and warranties of Tencor contained in the Merger Agreement shall not have been true and correct in all material respects on and as of the date when made.

(d) If Tencor receives in the aggregate pursuant to Section 7.3(c) of the Merger Agreement together with proceeds in connection with any sales or other dispositions of Option Shares and any dividends received by Tencor declared on Option Shares, more than the sum of (x) \$60,000,000 plus (y) the Exercise Price multiplied by the number of KLA Shares purchased by Tencor pursuant to the Option, then all proceeds to Tencor in excess of such sum shall be remitted by Tencor to KLA.

3. CONDITIONS TO CLOSING

The obligation of KLA to issue Option Shares to Tencor hereunder is subject to the conditions that (a) any waiting period under the HSR Act applicable to the issuance of the Option Shares hereunder shall have expired or been terminated; (b) all material consents, approvals, orders or authorizations of, or registrations, declarations or filings with, any Federal, state or local administrative agency or commission or other Federal state or local governmental authority or instrumentality, if any, required in connection with the issuance of the Option Shares hereunder shall have been obtained or made, as the case may be; and (c) no preliminary or permanent injunction or other order by any court of competent jurisdiction prohibiting or otherwise restraining such issuance shall be in effect. It is understood and agreed that at any time during which the Option is exercisable or if Tencor shall have delivered to KLA a Conditional Exercise Notice, the parties will use their respective best efforts to satisfy all conditions to Closing, so that a Closing may take place as promptly as practicable, and in any event, prior to consummation of a tender or exchange offer for shares of KLA capital stock; provided that neither KLA nor Tencor nor any subsidiary or affiliate thereof will be required to agree to any divestiture by itself or any of its affiliates of shares of capital stock or of any business, assets or property, or the imposition of any material limitation on the ability of any of them to conduct their businesses or to own or exercise control of such assets, properties and stock.

4. CLOSING

At any Closing, (a) KLA shall deliver to Tencor a single certificate in definitive form representing the number of KLA Shares designated by Tencor in its Exercise Notice, such certificate to be registered in the name of Tencor and to bear the legend set forth in Section 10 hereof, against delivery of (b) payment by Tencor to KLA of the aggregate purchase price for the KLA Shares so

designated and being purchased by delivery of (i) a certified check or bank check and/or, at Tencor's election, (ii) a single certificate in definitive form representing the number of Tencor Shares being issued by Tencor in consideration therefor (based on the Exercise Ratio), such certificate to be registered in the name of KLA and to bear the legend set forth in Section 10 hereof.

5. REPRESENTATIONS AND WARRANTIES OF KLA

KLA represents and warrants to Tencor that (a) KLA is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has the corporate power and authority to enter into this Agreement and to carry out its obligations hereunder; (b) the execution and delivery of this Agreement by KLA and consummation by KLA of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of KLA and no other corporate proceedings on the part of KLA are necessary to authorize this Agreement or any of the transactions contemplated hereby; (c) this Agreement has been duly executed and delivered by KLA and constitutes a legal, valid and binding obligation of KLA and, assuming this Agreement constitutes a legal, valid and binding obligation of Tencor, is enforceable against KLA in accordance with its terms, except as enforceability may be limited by bankruptcy and other laws affecting the rights and remedies of creditors generally and general principles of equity; (d) except for any filings required under the HSR Act, KLA has taken all necessary corporate and other action to authorize and reserve for issuance and to permit it to issue upon exercise of the Option, and at all times from the date hereof until the termination of the Option will have reserved for issuance, a sufficient number of unissued KLA Shares for Tencor to exercise the Option in full and will take all necessary corporate or other action to authorize and reserve for issuance all additional KLA Shares or other securities which may be issuable pursuant to Section 9(a) upon exercise of the Option, all of which, upon their issuance and delivery in accordance with the terms of this Agreement, will be validly issued, fully paid and nonassessable; (e) upon delivery of the KLA Shares and any other securities to Tencor upon exercise of the Option, Tencor will acquire such KLA Shares or other securities free and clear of all material claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, excluding those imposed by Tencor; (f) the execution and delivery of this Agreement by KLA do not, and the performance of this Agreement by KLA will not, (i) violate the Certificate of Incorporation or By-Laws of KLA, (ii) conflict with or violate any order applicable to KLA or any of its subsidiaries or by which they or any of their property is bound or affected or (iii) result in any breach of or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give rise to any right of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the property or assets of KLA or any of its subsidiaries pursuant to, any contract or agreement to which KLA or any of its subsidiaries is a party or by which KLA or any of its subsidiaries or any of their property is bound or affected, except, in the case of clauses (ii) and (iii) above, for violations, conflicts, breaches, defaults, rights of termination, amendment, acceleration or cancellation, liens or encumbrances which would not, individually or in the aggregate, have a Material Adverse Effect on KLA; (g) the execution and delivery of this Agreement by KLA does not, and the performance of this Agreement by KLA will not, require any consent, approval, authorization or permit of, or filing with, or notification to, any Governmental Entity except pursuant to the HSR Act; and (h) any Tencor Shares acquired pursuant to this

Agreement will not be acquired by KLA with a view to the public distribution thereof and KLA will not sell or otherwise dispose of such shares in violation of applicable law or this Agreement.

6. REPRESENTATIONS AND WARRANTIES OF TENCOR

Tencor represents and warrants to KLA that (a) Tencor is a corporation duly incorporated, validly existing and in good standing under the laws of the State of California and has the corporate power and authority to enter into this Agreement and to carry out its obligations hereunder; (b) the execution and delivery of this Agreement by Tencor and the consummation by Tencor of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Tencor and no other corporate proceedings on the part of Tencor are necessary to authorize this Agreement or any of the transactions contemplated hereby; (c) this Agreement has been duly executed and delivered by Tencor and constitutes a legal, valid and binding obligation of Tencor and, assuming this Agreement constitutes a legal, valid and binding obligation of KLA, is enforceable against Tencor in accordance with its terms,

except as enforceability may be limited by bankruptcy and other laws affecting the rights and remedies of creditors generally and general principles of equity; (d) except for any filings required under the HSR Act, Tencor has taken (or will in a timely manner take) all necessary corporate and other action to authorize and reserve for issuance and to permit it to issue upon exercise of the Option and will take all necessary corporate or other action to authorize and reserve for issuance all additional Tencor Shares or other securities which may be issuable pursuant to Section 9(b) upon exercise of the Option, all of which, upon their issuance and delivery in accordance with the terms of this Agreement, will be validly issued, fully paid and nonassessable; (e) upon delivery of Tencor Shares to KLA in consideration of any acquisition of KLA Shares pursuant hereto, KLA will acquire such Tencor Shares free and clear of all material claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, excluding those imposed by KLA; (f) the execution and delivery of this Agreement by Tencor do not, and the performance of this Agreement by Tencor will not, (i) violate the Articles of Incorporation or Bylaws of Tencor, (ii) conflict with or violate any order applicable to Tencor or any of its subsidiaries or by which they or any of their property is bound or affected or (iii) result in any breach of or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give rise to any right of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the property or assets of Tencor or any of its subsidiaries pursuant to, any contract or agreement to which Tencor or any of its subsidiaries is a party or by which Tencor or any of its subsidiaries or any of their property is bound or affected, except, in the case of clauses (ii) and (iii) above, for violations, conflicts, breaches, defaults, rights of termination, amendment, acceleration or cancellation, liens or encumbrances which would not, individually or in the aggregate, have a Material Adverse Effect on Tencor; (g) the execution and delivery of this Agreement by Tencor does not, and the performance of this Agreement by Tencor will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity except pursuant to the HSR Act; and (h) any KLA Shares acquired upon exercise of the Option will not be acquired by Tencor with a view to the public distribution thereof and Tencor will not sell or otherwise dispose of such shares in violation of applicable law or this Agreement.

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7. CERTAIN RIGHTS

(a) TENCOR PUT. At the request of and upon notice by Tencor (the "PUT NOTICE"), at any time during the period during which the Option is exercisable pursuant to Section 2 (the "PURCHASE PERIOD") or in accordance with subparagraph (iv) below, KLA (or any successor entity thereof) shall purchase from Tencor the Option, to the extent not previously exercised, at the price set forth in subparagraph (i) below (as limited by subparagraph (iii) below), and the Option Shares, if any, acquired by Tencor pursuant thereto, at the price set forth in subparagraph (ii) below (as limited by subparagraph (iii) below):

(i) The difference between the "MARKET/TENDER OFFER PRICE" for KLA Shares as of the date Tencor gives notice of its intent to exercise its rights under this Section 7(a) (defined as the higher of (A) the highest price per share offered as of such date pursuant to any Acquisition Proposal which was made prior to such date and not terminated or withdrawn as of such date and (B) the highest closing sale price of KLA Shares on the Nasdaq National Market during the twenty (20) trading days ending on the trading day immediately preceding such date) and the Exercise Price, multiplied by the number of KLA Shares purchasable pursuant to the Option, but only if the Market/Tender Offer Price is greater than the Exercise Price. For purposes of determining the highest price offered pursuant to any Acquisition Proposal which involves consideration other than cash, the value of such consideration shall be equal to the higher of (x) if securities of the same class of the proponent as such consideration are traded on any national securities exchange or by any registered securities association, a value based on the closing sale price or asked price for such securities on their principal trading market on such date and (y) the value ascribed to such consideration by the proponent of such Acquisition Proposal, or if no such value is ascribed, a value determined in good faith by the Board of Directors of KLA.

(ii) The Exercise Price paid by Tencor for KLA Shares acquired pursuant to the Option plus the difference between the Market/Tender Offer Price and such Exercise Price (but only if the Market/Tender Offer Price is greater than the Exercise Price) multiplied by the number of KLA Shares so purchased. If Tencor issued Tencor Shares in connection with any exercise of the Option, the Exercise Price in connection with such exercise shall be calculated as set forth in the last sentence of Section 4 as if Tencor had exercised its right

to pay cash instead of issuing Tencor Shares.

(iii) Notwithstanding subparagraphs (i) and (ii) above, pursuant to this Section 7 KLA shall not be required to pay Tencor in excess of an aggregate of (x) \$60,000,000 plus (y) the Exercise Price paid by Tencor for KLA Shares acquired pursuant to the Option minus (z) any amounts paid to Tencor by KLA pursuant to Section 7.3(c) of the Merger Agreement.

(iv) Notwithstanding the foregoing, upon the commencement of a tender or exchange offer for 25% or more of any class of KLA's capital stock (and/or during any

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time which such a tender or exchange offer remains open), Tencor may deliver to KLA a Put Notice (a "CONDITIONAL PUT NOTICE") specifying that it wishes to exercise and close immediately prior to the consummation of such tender or exchange offer, a sale to KLA pursuant to this Section 7(a) of the Option, to the extent not previously exercised, and the Option Shares, if any, acquired by Tencor pursuant thereto,. Unless the Conditional Put Notice is withdrawn by Tencor, the Closing of any such sale specified in a Conditional Put Notice shall take place immediately prior to the consummation of such tender or exchange offer. In the event that such tender or exchange offer is not consummated prior to termination of the Option, such Conditional Put Notice shall be void and of no further force and effect.

(b) REDELIVERY OF TENCOR SHARES. If Tencor has acquired KLA Shares pursuant to exercise of the Option by the issuance and delivery of Tencor Shares, then KLA shall, if so requested by Tencor, in fulfillment of its obligation pursuant to the first clause of Section 7(a)(ii) with respect to the Exercise Price paid in the form of Tencor Shares only, redeliver the certificate(s) for such Tencor Shares to Tencor, free and clear of all claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, other than those imposed by Tencor.

(c) PAYMENT AND REDELIVERY OF OPTION OR SHARES. In the event Tencor exercises its rights under Sections 7(a) or (b), KLA shall, within ten business days after Tencor delivers notice pursuant to Section 7(a), pay the required amount to Tencor in immediately available funds (and Tencor Shares, if applicable) and Tencor shall surrender to KLA the Option and the certificates evidencing the KLA Shares purchased by Tencor pursuant thereto, and Tencor shall represent and warrant that such shares are then free and clear of all claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, other than those imposed by KLA.

(d) KLA CALL. If Tencor has acquired Option Shares pursuant to exercise of the Option (the date of any Closing relating to any such exercise herein referred to as an "EXERCISE DATE") and no Acquisition Proposal with respect to KLA has been consummated at any time after the date of this Agreement and prior to the date one year following such Exercise Date (nor has KLA entered into a definitive agreement or letter of intent with respect to such an Acquisition Proposal which agreement or letter of intent remains in effect at the end of such year), then, at any time after the date one year following such Exercise Date and prior to the date eighteen months following such Exercise Date, KLA may require Tencor, upon delivery to Tencor of written notice, to sell to KLA any KLA Shares held by Tencor as of the day that is ten business days after the date of such notice, up to a number of shares equal to the number of Option Shares acquired by Tencor pursuant to exercise of the Option in connection with such Exercise Date. The per share purchase price for such sale (the "KLA CALL PRICE") shall be equal to the Exercise Price less any dividends paid on the KLA Shares to be purchased by KLA pursuant to this Section 7(d). The closing of any sale of KLA Shares pursuant to this Section 7(d) shall take place at the principal offices of KLA at a time and on a date designated by KLA in the aforementioned notice to Tencor, which date shall be no more than 20 and no less than 12 business days from the date of such notice. The KLA Call Price shall be paid in immediately available funds, provided that, in the event Tencor has acquired Option Shares pursuant

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to exercise of the Option by issuance and delivery of Tencor Shares, at the option of KLA, the KLA Call Price for part or all of any purchase of KLA Shares pursuant to this Section 7(d), up to a number of such shares equal to the number of Option Shares acquired by Tencor by issuance and delivery of Tencor Shares,

shall be paid by delivery of a number of Tencor Shares equal to the KLA Call Price divided by the closing sale price of Tencor Shares on the Nasdaq National Market for the trading day immediately preceding the date of the Exercise Date on which the Option Shares to be purchased by KLA pursuant to this Section 7(d) were originally issued to Tencor.

(e) RESTRICTIONS ON TRANSFER. Until the expiration of the Purchase Period, KLA shall not sell, transfer or otherwise dispose of any Tencor Shares acquired by it pursuant to this Agreement.

8. REGISTRATION RIGHTS

(a) Following the termination of the Merger Agreement, each party hereto (a "HOLDER") may by written notice (a "REGISTRATION NOTICE") to the other party (the "REGISTRANT") request the Registrant to register under the Securities Act all or any part of the shares acquired by such Holder pursuant to this Agreement (the "REGISTRABLE SECURITIES") in order to permit the sale or other disposition of such shares pursuant to a bona fide firm commitment underwritten public offering in which the Holder and the underwriters shall effect as wide a distribution of such Registrable Securities as is reasonably practicable and shall use reasonable efforts to prevent any person or group from purchasing through such offering shares representing more than 1% of the outstanding shares of Common Stock of the Registrant on a fully diluted basis (a "PERMITTED OFFERING"); provided, however, that any such Registration Notice must relate to a number of shares equal to at least 2% of the outstanding shares of Common Stock of the Registrant on a fully diluted basis and that any rights to require registration hereunder shall terminate with respect to any shares that may be sold pursuant to Rule 144(k) under the Securities Act. The Registration Notice shall include a certificate executed by the Holder and its proposed managing underwriter, which underwriter shall be an investment banking firm of nationally recognized standing (the "MANAGER"), stating that (i) the Holder and the Manager have a good faith intention to commence a Permitted Offering and (ii) the Manager in good faith believes that, based on the then prevailing market conditions, it will be able to sell the Registrable Securities at a per share price equal to at least 80% of the per share average of the closing sale prices of the Registrant's Common Stock on the Nasdaq National Market for the twenty trading days immediately preceding the date of the Registration Notice. The Registrant shall thereupon have the option exercisable by written notice delivered to the Holder within ten business days after the receipt of the Registration Notice, irrevocably to agree to purchase all or any part of the Registrable Securities for cash at a price (the "OPTION PRICE" equal to the product of (i) the number of Registrable Securities so purchased and (ii) the per share average of the closing sale prices of the Registrant's Common Stock on the Nasdaq National Market for the twenty trading days immediately preceding the date of the Registration Notice. Any such purchase of Registrable Securities by the Registrant hereunder shall take place at a closing to be held at the principle executive offices of the Registrant or its counsel at any reasonable date and time designated by the Registrant in such notice within 10 business days after delivery of such notice. The payment for the shares to be purchased

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shall be made by delivery at the time of such closing of the Option Price in immediately available funds.

(b) If the Registrant does not elect to exercise its option to purchase pursuant to Section 8(a) with respect to all Registrable Securities, the Registrant shall use all reasonable efforts to effect, as promptly as practicable, the registration under the Securities Act of the unpurchased Registrable Securities requested to be registered in the Registration Notice; provided, however, that (i) neither party shall be entitled to more than an aggregate of two effective registration statements hereunder and (ii) the Registrant will not be required to file any such registration statement during any period of time (not to exceed 40 days after a Registration Notice in the case of clause (A) below or 90 days after a Registration Notice in the case of clauses (B) and (C) below) when (A) the Registrant is in possession of material non-public information which it reasonably believes would be detrimental to be disclosed at such time and, in the written opinion of counsel to such Registrant, such information would have to be disclosed if a registration statement were filed at that time; (B) such Registrant is required under the Securities Act to include audited financial statements for any period in such registration statement and such financial statements are not yet available for inclusion in such registration statement; or (C) such Registrant determines, in its reasonable judgment, that such registration would interfere with any financing, acquisition or other material transaction involving the Registrant. If consummation of the sale of any Registrable Securities pursuant to a registration hereunder does not occur within 180 days after the filing with the SEC of the initial registration statement therefor, the provisions of this Section 8 shall again be applicable to any proposed registration, it being understood that neither party shall be entitled to more than an aggregate of two effective registration statements hereunder. The Registrant shall use all

reasonable efforts to cause any Registrable Securities registered pursuant to this Section 8 to be qualified for sale under the securities or blue sky laws of such jurisdictions as the Holder may reasonably request and shall continue such registration or qualification in effect in such jurisdictions; provided, however, that the Registrant shall not be required to qualify to do business in, or consent to general service of process in, any jurisdiction by reason of this provision.

(c) The registration rights set forth in this Section 8 are subject to the condition that the Holder shall provide the Registrant with such information with respect to such Holder's Registrable Securities, the plan for distribution thereof, and such other information with respect to such Holder as, in the reasonable judgment of counsel for the Registrant, is necessary to enable the Registrant to include in a registration statement all material facts required to be disclosed with respect to a registration thereunder.

(d) A registration effected under this Section 8 shall be effected at the Registrant's expense, except for underwriting discounts and commissions and the fees and expenses of counsel to the Holder, and the Registrant shall provide to the underwriters such documentation (including certificates, opinions of counsel and "comfort" letters from auditors) as are customary in connection with underwritten public offerings and as such underwriters may reasonably require. In connection with any registration, the Holder and the Registrant agree to enter into an underwriting agreement reasonably acceptable to each such party, in form and substance customary for transactions of this type with the underwriters participating in such offering.

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(e) Indemnification

(i) The Registrant will indemnify the Holder, each of its directors and officers and each person who controls the Holder within the meaning of Section 15 of the Securities Act, and each underwriter of the Registrant's securities, with respect to any registration, qualification or compliance which has been effected pursuant to this Agreement, against all expenses, claims, losses, damages or liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation by the Registrant of any rule or regulation promulgated under the Securities Act applicable to the Registrant in connection with any such registration, qualification or compliance, and the Registrant will reimburse the Holder and, each of its directors and officers and each person who controls the Holder within the meaning of Section 15 of the Securities Act, and each underwriter for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, provided that the Registrant will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to the Registrant by such Holder or director or officer or controlling person or underwriter seeking indemnification.

(ii) The Holder will indemnify the Registrant, each of its directors and officers and each underwriter of the Registrant's securities covered by such registration statement and each person who controls the Registrant within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or any violation by the Holder of any rule or regulation promulgated under the Securities Act applicable to the Holder in connection with any such registration, qualification or compliance, and will reimburse the Registrant, such directors, officers or control persons or underwriters for any legal or any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Registrant by the Holder for use therein, provided that in no event

shall any indemnity under this Section 8(e) exceed the gross proceeds of the offering received by the Holder..

(iii) Each party entitled to indemnification under this Section 8(e) (the "INDEMNIFIED PARTY") shall give notice to the party required to provide indemnification (the "INDEMNIFYING PARTY") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such party's expense; provided, however, that the Indemnifying Party shall pay such expense if representation of the Indemnified Party by counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between the Indemnified Party and any other party represented by such counsel in such proceeding, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 8(e) unless the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action. No Indemnifying Party, in the defense of any such claim or litigation shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation. No Indemnifying Party shall be required to indemnify any Indemnified Party with respect to any settlement entered into without such Indemnifying Party's prior consent (which shall not be unreasonably withheld).

9. ADJUSTMENT UPON CHANGES IN CAPITALIZATION; RIGHTS PLANS

(a) In the event of any change in the KLA Shares by reason of stock dividends, stock splits, reverse stock splits, mergers (other than the Merger), recapitalizations, combinations, exchanges of shares and the like, the type and number of shares or securities subject to the Option, the Exercise Ratio and the Exercise Price shall be adjusted appropriately, and proper provision shall be made in the agreements governing such transaction so that Tencor shall receive, upon exercise of the Option, the number and class of shares or other securities or property that Tencor would have received in respect of the KLA Shares if the Option had been exercised immediately prior to such event or the record date therefor, as applicable.

(b) At any time during which the Option is exercisable, and at any time after the Option is exercised (in whole or in part, if at all), Tencor shall not adopt a shareholders rights plan (a so-called "poison pill"), and KLA shall not amend the KLA Rights Plan or adopt a new shareholders rights plan, that contains provisions for the distribution of rights thereunder as a result of the other party being the beneficial owner of shares of the first party by virtue of the Option being exercisable or having been exercised (or as a result of such other party beneficially owning shares issuable in

respect of any Option Shares). It is understood, however, that following termination (if any) of the Merger Agreement, a party may adopt (or in the case of KLA, adopt and/or amend) a shareholders rights plan, that contains provisions for the distribution of rights thereunder as a result of the other party being the beneficial owner of shares of the first party in addition to those that may be beneficially owned by virtue of the Option being exercisable or having been exercised (or as a result of such other party beneficially owning shares issuable in respect of any Option Shares).

10. RESTRICTIVE LEGENDS

Each certificate representing Option Shares issued to Tencor hereunder, and each certificate representing Tencor Shares delivered to KLA at a Closing, shall include a legend in substantially the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY BE REOFFERED OR SOLD ONLY IF SO REGISTERED OR IF AN EXEMPTION FROM SUCH REGISTRATION IS AVAILABLE. SUCH SECURITIES ARE ALSO SUBJECT TO ADDITIONAL RESTRICTIONS ON TRANSFER AS SET FORTH IN THE STOCK OPTION AGREEMENT DATED AS OF JANUARY 14, 1997, A COPY OF WHICH MAY BE OBTAINED FROM THE ISSUER.

11. LISTING AND HSR FILING

KLA, upon the request of Tencor, shall promptly file an application to list the KLA Shares to be acquired upon exercise of the Option for quotation on the Nasdaq National Market and shall use its best efforts to obtain approval of such listing as soon as practicable. Tencor, upon the request of KLA, shall promptly file an application to list the Tencor Shares issued and delivered to KLA pursuant to Section 4 for quotation on the Nasdaq National Market and shall use its best efforts to obtain approval of such listing as soon as practicable. Promptly after the date hereof, each of the parties hereto shall promptly file with the Federal Trade Commission and the Antitrust Division of the United States Department of Justice all required premerger notification and report forms and other documents and exhibits required to be filed under the HSR Act to permit the acquisition of the KLA Shares subject to the Option at the earliest possible date.

12. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. Nothing contained in this Agreement, express or implied, is intended to confer upon any person other than the parties hereto and their respective successors and permitted assigns any rights or remedies of any nature whatsoever by reason of this Agreement. Any shares sold by a party in compliance with the provisions of Section 8 shall, upon consummation of such sale, be free of the restrictions imposed with respect to such shares by this Agreement and any transferee of such shares shall not be entitled to the rights of such party.

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Certificates representing shares sold in a registered public offering pursuant to Section 8 shall not be required to bear the legend set forth in Section 10.

13. SPECIFIC PERFORMANCE

The parties recognize and agree that if for any reason any of the provisions of this Agreement are not performed in accordance with their specific terms or are otherwise breached, immediate and irreparable harm or injury would be caused for which money damages would not be an adequate remedy. Accordingly, each party agrees that in addition to other remedies the other party shall be entitled to an injunction restraining any violation or threatened violation of the provisions of this Agreement. In the event that any action shall be brought in equity to enforce the provisions of the Agreement, neither party will allege, and each party hereby waives the defense, that there is an adequate remedy at law.

14. ENTIRE AGREEMENT

This Agreement and the Merger Agreement (including the appendices thereto) constitute the entire agreement between the parties with respect to the subject matter hereof and supersede all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof.

15. FURTHER ASSURANCES

Each party will execute and deliver all such further documents and instruments and take all such further action as may be necessary in order to consummate the transactions contemplated hereby.

16. VALIDITY

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of the other provisions of this Agreement, which shall remain in full force and effect. In the event any Governmental Entity of competent jurisdiction holds any provision of this Agreement to be null, void or unenforceable, the parties hereto shall negotiate in good faith and shall execute and deliver an amendment to this Agreement in order, as nearly as possible, to effectuate, to the extent permitted by law, the intent of the parties hereto with respect to such provision.

17. NOTICES

All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or by commercial delivery service, or sent via teletype (receipt confirmed) to the parties at the following addresses or teletype numbers (or at such other address or teletype numbers for a party as shall be specified by like notice):

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(1) if to Tencor, to:

Tencor Instruments
One Technology Drive
Milpitas, California 95035
Attention: President
Telephone No.: (408) 970-9500
Telecopy No.: (408) 988-6420

with a copy to:

Heller, Ehrman, White & McAuliffe
525 University Avenue
Palo Alto, CA 94301
Attention: Sarah A. O'Dowd, Esq.
Telephone No.: 415-324-7045
Telecopy No.: 415-324-0638

(2) if to KLA, to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: Chief Executive Officer
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

with a copy to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: General Counsel
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

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with another copy to:

Wilson, Sonsini, Goodrich & Rosati, P.C.
650 Page Mill Road
Palo Alto, California 94304-1050
Attention: Larry W. Sonsini, Esq.
Telephone No.: (415) 493-9300
Telecopy No.: (415) 493-6811

18. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of California applicable to agreements made and to be performed entirely within such State.

19. COUNTERPARTS

This Agreement may be executed in two counterparts, each of which shall be deemed to be an original, but both of which, taken together, shall constitute one and the same instrument.

20. EXPENSES

Except as otherwise expressly provided herein or in the Merger Agreement, all costs and expenses incurred in connection with the transactions contemplated by this Agreement shall be paid by the party incurring such expenses.

21. AMENDMENTS; WAIVER

This Agreement may be amended by the parties hereto and the terms and conditions hereof may be waived only by an instrument in writing signed on behalf of each of the parties hereto, or, in the case of a waiver, by an instrument signed on behalf of the party waiving compliance.

22. ASSIGNMENT

Neither of the parties hereto may sell, transfer, assign or otherwise dispose of any of its rights or obligations under this Agreement or the Option

created hereunder to any other person, without the express written consent of the other party, except that the rights and obligations hereunder shall inure to the benefit of and be binding upon any successor of a party hereto.

[Remainder of Page Intentionally Blank]

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized officers as of the date first above written.

TENCOR INSTRUMENTS

By: /s/ Jon D. Tompkins

Name: Jon D. Tompkins
Title: President and Chief Executive Officer

KLA INSTRUMENTS CORPORATION

By: /s/ Kenneth Levy

Name: Kenneth Levy
Title: Chief Executive Officer

STOCK OPTION AGREEMENT
(KLA option to TENCOR)

[Option from TENCOR to KLA]

STOCK OPTION AGREEMENT

THIS STOCK OPTION AGREEMENT dated as of January 14, 1997 (the "AGREEMENT") is entered into by and between Tencor Instruments, a California corporation ("TENCOR"), and KLA Instruments Corporation, a Delaware corporation ("KLA").

RECITALS

WHEREAS, concurrently with the execution and delivery of this Agreement, Tencor, KLA and Tiger Acquisition Corp., a California corporation and a wholly owned subsidiary of KLA ("SUB"), are entering into an Agreement and Plan of Reorganization (the "MERGER AGREEMENT"), which provides that, among other things, upon the terms and subject to the conditions thereof, Tencor and KLA will enter into a business combination transaction to pursue their long-term business strategies (the "MERGER"); and

WHEREAS, as a condition to KLA's willingness to enter into the Merger Agreement, KLA has requested that Tencor agree, and Tencor has so agreed, to grant to KLA an option to acquire shares of Tencor's Common Stock, no par value, upon the terms and subject to the conditions set forth herein;

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants and agreements set forth herein and in the Merger Agreement and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. GRANT OF OPTION

Tencor hereby grants to KLA an irrevocable option (the "OPTION") to acquire up to a number of shares of the Common Stock, no par value, of Tencor ("TENCOR SHARES") equal to 19.9% of the issued and outstanding shares as of the first date, if any, upon which an Exercise Event (as defined in Section 2(a) below) shall occur (the "OPTION SHARES") (provided that the Option Shares shall not upon timely issuance constitute more than 19.9% of the then issued and outstanding Tencor Shares), in the manner set forth below (i) by paying cash at a price of \$40.00 per share (the "EXERCISE PRICE") and/or, at KLA's election, (ii) by exchanging therefor shares of the Common Stock, par value \$0.001 per share, of KLA ("KLA SHARES") at a rate (the "EXERCISE RATIO"), for each Option Share, of a number of KLA Shares equal to the Exercise Price divided by the closing sale price of KLA Shares on the Nasdaq National Market for the trading day immediately preceding the date of the Closing (as

defined below) of the particular Option exercise. All references in this Agreement to KLA Shares hereunder shall be deemed to include the associated KLA Rights. Capitalized terms used in this Agreement but not defined herein shall have the meanings ascribed thereto in the Merger Agreement.

2. EXERCISE OF OPTION; MAXIMUM PROCEEDS

(a) The Option may be exercised by KLA, in whole or in part, at any time or from time to time, (i) immediately prior to the consummation of a tender or exchange offer for 25% or more of any class of Tencor's capital stock, (ii) upon the occurrence of all of the events specified in Section 7.3(b)(ii) of the Merger Agreement, (iii) if and when the Board of Directors of Tencor shall have withheld, withdrawn or modified in a manner adverse to KLA its recommendation in favor of approving the issuance of the shares of Tencor Common Stock by virtue of the Merger after receipt of and in connection with an Acquisition Proposal with respect to Tencor or (iv) if and when the Board of Directors of Tencor recommends a Tencor Superior Proposal to the shareholders of Tencor (any of the events specified in clauses (i), (ii), (iii) or (iv) of this sentence being referred to herein as an "EXERCISE EVENT"). In the event KLA wishes to exercise the Option, KLA shall deliver to Tencor a written notice (each an "EXERCISE NOTICE") specifying the total number of Option Shares it wishes to acquire and the form of consideration to be paid. Each closing of a purchase of Option Shares (a "CLOSING") shall occur on a date and at a time prior to the termination of the Option designated by KLA in an Exercise Notice delivered at least two business days prior to the date of such Closing, which Closing shall be held at the principal offices of Tencor.

(b) Notwithstanding the foregoing, upon the commencement of a tender or exchange offer for 25% or more of any class of Tencor's capital stock (and/or during any time which such a tender or exchange offer remains open), KLA may deliver to Tencor an Exercise Notice (a "CONDITIONAL EXERCISE NOTICE")

specifying that it wishes to exercise and close a purchase of Option Shares immediately prior to the consummation of such tender or exchange offer. Unless the Conditional Exercise Notice is withdrawn by KLA, the Closing of a purchase of Option Shares specified in a Conditional Exercise Notice shall take place immediately prior to the consummation of such tender or exchange offer. In the event that such tender or exchange offer is not consummated prior to termination of the Option, such Conditional Exercise Notice shall be void and of no further force and effect.

(c) The Option shall terminate upon the earliest of (i) the Effective Time, (ii) 180 days following the termination of the Merger Agreement pursuant to Article VII thereof if an Exercise Event shall have occurred on or prior to the date of such termination, (iii) 12 months following the date on which the Merger Agreement is terminated pursuant to Article VII thereof if (x) there shall have been a Tencor Negative Vote and (y) prior to such Tencor Negative Vote there shall have occurred an Acquisition Proposal with respect to Tencor which shall have been publicly disclosed and not withdrawn, (iv) 12 months following the date on which the Merger Agreement is terminated pursuant to Article VII thereof if prior thereto there shall have commenced a tender or exchange offer for 25% or more of any class of Tencor's capital stock and (v) the date on which the Merger Agreement is terminated if neither an Exercise Event, nor both of the events specified in subclauses (x) and (y) of clause (iii), nor the commencement of a tender or exchange offer for 25% or

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more of any class of Tencor's capital stock shall have occurred on or prior to such date of termination; provided, however, that if the Option cannot be exercised by reason of any applicable government order or because the waiting period related to the issuance of the Option Shares under the HSR Act shall not have expired or been terminated, then the Option shall not terminate until the tenth business day after such impediment to exercise shall have been removed or shall have become final and not subject to appeal. Notwithstanding the foregoing, the Option may not be exercised if (i) KLA shall have breached in any material respect any of its covenants or agreements contained in the Merger Agreement or (ii) the representations and warranties of KLA contained in the Merger Agreement shall not have been true and correct in all material respects on and as of the date when made.

(d) If KLA receives in the aggregate pursuant to Section 7.3(b) of the Merger Agreement together with proceeds in connection with any sales or other dispositions of Option Shares and any dividends received by KLA declared on Option Shares, more than the sum of (x) \$40,000,000 plus (y) the Exercise Price multiplied by the number of Tencor Shares purchased by KLA pursuant to the Option, then all proceeds to KLA in excess of such sum shall be remitted by KLA to Tencor.

3. CONDITIONS TO CLOSING

The obligation of Tencor to issue Option Shares to KLA hereunder is subject to the conditions that (a) any waiting period under the HSR Act applicable to the issuance of the Option Shares hereunder shall have expired or been terminated; (b) all material consents, approvals, orders or authorizations of, or registrations, declarations or filings with, any Federal, state or local administrative agency or commission or other Federal state or local governmental authority or instrumentality, if any, required in connection with the issuance of the Option Shares hereunder shall have been obtained or made, as the case may be; and (c) no preliminary or permanent injunction or other order by any court of competent jurisdiction prohibiting or otherwise restraining such issuance shall be in effect. It is understood and agreed that at any time during which the Option is exercisable or if KLA shall have delivered to Tencor a Conditional Exercise Notice, the parties will use their respective best efforts to satisfy all conditions to Closing, so that a Closing may take place as promptly as practicable, and in any event, prior to consummation of a tender or exchange offer for shares of Tencor capital stock; provided that neither Tencor nor KLA nor any subsidiary or affiliate thereof will be required to agree to any divestiture by itself or any of its affiliates of shares of capital stock or of any business, assets or property, or the imposition of any material limitation on the ability of any of them to conduct their businesses or to own or exercise control of such assets, properties and stock.

4. CLOSING

At any Closing, (a) Tencor shall deliver to KLA a single certificate in definitive form representing the number of Tencor Shares designated by KLA in its Exercise Notice, such certificate to be registered in the name of KLA and to bear the legend set forth in Section 10 hereof, against delivery of (b) payment by KLA to Tencor of the aggregate purchase price for the Tencor Shares so

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designated and being purchased by delivery of (i) a certified check or bank check and/or, at KLA's election, (ii) a single certificate in definitive form representing the number of KLA Shares being issued by KLA in consideration therefor (based on the Exercise Ratio), such certificate to be registered in the name of Tencor and to bear the legend set forth in Section 10 hereof.

5. REPRESENTATIONS AND WARRANTIES OF TENCOR

Tencor represents and warrants to KLA that (a) Tencor is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has the corporate power and authority to enter into this Agreement and to carry out its obligations hereunder; (b) the execution and delivery of this Agreement by Tencor and consummation by Tencor of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Tencor and no other corporate proceedings on the part of Tencor are necessary to authorize this Agreement or any of the transactions contemplated hereby; (c) this Agreement has been duly executed and delivered by Tencor and constitutes a legal, valid and binding obligation of Tencor and, assuming this Agreement constitutes a legal, valid and binding obligation of KLA, is enforceable against Tencor in accordance with its terms, except as enforceability may be limited by bankruptcy and other laws affecting the rights and remedies of creditors generally and general principles of equity; (d) except for any filings required under the HSR Act, Tencor has taken all necessary corporate and other action to authorize and reserve for issuance and to permit it to issue upon exercise of the Option, and at all times from the date hereof until the termination of the Option will have reserved for issuance, a sufficient number of unissued Tencor Shares for KLA to exercise the Option in full and will take all necessary corporate or other action to authorize and reserve for issuance all additional Tencor Shares or other securities which may be issuable pursuant to Section 9(a) upon exercise of the Option, all of which, upon their issuance and delivery in accordance with the terms of this Agreement, will be validly issued, fully paid and nonassessable; (e) upon delivery of the Tencor Shares and any other securities to KLA upon exercise of the Option, KLA will acquire such Tencor Shares or other securities free and clear of all material claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, excluding those imposed by KLA; (f) the execution and delivery of this Agreement by Tencor do not, and the performance of this Agreement by Tencor will not, (i) violate the Articles of Incorporation or By-Laws of Tencor, (ii) conflict with or violate any order applicable to Tencor or any of its subsidiaries or by which they or any of their property is bound or affected or (iii) result in any breach of or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give rise to any right of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the property or assets of Tencor or any of its subsidiaries pursuant to, any contract or agreement to which Tencor or any of its subsidiaries is a party or by which Tencor or any of its subsidiaries or any of their property is bound or affected, except, in the case of clauses (ii) and (iii) above, for violations, conflicts, breaches, defaults, rights of termination, amendment, acceleration or cancellation, liens or encumbrances which would not, individually or in the aggregate, have a Material Adverse Effect on Tencor; (g) the execution and delivery of this Agreement by Tencor does not, and the performance of this Agreement by Tencor will not, require any consent, approval, authorization or permit of, or filing with, or notification to, any Governmental Entity except pursuant to the HSR Act; and (h) any KLA Shares acquired pursuant to this Agreement will not be acquired by

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Tencor with a view to the public distribution thereof and Tencor will not sell or otherwise dispose of such shares in violation of applicable law or this Agreement.

6. REPRESENTATIONS AND WARRANTIES OF KLA

KLA represents and warrants to Tencor that (a) KLA is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and has the corporate power and authority to enter into this Agreement and to carry out its obligations hereunder; (b) the execution and delivery of this Agreement by KLA and the consummation by KLA of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of KLA and no other corporate proceedings on the part of KLA are necessary to authorize this Agreement or any of the transactions contemplated hereby; (c) this Agreement has been duly executed and delivered by KLA and constitutes a legal, valid and binding obligation of KLA and, assuming this Agreement constitutes a legal, valid and binding obligation of Tencor, is enforceable against KLA in accordance with its terms, except as enforceability

may be limited by bankruptcy and other laws affecting the rights and remedies of creditors generally and general principles of equity; (d) except for any filings required under the HSR Act, KLA has taken (or will in a timely manner take) all necessary corporate and other action to authorize and reserve for issuance and to permit it to issue upon exercise of the Option and will take all necessary corporate or other action to authorize and reserve for issuance all additional KLA Shares or other securities which may be issuable pursuant to Section 9(b) upon exercise of the Option, all of which, upon their issuance and delivery in accordance with the terms of this Agreement, will be validly issued, fully paid and nonassessable; (e) upon delivery of KLA Shares to Tencor in consideration of any acquisition of Tencor Shares pursuant hereto, Tencor will acquire such KLA Shares free and clear of all material claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, excluding those imposed by Tencor; (f) the execution and delivery of this Agreement by KLA do not, and the performance of this Agreement by KLA will not, (i) violate the Certificate of Incorporation or By-Laws of KLA, (ii) conflict with or violate any order applicable to KLA or any of its subsidiaries or by which they or any of their property is bound or affected or (iii) result in any breach of or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give rise to any right of termination, amendment, acceleration or cancellation of, or result in the creation of a lien or encumbrance on any of the property or assets of KLA or any of its subsidiaries pursuant to, any contract or agreement to which KLA or any of its subsidiaries is a party or by which KLA or any of its subsidiaries or any of their property is bound or affected, except, in the case of clauses (ii) and (iii) above, for violations, conflicts, breaches, defaults, rights of termination, amendment, acceleration or cancellation, liens or encumbrances which would not, individually or in the aggregate, have a Material Adverse Effect on KLA; (g) the execution and delivery of this Agreement by KLA does not, and the performance of this Agreement by KLA will not, require any consent, approval, authorization or permit of, or filing with or notification to, any Governmental Entity except pursuant to the HSR Act; and (h) any Tencor Shares acquired upon exercise of the Option will not be acquired by KLA with a view to the public distribution thereof and KLA will not sell or otherwise dispose of such shares in violation of applicable law or this Agreement.

7. CERTAIN RIGHTS

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(a) KLA PUT. At the request of and upon notice by KLA (the "PUT NOTICE"), at any time during the period during which the Option is exercisable pursuant to Section 2 (the "PURCHASE PERIOD") or in accordance with subparagraph (iv) below, Tencor (or any successor entity thereof) shall purchase from KLA the Option, to the extent not previously exercised, at the price set forth in subparagraph (i) below (as limited by subparagraph (iii) below), and the Option Shares, if any, acquired by KLA pursuant thereto, at the price set forth in subparagraph (ii) below (as limited by subparagraph (iii) below):

(i) The difference between the "MARKET/TENDER OFFER PRICE" for Tencor Shares as of the date KLA gives notice of its intent to exercise its rights under this Section 7(a) (defined as the higher of (A) the highest price per share offered as of such date pursuant to any Acquisition Proposal which was made prior to such date and not terminated or withdrawn as of such date and (B) the highest closing sale price of Tencor Shares on the Nasdaq National Market during the twenty (20) trading days ending on the trading day immediately preceding such date) and the Exercise Price, multiplied by the number of Tencor Shares purchasable pursuant to the Option, but only if the Market/Tender Offer Price is greater than the Exercise Price. For purposes of determining the highest price offered pursuant to any Acquisition Proposal which involves consideration other than cash, the value of such consideration shall be equal to the higher of (x) if securities of the same class of the proponent as such consideration are traded on any national securities exchange or by any registered securities association, a value based on the closing sale price or asked price for such securities on their principal trading market on such date and (y) the value ascribed to such consideration by the proponent of such Acquisition Proposal, or if no such value is ascribed, a value determined in good faith by the Board of Directors of Tencor.

(ii) The Exercise Price paid by KLA for Tencor Shares acquired pursuant to the Option plus the difference between the Market/Tender Offer Price and such Exercise Price (but only if the Market/Tender Offer Price is greater than the Exercise Price) multiplied by the number of Tencor Shares so purchased. If KLA issued KLA Shares in connection with any exercise of the Option, the Exercise Price in connection with such exercise shall be calculated as set forth in the last sentence of Section 4 as if KLA had exercised its right to pay cash instead of issuing KLA Shares.

(iii) Notwithstanding subparagraphs (i) and (ii) above, pursuant to this Section 7 Tencor shall not be required to pay KLA in excess of an aggregate of (x) \$40,000,000 plus (y) the Exercise Price paid by KLA for Tencor Shares acquired pursuant to the Option minus (z) any amounts paid to KLA by Tencor pursuant to Section 7.3(b) of the Merger Agreement.

(iv) Notwithstanding the foregoing, upon the commencement of a tender or exchange offer for 25% or more of any class of Tencor's capital stock (and/or during any time which such a tender or exchange offer remains open), KLA may deliver to Tencor a Put Notice (a "CONDITIONAL PUT NOTICE") specifying that it wishes to

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exercise and close immediately prior to the consummation of such tender or exchange offer, a sale to Tencor pursuant to this Section 7(a) of the Option, to the extent not previously exercised, and the Option Shares, if any, acquired by KLA pursuant thereto. Unless the Conditional Put Notice is withdrawn by KLA, the Closing of any such sale specified in a Conditional Put Notice shall take place immediately prior to the consummation of such tender or exchange offer. In the event that such tender or exchange offer is not consummated prior to termination of the Option, such Conditional Put Notice shall be void and of no further force and effect.

(b) REDELIVERY OF KLA SHARES. If KLA has acquired Tencor Shares pursuant to exercise of the Option by the issuance and delivery of KLA Shares, then Tencor shall, if so requested by KLA, in fulfillment of its obligation pursuant to the first clause of Section 7(a) (ii) with respect to the Exercise Price paid in the form of KLA Shares only, redeliver the certificate(s) for such KLA Shares to KLA, free and clear of all claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, other than those imposed by KLA.

(c) PAYMENT AND REDELIVERY OF OPTION OR SHARES. In the event KLA exercises its rights under Sections 7(a) or (b), Tencor shall, within ten business days after KLA delivers notice pursuant to Section 7(a), pay the required amount to KLA in immediately available funds (and KLA Shares, if applicable) and KLA shall surrender to Tencor the Option and the certificates evidencing the Tencor Shares purchased by KLA pursuant thereto, and KLA shall represent and warrant that such shares are then free and clear of all claims, liens, charges, encumbrances and security interests of any kind or nature whatsoever, other than those imposed by Tencor.

(d) TENCOR CALL. If KLA has acquired Option Shares pursuant to exercise of the Option (the date of any Closing relating to any such exercise herein referred to as an "EXERCISE DATE") and no Acquisition Proposal with respect to Tencor has been consummated at any time after the date of this Agreement and prior to the date one year following such Exercise Date (nor has Tencor entered into a definitive agreement or letter of intent with respect to such an Acquisition Proposal which agreement or letter of intent remains in effect at the end of such year), then, at any time after the date one year following such Exercise Date and prior to the date eighteen months following such Exercise Date, Tencor may require KLA, upon delivery to KLA of written notice, to sell to Tencor any Tencor Shares held by KLA as of the day that is ten business days after the date of such notice, up to a number of shares equal to the number of Option Shares acquired by KLA pursuant to exercise of the Option in connection with such Exercise Date. The per share purchase price for such sale (the "TENCOR CALL PRICE") shall be equal to the Exercise Price less any dividends paid on the Tencor Shares to be purchased by Tencor pursuant to this Section 7(d). The closing of any sale of Tencor Shares pursuant to this Section 7(d) shall take place at the principal offices of Tencor at a time and on a date designated by Tencor in the aforementioned notice to KLA, which date shall be no more than 20 and no less than 12 business days from the date of such notice. The Tencor Call Price shall be paid in immediately available funds, provided that, in the event KLA has acquired Option Shares pursuant to exercise of the Option by issuance and delivery of KLA Shares, at the option of Tencor, the Tencor Call Price for part or all of any purchase of Tencor Shares pursuant to this Section 7(d), up to a number of such shares equal to the number of Option Shares acquired by

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KLA by issuance and delivery of KLA Shares, shall be paid by delivery of a number of KLA Shares equal to the Tencor Call Price divided by the closing sale

price of KLA Shares on the Nasdaq National Market for the trading day immediately preceding the date of the Exercise Date on which the Option Shares to be purchased by Tencor pursuant to this Section 7(d) were originally issued to KLA.

(e) RESTRICTIONS ON TRANSFER. Until the expiration of the Purchase Period, Tencor shall not sell, transfer or otherwise dispose of any KLA Shares acquired by it pursuant to this Agreement.

8. REGISTRATION RIGHTS

(a) Following the termination of the Merger Agreement, each party hereto (a "HOLDER") may by written notice (a "REGISTRATION NOTICE") to the other party (the "REGISTRANT") request the Registrant to register under the Securities Act all or any part of the shares acquired by such Holder pursuant to this Agreement (the "REGISTRABLE SECURITIES") in order to permit the sale or other disposition of such shares pursuant to a bona fide firm commitment underwritten public offering in which the Holder and the underwriters shall effect as wide a distribution of such Registrable Securities as is reasonably practicable and shall use reasonable efforts to prevent any person or group from purchasing through such offering shares representing more than 1% of the outstanding shares of Common Stock of the Registrant on a fully diluted basis (a "PERMITTED OFFERING"); provided, however, that any such Registration Notice must relate to a number of shares equal to at least 2% of the outstanding shares of Common Stock of the Registrant on a fully diluted basis and that any rights to require registration hereunder shall terminate with respect to any shares that may be sold pursuant to Rule 144(k) under the Securities Act. The Registration Notice shall include a certificate executed by the Holder and its proposed managing underwriter, which underwriter shall be an investment banking firm of nationally recognized standing (the "MANAGER"), stating that (i) the Holder and the Manager have a good faith intention to commence a Permitted Offering and (ii) the Manager in good faith believes that, based on the then prevailing market conditions, it will be able to sell the Registrable Securities at a per share price equal to at least 80% of the per share average of the closing sale prices of the Registrant's Common Stock on the Nasdaq National Market for the twenty trading days immediately preceding the date of the Registration Notice. The Registrant shall thereupon have the option exercisable by written notice delivered to the Holder within ten business days after the receipt of the Registration Notice, irrevocably to agree to purchase all or any part of the Registrable Securities for cash at a price (the "OPTION PRICE" equal to the product of (i) the number of Registrable Securities so purchased and (ii) the per share average of the closing sale prices of the Registrant's Common Stock on the Nasdaq National Market for the twenty trading days immediately preceding the date of the Registration Notice. Any such purchase of Registrable Securities by the Registrant hereunder shall take place at a closing to be held at the principle executive offices of the Registrant or its counsel at any reasonable date and time designated by the Registrant in such notice within 10 business days after delivery of such notice. The payment for the shares to be purchased shall be made by delivery at the time of such closing of the Option Price in immediately available funds.

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(b) If the Registrant does not elect to exercise its option to purchase pursuant to Section 8(a) with respect to all Registrable Securities, the Registrant shall use all reasonable efforts to effect, as promptly as practicable, the registration under the Securities Act of the unpurchased Registrable Securities requested to be registered in the Registration Notice; provided, however, that (i) neither party shall be entitled to more than an aggregate of two effective registration statements hereunder and (ii) the Registrant will not be required to file any such registration statement during any period of time (not to exceed 40 days after a Registration Notice in the case of clause (A) below or 90 days after a Registration Notice in the case of clauses (B) and (C) below) when (A) the Registrant is in possession of material non-public information which it reasonably believes would be detrimental to be disclosed at such time and, in the written opinion of counsel to such Registrant, such information would have to be disclosed if a registration statement were filed at that time; (B) such Registrant is required under the Securities Act to include audited financial statements for any period in such registration statement and such financial statements are not yet available for inclusion in such registration statement; or (C) such Registrant determines, in its reasonable judgment, that such registration would interfere with any financing, acquisition or other material transaction involving the Registrant. If consummation of the sale of any Registrable Securities pursuant to a registration hereunder does not occur within 180 days after the filing with the SEC of the initial registration statement therefor, the provisions of this Section 8 shall again be applicable to any proposed registration, it being understood that neither party shall be entitled to more than an aggregate of two effective registration statements hereunder. The Registrant shall use all reasonable efforts to cause any Registrable Securities registered pursuant to this Section 8 to be qualified for sale under the securities or blue sky laws of

such jurisdictions as the Holder may reasonably request and shall continue such registration or qualification in effect in such jurisdictions; provided, however, that the Registrant shall not be required to qualify to do business in, or consent to general service of process in, any jurisdiction by reason of this provision.

(c) The registration rights set forth in this Section 8 are subject to the condition that the Holder shall provide the Registrant with such information with respect to such Holder's Registrable Securities, the plan for distribution thereof, and such other information with respect to such Holder as, in the reasonable judgment of counsel for the Registrant, is necessary to enable the Registrant to include in a registration statement all material facts required to be disclosed with respect to a registration thereunder.

(d) A registration effected under this Section 8 shall be effected at the Registrant's expense, except for underwriting discounts and commissions and the fees and expenses of counsel to the Holder, and the Registrant shall provide to the underwriters such documentation (including certificates, opinions of counsel and "comfort" letters from auditors) as are customary in connection with underwritten public offerings and as such underwriters may reasonably require. In connection with any registration, the Holder and the Registrant agree to enter into an underwriting agreement reasonably acceptable to each such party, in form and substance customary for transactions of this type with the underwriters participating in such offering.

(e) Indemnification

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(i) The Registrant will indemnify the Holder, each of its directors and officers and each person who controls the Holder within the meaning of Section 15 of the Securities Act, and each underwriter of the Registrant's securities, with respect to any registration, qualification or compliance which has been effected pursuant to this Agreement, against all expenses, claims, losses, damages or liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus, offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation by the Registrant of any rule or regulation promulgated under the Securities Act applicable to the Registrant in connection with any such registration, qualification or compliance, and the Registrant will reimburse the Holder and, each of its directors and officers and each person who controls the Holder within the meaning of Section 15 of the Securities Act, and each underwriter for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, provided that the Registrant will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to the Registrant by such Holder or director or officer or controlling person or underwriter seeking indemnification.

(ii) The Holder will indemnify the Registrant, each of its directors and officers and each underwriter of the Registrant's securities covered by such registration statement and each person who controls the Registrant within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or any violation by the Holder of any rule or regulation promulgated under the Securities Act applicable to the Holder in connection with any such registration, qualification or compliance, and will reimburse the Registrant, such directors, officers or control persons or underwriters for any legal or any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Registrant by the Holder for use therein, provided that in no event shall any indemnity under this Section 8(e) exceed the gross proceeds of the offering received by the Holder.

(iii) Each party entitled to indemnification under this Section 8(e) (the "INDEMNIFIED PARTY") shall give notice to the party required to provide indemnification (the "INDEMNIFYING PARTY") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such party's expense; provided, however, that the Indemnifying Party shall pay such expense if representation of the Indemnified Party by counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between the Indemnified Party and any other party represented by such counsel in such proceeding, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 8(e) unless the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action. No Indemnifying Party, in the defense of any such claim or litigation shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation. No Indemnifying Party shall be required to indemnify any Indemnified Party with respect to any settlement entered into without such Indemnifying Party's prior consent (which shall not be unreasonably withheld).

9. ADJUSTMENT UPON CHANGES IN CAPITALIZATION; RIGHTS PLANS

(a) In the event of any change in the Tencor Shares by reason of stock dividends, stock splits, reverse stock splits, mergers (other than the Merger), recapitalizations, combinations, exchanges of shares and the like, the type and number of shares or securities subject to the Option, the Exercise Ratio and the Exercise Price shall be adjusted appropriately, and proper provision shall be made in the agreements governing such transaction so that KLA shall receive, upon exercise of the Option, the number and class of shares or other securities or property that KLA would have received in respect of the Tencor Shares if the Option had been exercised immediately prior to such event or the record date therefor, as applicable.

(b) At any time during which the Option is exercisable, and at any time after the Option is exercised (in whole or in part, if at all), Tencor shall not adopt a shareholders rights plan (a so-called "poison pill"), and KLA shall not amend the KLA Rights Plan or adopt a new shareholders rights plan, that contains provisions for the distribution of rights thereunder as a result of the other party being the beneficial owner of shares of the first party by virtue of the Option being exercisable or having been exercised (or as a result of such other party beneficially owning shares issuable in respect of any Option Shares). It is understood, however, that following termination (if any) of the Merger Agreement, a party may adopt (or in the case of KLA, adopt and/or amend) a shareholders rights plan, that contains provisions for the distribution of rights thereunder as a result of the other

party being the beneficial owner of shares of the first party in addition to those that may be beneficially owned by virtue of the Option being exercisable or having been exercised (or as a result of such other party beneficially owning shares issuable in respect of any Option Shares).

10. RESTRICTIVE LEGENDS

Each certificate representing Option Shares issued to KLA hereunder, and each certificate representing KLA Shares delivered to Tencor at a Closing, shall include a legend in substantially the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY BE REOFFERED OR SOLD ONLY IF SO REGISTERED OR IF AN EXEMPTION FROM SUCH REGISTRATION IS AVAILABLE. SUCH SECURITIES ARE ALSO SUBJECT TO ADDITIONAL RESTRICTIONS ON TRANSFER AS SET FORTH IN THE STOCK OPTION AGREEMENT DATED AS OF JANUARY 14, 1997, A COPY OF WHICH MAY BE OBTAINED FROM THE ISSUER.

11. LISTING AND HSR FILING

Tencor, upon the request of KLA, shall promptly file an application to list the Tencor Shares to be acquired upon exercise of the Option for quotation on the Nasdaq National Market and shall use its best efforts to obtain approval of such listing as soon as practicable. KLA, upon the request of Tencor, shall promptly file an application to list the KLA Shares issued and delivered to Tencor pursuant to Section 4 for quotation on the Nasdaq National Market and shall use its best efforts to obtain approval of such listing as soon as practicable. Promptly after the date hereof, each of the parties hereto shall promptly file with the Federal Trade Commission and the Antitrust Division of the United States Department of Justice all required premerger notification and report forms and other documents and exhibits required to be filed under the HSR Act to permit the acquisition of the Tencor Shares subject to the Option at the earliest possible date.

12. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. Nothing contained in this Agreement, express or implied, is intended to confer upon any person other than the parties hereto and their respective successors and permitted assigns any rights or remedies of any nature whatsoever by reason of this Agreement. Any shares sold by a party in compliance with the provisions of Section 8 shall, upon consummation of such sale, be free of the restrictions imposed with respect to such shares by this Agreement and any transferee of such shares shall not be entitled to the rights of such party. Certificates representing shares sold in a registered public offering pursuant to Section 8 shall not be required to bear the legend set forth in Section 10.

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13. SPECIFIC PERFORMANCE

The parties recognize and agree that if for any reason any of the provisions of this Agreement are not performed in accordance with their specific terms or are otherwise breached, immediate and irreparable harm or injury would be caused for which money damages would not be an adequate remedy. Accordingly, each party agrees that in addition to other remedies the other party shall be entitled to an injunction restraining any violation or threatened violation of the provisions of this Agreement. In the event that any action shall be brought in equity to enforce the provisions of the Agreement, neither party will allege, and each party hereby waives the defense, that there is an adequate remedy at law.

14. ENTIRE AGREEMENT

This Agreement and the Merger Agreement (including the appendices thereto) constitute the entire agreement between the parties with respect to the subject matter hereof and supersede all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof.

15. FURTHER ASSURANCES

Each party will execute and deliver all such further documents and instruments and take all such further action as may be necessary in order to consummate the transactions contemplated hereby.

16. VALIDITY

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of the other provisions of this Agreement, which shall remain in full force and effect. In the event any Governmental Entity of competent jurisdiction holds any provision of this Agreement to be null, void or unenforceable, the parties hereto shall negotiate in good faith and shall execute and deliver an amendment to this Agreement in order, as nearly as possible, to effectuate, to the extent permitted by law, the intent of the parties hereto with respect to such provision.

17. NOTICES

All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or by commercial delivery service, or sent via telecopy (receipt confirmed) to the parties at the following addresses or telecopy numbers (or at such other address or telecopy numbers for a party as shall be specified by like notice):

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(1) if to Tencor, to:

Tencor Instruments
One Technology Drive
Milpitas, California 95035
Attention: President
Telephone No.: (408) 970-9500
Telecopy No.: (408) 988-6420

with a copy to:

Heller, Ehrman, White & McAuliffe
525 University Avenue
Palo Alto, CA 94301
Attention: Sarah A. O'Dowd, Esq.
Telephone No.: 415-324-7045
Telecopy No.: 415-324-0638

(2) if to KLA, to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: Chief Executive Officer
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

with a copy to:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055
Attention: General Counsel
Telephone No.: (408) 434-4200
Telecopy No.: (408) 468-4266

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with another copy to:

Wilson, Sonsini, Goodrich & Rosati, P.C.
650 Page Mill Road
Palo Alto, California 94304-1050
Attention: Larry W. Sonsini, Esq.
Telephone No.: (415) 493-9300
Telecopy No.: (415) 493-6811

18. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of California applicable to agreements made and to be performed entirely within such State.

19. COUNTERPARTS

This Agreement may be executed in two counterparts, each of which shall be deemed to be an original, but both of which, taken together, shall constitute one and the same instrument.

20. EXPENSES

Except as otherwise expressly provided herein or in the Merger Agreement, all costs and expenses incurred in connection with the transactions contemplated by this Agreement shall be paid by the party incurring such expenses.

21. AMENDMENTS; WAIVER

This Agreement may be amended by the parties hereto and the terms and conditions hereof may be waived only by an instrument in writing signed on behalf of each of the parties hereto, or, in the case of a waiver, by an instrument signed on behalf of the party waiving compliance.

22. ASSIGNMENT

Neither of the parties hereto may sell, transfer, assign or otherwise dispose of any of its rights or obligations under this Agreement or the Option

created hereunder to any other person, without the express written consent of the other party, except that the rights and obligations hereunder shall inure to the benefit of and be binding upon any successor of a party hereto.

[Remainder of Page Intentionally Blank]

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized officers as of the date first above written.

TENCOR INSTRUMENTS

By: /s/ Jon D. Tompkins

Name: Jon D. Tompkins
Title: President and Chief Executive Officer

KLA INSTRUMENTS CORPORATION

By: /s/ Kenneth Levy

Name: Kenneth Levy
Title: Chief Executive Officer

STOCK OPTION AGREEMENT
(TENCOR option to KLA)