

EACH REPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER 0	
	10	SHARED DISPOSITIVE POWER 0	

11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	1,033,059		

12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*		[]

13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)		
	34.5%		

14	TYPE OF REPORTING PERSON*		
	CO		

*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP NO. 746 934 108 SCHEDULE 13D PAGE 3 OF 8 PAGES

Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by KLA-Tencor Corporation that it is the beneficial owner of any of the Common Stock of QC Optics, Inc. referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Act"), or for any other purpose, and such beneficial ownership is expressly disclaimed.

ITEM 1. SECURITY AND ISSUER

This statement (the "Statement") relates to the common stock, par value \$.01 per share (the "Common Stock"), of QC Optics, Inc., a Delaware corporation (the "Issuer"). The principal executive office of the Issuer is located at 46 Jonspin Road, Wilmington, Massachusetts 01887.

ITEM 2. IDENTITY AND BACKGROUND

- (a) The name of the person filing this Statement is KLA-Tencor Corporation, a Delaware corporation ("KLA-Tencor").
- (b) The address of the principal office and principal business of KLA-Tencor is 160 Rio Robles, San Jose, California 95134.
- (c) The principal business of KLA-Tencor is providing process control and yield management solutions for the semiconductor and related microelectronics industries. Set forth in Schedule A is the name and present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted, of each of KLA-Tencor's executive officers and directors, as of the date hereof.
- (d) During the past five years, neither KLA-Tencor, nor to KLA-Tencor's knowledge, any person named in Schedule A to this Statement, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the past five years, neither KLA-Tencor, nor to KLA-Tencor's knowledge, any person named in Schedule A to this Statement, was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person was or is subject to any judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or State securities laws or finding any violation with respect to such laws.
- (f) Not applicable.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

Pursuant to an Agreement and Plan of Merger, dated as of August 31, 2001 (the "Merger Agreement") by and among KLA-Tencor, Katmandu Acquisition Corp. ("Merger Sub") and the Issuer, and subject to the conditions set forth therein (including approval by the stockholders of the Issuer), Merger Sub will be merged with and into the Issuer (the "Merger"), with each share of Issuer Common Stock being converted into the right to receive \$1.00. The Merger is

subject to the approval of the Merger Agreement and the Merger by the Issuer's stockholders and the satisfaction or waiver of certain other conditions as more fully described in the Merger Agreement. The foregoing summary of the Merger is qualified in its entirety by reference to the Merger Agreement included as Exhibit 1 to this Statement and incorporated herein in its entirety by reference. The source of funds to be used by KLA-Tencor to acquire the Issuer's Common Stock is the working capital of KLA-Tencor.

ITEM 4. PURPOSE OF TRANSACTION

- (a)-(b) As described in Item 3 above, this Statement relates to the Merger of Merger Sub, a wholly owned subsidiary of KLA-Tencor, with and into the Issuer in a statutory merger pursuant to the Delaware General Corporation Law. At the effective time of the Merger, the separate existence of Merger Sub will cease and the Issuer will continue as the surviving corporation and as a wholly owned subsidiary of KLA-Tencor (the "Surviving Corporation"). Holders of outstanding Issuer Common Stock will receive, in exchange for each share of Issuer Common Stock held by them,

CUSIP NO. 746 934 108

SCHEDULE 13D

PAGE 4 OF 8 PAGES

the right to receive \$1.00 subject to the surrender of a valid stock certificate or affidavit of loss in accordance with the terms of the Merger Agreement.

As an inducement to KLA-Tencor to enter into the Merger Agreement, certain stockholders of the Issuer (collectively, the "Voting Agreement Stockholders") have entered into a Stockholder Voting Agreement, dated as of August 31, 2001 (the "Voting Agreement"), with KLA-Tencor and have, by executing the Voting Agreement, irrevocably appointed KLA-Tencor (or any nominee of KLA-Tencor) as his, hers or its lawful attorney and proxy. Such proxy gives KLA-Tencor the limited right to vote each of the 1,033,059 shares of Issuer Common Stock beneficially and collectively owned by the Voting Agreement Stockholders in all matters related to the Merger. The shared voting power with the Issuer relates to 1,033,059 shares of Issuer Common Stock (the "Shares"). The Voting Agreement Stockholders and the number of shares beneficially owned by each of them is set forth on Schedule B hereto which is hereby incorporated herein by reference. The foregoing summary of the Voting Agreement is qualified in its entirety by reference to the form of Voting Agreement included as Exhibit 2 to this Statement and incorporated herein in its entirety by reference.

In exercising its right to vote the Shares as lawful attorney and proxy of the Voting Agreement Stockholders, KLA-Tencor (or any nominee of KLA-Tencor) will be limited, at every Issuer stockholders meeting and every written consent in lieu of such meeting to vote the Shares in favor of approval of the Merger and the Merger Agreement. The Voting Agreement Stockholders may vote the Shares on all other matters. The Voting Agreement terminates upon the earlier to occur of (i) such date and time as the Merger shall become effective in accordance with the terms and provisions of the Merger Agreement and (ii) the date of termination of the Merger Agreement.

- (c) Other than as a result of the Merger described in Item 3 above, not applicable.
- (d) Other than as a result of the Merger described in Item 3 above, not applicable. Upon consummation of the Merger the directors of the Surviving Corporation shall be Stuart Nichols and Jeffrey Hall. The officers of the Surviving Corporation shall be the initial officers of the Merger Sub, until their successors are duly elected, appointed or qualified.
- (e) Other than as a result of the Merger described in Item 3 above, not applicable.
- (f) Other than as a result of the Merger described in Item 3 above, not applicable.
- (g) Upon consummation of the Merger, the Certificate of Incorporation of Merger Sub, as in effect immediately prior to the Merger, shall be the Certificate of Incorporation of the Surviving Corporation except that the same shall be amended to reflect the name of the Issuer and as so amended shall be the Certificate of Incorporation of the Surviving Corporation until thereafter amended as provided by Delaware General

Corporate Law and such Certificate of Incorporation. Upon consummation of the Merger, the Bylaws of Merger Sub, as in effect immediately prior to the Merger, shall be the Bylaws of the Surviving Corporation until thereafter amended.

- (h)-(i) If the Merger is consummated as planned, the Issuer Common Stock will be deregistered under the Act and delisted from The American Stock Exchange.
- (j) Other than as described above, KLA-Tencor has no plan or proposals which relate to, or may result in, any of the matters listed in Items 4(a)-(j) of Schedule 13D (although KLA-Tencor reserves the right to develop such plans).

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

- (a)-(b) As a result of the Voting Agreement, KLA-Tencor may be deemed to be the beneficial owner of 1,033,059 shares of Issuer Common Stock pursuant to Rule 13d-3. Such Issuer Common Stock constitutes approximately 34.5% of the issued and outstanding shares of Issuer Common Stock.

KLA-Tencor has shared power to vote all of the Shares for the limited purposes described above. KLA-Tencor does not have the sole power to vote or to direct the vote or to dispose or to direct the disposition of any shares of Issuer Common Stock. KLA-Tencor (i) is not entitled to any rights as a stockholder of the Issuer as to the Shares covered

CUSIP NO. 746 934 108

SCHEDULE 13D

PAGE 5 OF 8 PAGES

by the Voting Agreement and (ii) disclaims any beneficial ownership of the shares of Issuer Common stock which are covered by the Voting Agreement. To the best of KLA-Tencor's knowledge, no shares of Issuer Common Stock are beneficially owned by any of the persons named in Schedule A.

- (c) Neither KLA-Tencor, nor to the knowledge of KLA-Tencor, any person named in Schedule A, has affected any transaction in the Issuer Common Stock within the past 60 days.
- (d) Not applicable.
- (e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

As an inducement to KLA-Tencor to enter into the Merger Agreement, KLA-Tencor and Eric T. Chase, the President of the Issuer, have entered into a consulting agreement, dated as of August 31, 2001 (the "Consulting Agreement"), pursuant to which Mr. Chase has agreed to perform certain consulting services for KLA-Tencor after the effective date of the Merger. Other than the Merger Agreement, the Voting Agreement, and the Consulting Agreement, to the knowledge of KLA-Tencor, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies. The foregoing discussion of the Consulting Agreement is qualified in its entirety by reference to the Consulting Agreement included as Exhibit 3 to this Statement and incorporated herein in its entirety by reference.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

The following documents are filed as exhibits:

1. Agreement and Plan of Merger, dated as of August 31, 2001, by and among KLA-Tencor Corporation, Katmandu Acquisition Corp. and QC Optics, Inc.
2. Stockholders Voting Agreement, dated as of August 31, 2001, by and among KLA-Tencor Corporation, QC Optics Voting Trust, Eric T. Chase and John R. Freeman.
3. Consulting Agreement, dated as of August 31, 2001, by and among KLA-Tencor Corporation and Eric T. Chase.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, the undersigned certifies that the information set forth in this Statement is true, complete and correct.

Dated: September 7, 2001

KLA-TENCOR CORPORATION

By: /s/ Stuart J. Nichols

Stuart J. Nichols
Vice President & General Counsel

CUSIP NO. 746 934 108

SCHEDULE 13D

PAGE 6 OF 8 PAGES

SCHEDULE A

DIRECTORS AND EXECUTIVE OFFICERS OF KLA-TENCOR CORPORATION

<TABLE>
<CAPTION>

NAME ----	TITLE, PRESENT PRINCIPAL OCCUPATION AND NAME OF EMPLOYER -----
<S> Kenneth Levy	<C> Chairman of the Board of KLA-Tencor Corporation
Kenneth L. Schroeder	President and Chief Executive Officer of KLA-Tencor Corporation
Edward W. Barnholt	Director of KLA-Tencor Corporation and President and Chief Executive Officer of Agilent Technologies, Inc.
H. Raymond Bingham	Director of KLA-Tencor Corporation and President and Chief Executive Officer of Cadence Design Systems, Inc.
Robert T. Bond	Director of KLA-Tencor Corporation
Richard J. Elkus, Jr.	Director of KLA-Tencor Corporation
Dean O. Morton	Director of KLA-Tencor Corporation
Jon D. Tompkins	Director of KLA-Tencor Corporation
Lida Urbanek	Director of KLA-Tencor Corporation
Gary E. Dickerson	Chief Operating Officer of KLA-Tencor Corporation
Frank L. Brienzo	Senior Vice President, Data Storage Business of KLA-Tencor Corporation
Dennis J. Fortino	Executive Vice President, Optical Surface Inspection and Measurement Group of KLA-Tencor Corporation
Samuel A. Harrell	Senior Vice President, Strategic Business Development of KLA-Tencor Corporation
John H. Kispert	Executive Vice President and Chief Financial Officer of KLA-Tencor Corporation
Maureen Lamb	Vice President, Finance and Accounting of KLA-Tencor Corporation
Peter Campagana	Vice President and Treasurer of KLA-Tencor Corporation
Stuart J. Nichols	Vice President, General Counsel of KLA-Tencor Corporation
Neil Richardson	Executive Vice President, E-Beam Inspection and Measurement Group of KLA-Tencor Corporation
Richard P. Wallace	Executive Vice President, Wafer Inspection Group of KLA-Tencor Corporation
Robert Rubino	Chief Technical Officer, Software of KLA-Tencor Corporation
Bin-Ming Ben Tsai	Chief Technical Officer, Systems of KLA-Tencor Corporation

CUSIP NO. 746 934 108

SCHEDULE 13D

PAGE 7 OF 8 PAGES

SCHEDULE B

VOTING AGREEMENT STOCKHOLDERS

STOCKHOLDER	SHARES BENEFICIALLY OWNED
Eric T. Chase, in his capacity as Trustee of the QC Optics Voting Trust u/d/t dated as of October 27, 1995 c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	1,032,859 shares of Common Stock* *Beneficially owned as follows: Eric T. Chase - 634,517 shares; Jay L. Ormsby - 162,599 shares; John R. Freeman - 78,581 shares; Albert E. Tobey - 78,581 shares; and Abdu Boudour - 78,581 shares.
Eric T. Chase, in his individual capacity c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	100 shares of Common Stock
John R. Freeman, in his individual capacity c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	100 shares of Common Stock

CUSIP NO. 746 934 108

SCHEDULE 13D

PAGE 8 OF 8 PAGES

EXHIBIT INDEX

1. Agreement and Plan of Merger, dated as of August 31, 2001, by and among KLA-Tencor Corporation, Katmandu Acquisition Corp. and QC Optics, Inc.
2. Stockholders Voting Agreement, dated as of August 31, 2001, by and among KLA-Tencor Corporation, QC Optics Voting Trust, Eric T. Chase and John R. Freeman.
3. Consulting Agreement, dated as of August 31, 2001, by and among KLA-Tencor Corporation and Eric T. Chase.

AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT, dated as of the 31st day of August, 2001 (the "Agreement"), is entered into by and among KLA-Tencor Corporation, a Delaware corporation having an office at 160 Rio Robles, San Jose, California 95134 ("KLA-Tencor"), Katmandu Acquisition Corp., a Delaware corporation and a wholly-owned subsidiary of KLA-Tencor ("Merger Sub"), and QC Optics, Inc., a Delaware corporation having an office at 46 Jonspin Road, Wilmington, Massachusetts 01887 (the "Company").

WHEREAS, the Boards of Directors of Merger Sub and the Company deem it advisable and in the best interests of such corporations and their respective stockholders that Merger Sub be merged into and with the Company on the terms and conditions set forth in this Agreement, as a result of which the Company will become a wholly-owned subsidiary of KLA-Tencor; and

WHEREAS, the Board of Directors of KLA-Tencor has approved the merger;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements hereinafter set forth, and other good and valuable consideration, the receipt of which is acknowledged by each party hereto, the parties hereto agree as follows:

ARTICLE 1

THE MERGER

Section 1.1. AGREEMENT AND PLAN OF MERGER. Effective as of the Effective Date (as defined in Section 2.2 below), Merger Sub shall be merged with and into the Company (hereinafter sometimes called the "Merger") in accordance with the terms of this Agreement and the Certificate of Merger set forth in EXHIBIT A hereto (the "Certificate of Merger"). The Company shall be the corporation surviving the Merger (the "Surviving Corporation"), and the separate existence of Merger Sub shall cease as of the Merger. The Certificate of Incorporation of Merger Sub, as in effect immediately prior to the Effective Time (as defined in Section 2.2 below), shall thereafter be the Certificate of Incorporation of the Surviving Corporation; provided, however, that at the Effective Time, Article I of the Certificate of Incorporation of the Surviving Corporation shall be amended to read as follows: "The name of the Corporation is QC Optics, Inc." The Bylaws of Merger Sub, as in effect immediately prior to the Effective Time, shall thereafter be the Bylaws of the Surviving Corporation until thereafter amended as provided by law and such Bylaws (except as necessary to conform to the name change contemplated by the preceding sentence). The directors and officers of Merger Sub immediately prior to the Effective Time shall be the initial directors and officers of the Surviving Corporation, each to hold office in accordance with the Certificate of Incorporation and By-Laws of the Surviving Corporation, in each case until their respective successors are duly elected or appointed and qualified. The effect of the Merger shall be as provided by the Delaware General Corporation Law (the "DGCL").

Section 1.2. CONVERSION OF THE COMPANY'S SHARES. At the Effective Time, each share of the Company's capital stock outstanding immediately prior thereto (herein referred to as a "Company Share" and collectively as the "Company Shares") shall, by virtue of the Merger and without any action on the part of the holder thereof, but subject to this Section and to Sections 1.3, 1.4 and 1.5 below, be canceled and converted into the right to receive, in cash, an amount equal to \$1.00 per share (the "Per Share Purchase Price"), except that in no event shall the total amount payable by KLA-Tencor for the Company Shares exceed \$3,010,000 (the "Purchase Price"); provided, however that the Purchase Price shall be increased by an amount equal to the Per Share Purchase Price multiplied by the Additional Shares (as defined below) if the Company's Net Cash Position (as defined in Section 5.1(r)) is increased by the Per Share Purchase Price for each of the Additional Shares. For purposes hereof, "Additional Shares" shall mean those Company Shares issued and outstanding at the Effective Time and which were not issued and outstanding as of the date hereof, which are issued upon the exercise of any Warrants (as defined in Section 3.2(b) hereof) for cash pursuant to the terms thereof.

Section 1.3 DISSENTING SHARES. Each outstanding Company Share held by a stockholder who has demanded and perfected his or her right to an appraisal of his or her Company Shares in accordance with Section 262 of the DGCL and who has not effectively withdrawn or lost his or her right to such appraisal (the "Dissenting Shares") shall not be converted into or represent the right to receive his or her Per Share Purchase Price represented by such Company Shares pursuant to Section 1.2 above, but the holder thereof shall be entitled only to such rights as are granted by Section 262 of the DGCL.

Section 1.4. PAYMENT FOR COMPANY SHARES. KLA-Tencor shall pay the Purchase Price to State Street Bank and Trust Company (or to another bank, trust company or transfer agent as may be selected by KLA-Tencor and which shall be

reasonably acceptable to the Company (as the case may be, the "Paying Agent") at the Effective Time. Promptly (but in any event within five business days) following the Effective Date, the Paying Agent shall mail to each holder of record (each, a "Stockholder" and, collectively, the "Stockholders") of a certificate or certificates which immediately prior to the Effective Time represented outstanding Company Shares (the "Company Certificates"), other than the Company and any subsidiary of the Company, the following: (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Company Certificates shall pass, only upon delivery of the Company Certificates to the Paying Agent and shall be in such form and have such other provisions as KLA-Tencor may reasonably specify) and (ii) instructions for effecting the surrender of the Company Certificates in exchange for such holder's or person's Per Share Purchase Price. Upon surrender of a Company Certificate (or affidavit of lost, stolen or destroyed Company Certificate pursuant to Section 1.8) to the Paying Agent or to such other agent or agents as may be appointed by the Surviving Corporation, together with such letter of transmittal, duly completed and executed, and such other documents as may be reasonably required by the Paying Agent, the holder of such Company Certificate shall be entitled to receive in exchange therefor an amount equal to such holder's Per Share Purchase Price multiplied by the number of Company Shares so delivered (the "Purchase Payment"), less any amounts required to be withheld under applicable federal, state, local or foreign income tax regulations; and the Company Certificates so surrendered shall forthwith be canceled. No interest will be paid or will accrue on the cash

2

payable upon the surrender of any Company Certificate. Until surrendered as contemplated by this Section 1.4, each Company Certificate shall be deemed at any time after the Effective Time to represent only the right to receive upon such surrender, the amount of cash specified in Section 1.2; provided, however, that unless and until any such outstanding Company Certificate is so surrendered (or an affidavit of lost, stolen or destroyed Company Certificate and reasonably satisfactory indemnity bond is provided), the holder of such outstanding Company Certificate shall cease to have any rights as a Stockholder, except such rights, if any, as such holder may have with respect to Dissenting Shares, and, except as set forth above, shall not be entitled to receive any consideration from the Surviving Corporation and/or KLA-Tencor with respect to the Company Shares represented by such Company Certificate. Any funds deposited with the Paying Agent that are payable to a former Stockholder which has not submitted a claim for its Purchase Payment as described in this Section 1.4 within one year after the Effective Time shall be paid to the Surviving Corporation upon demand, and any former Stockholders who have not theretofore complied with the instructions for exchanging their Company Certificates shall thereafter look only to the Surviving Corporation for payment, it being acknowledged by KLA-Tencor, Merger Sub and the Company that the receipt of any such amounts by the Surviving Corporation shall not relieve it of its payment obligations to such former Stockholders. After the Effective Time, no further exercises of options to purchase shares of capital stock of the Company ("Company Options") shall be permitted.

Section 1.5. CERTAIN OTHER AGREEMENTS. Concurrently with the execution and delivery of this Agreement, there shall be delivered to KLA-Tencor (i) a consulting and noncompetition agreement between KLA-Tencor and Eric T. Chase ("Chase"), in the form of EXHIBIT B attached hereto, duly executed and delivered by each of KLA-Tencor and Chase (the "Consulting Agreement"); and (ii) a voting agreement among the Company, Chase, acting in his own capacity and in his capacity as Trustee of the QC Optics Voting Trust u/d/t dated as of October 27, 1995 and John R. Freeman ("Freeman") in the form of EXHIBIT C attached hereto, pursuant to which such Stockholders shall covenant and agree to vote all of the capital stock of the Company held by them in favor of the adoption of this Agreement and the Merger (the "Voting Agreement").

Section 1.6. CONVERSION OF MERGER SUB SHARES. On the Effective Date, each share of Merger Sub's common stock, \$.01 par value per share ("Common Stock"), outstanding immediately prior thereto shall, by virtue of the Merger and without any action on the part of the holder thereof, be canceled and converted into one fully paid and nonassessable common share of the Surviving Corporation, which share shall be registered in the name of and beneficially owned by KLA-Tencor.

Section 1.7. CLOSING OF STOCK TRANSFER BOOKS. The stock transfer books of the Company shall be closed at the close of business on the business day immediately preceding the Effective Date, and after the Effective Time, except for transfers of Dissenting Shares in accordance with Section 262 of the DGCL, there shall be no transfers on the Company's stock transfer books of the Company Shares which were outstanding immediately prior to the Effective Time. In the event of a transfer of ownership of Company Shares which is not registered in the Company's transfer records, the Purchase Price to be paid in the Merger as provided herein may be delivered to a transferee, if the Company Certificate representing such Company Shares is

3

presented to the Paying Agent, accompanied by all documents required to evidence and effect such transfer and by payment of any applicable stock transfer taxes.

Section 1.8. LOST CERTIFICATES. In the event any Company Certificate shall have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming such Company Certificate to be lost, stolen or destroyed, the Paying Agent or the Surviving Corporation shall issue in exchange for such lost, stolen or destroyed Company Certificate the consideration payable in exchange therefor pursuant to this Article 1. The Paying Agent or the Surviving Corporation may, as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed Company Certificate to give the Paying Agent or the Surviving Corporation a bond that is reasonably satisfactory to KLA-Tencor and the Paying Agent in such sum as it may direct as indemnity against any claim that may be made against the Surviving Corporation with respect to the Company Certificate alleged to have been lost, stolen or destroyed.

Section 1.9. ABANDONED PROPERTY. Neither KLA-Tencor nor the Surviving Corporation shall be liable to any Stockholder for any portion of the Purchase Price delivered to a public official pursuant to any applicable abandoned property, escheat or similar law.

Section 1.10. ADOPTION. This Agreement shall be submitted to the stockholders of Merger Sub and the Company in the manner provided by law. In the case of Merger Sub, KLA-Tencor, as its sole stockholder, shall vote all its shares in favor of the adoption of this Agreement and the Merger. In the case of the Company, this Agreement shall be promptly submitted to its Stockholders at a Stockholder meeting duly called and held pursuant to the DGCL. Subject to the provisions of Section 4.6(b), the Board of Directors of the Company shall recommend to the Stockholders the approval of this Agreement and the Merger.

ARTICLE 2

CLOSING

Section 2.1. TIME AND PLACE OF CLOSING. The closing under this Agreement (the "Closing") shall take place at the offices of Morse, Barnes-Brown & Pendleton, P.C., Reservoir Place, 1601 Trapelo Road, Waltham, Massachusetts 02451 at 11:00 A.M., local time, on the day of the later of (i) the approval by the Stockholders of the execution, delivery and performance by the Company of this Agreement, and (ii) satisfaction of all other conditions to Closing as set forth in Article 5 hereof, or at such other time or date as may be mutually agreeable to the parties hereto. All transactions at the Closing shall be deemed to take place simultaneously and no transaction shall be deemed to have been completed and no document or certificate shall be deemed to have been delivered until all transactions are completed and all documents delivered.

Section 2.2. CONSUMMATION OF THE MERGER. As soon as is practicable after the satisfaction or waiver of the conditions set forth in Article 5 hereof, the parties hereto will cause the Merger to be consummated by delivering to the Secretary of State of the State of Delaware the Certificate of Merger. The Merger shall become effective at the time that the Certificate of

4

Merger is filed with the Secretary of State of the State of Delaware in accordance with the relevant provisions of the DGCL (the "Effective Time"). The term "Effective Date" shall mean the date and time of the filing of the Certificate of Merger with the Secretary of State of the State of Delaware.

Section 2.3. DOCUMENTS TO BE DELIVERED BY THE COMPANY. Unless waived in writing by KLA-Tencor, at the Closing the Company shall deliver or arrange to have delivered to KLA-Tencor the following:

- (a) The secretary's certificate described in Section 5.1(b).
- (b) The governmental consents described in Section 5.1(c),
if any.
- (c) The contractual consents described in Section 5.1(d),
if any.
- (d) The corporate good standing and foreign qualification
certificates described in Section 5.1(e).
- (e) The President's certificate described in Section 5.1(f).
- (f) The legal opinion of counsel to the Company described in
Section 5.1(h).
- (g) The resignations described in Section 5.1(l).
- (h) Evidence of the termination of the consulting agreement
described in Section 5.1(m).

Section 2.4. DOCUMENTS TO BE DELIVERED BY KLA-TENCOR. Unless waived in writing by the Company, at the Closing KLA-Tencor shall deliver or arrange to have delivered to the Company the following:

- (a) The secretary's certificate described in Section 5.2(b).
- (b) The governmental consents described in Section 5.2(c),
if any.
- (c) The corporate good standing certificate described in
Section 5.2(e).
- (d) The officer's certificate described in Section 5.2(f).
- (e) The legal opinion of counsel to KLA-Tencor described in
Section 5.2(h).

Section 2.5. DOCUMENTS TO BE DELIVERED BY MERGER SUB. Unless waived in writing by the Company, at the Closing Merger Sub shall deliver or arrange to have delivered to the Company the following:

- (a) The secretary's certificate described in Section 5.2(b).
- (b) The governmental consents described in Section 5.2(c),
if any.
- (c) The corporate good standing certificate described in
Section 5.2(e).
- (d) The officer's certificate described in Section 5.2(f).
- (e) The legal opinion of counsel to Merger Sub described in
Section 5.2(h).
- (f) Evidence of payment of the Purchase Price to the Paying
Agent.

5

ARTICLE 3

REPRESENTATIONS AND WARRANTIES

Section 3.1. DEFINITIONS. The term "knowledge," when used below with respect to the Company, shall mean the actual knowledge of any of the officers or directors of the Company and the knowledge such persons would have acquired after conducting a reasonable and diligent investigation concerning the relevant matters, including without limitation inquiry of the employees of the Company identified on Schedule 3.1 of the Disclosure Schedule and any other employee or employees of the Company generally responsible for the relevant matters. The term "ordinary course of business," when used below, shall mean the ordinary course of business of the Company consistent with its past custom and practice (including with respect to frequency and amount); provided, however, that the term "ordinary course of business" shall also include actions required or specifically contemplated by this Agreement to be taken or not to be taken in connection with the Merger. The term "Material Adverse Effect" shall mean a material adverse effect on the financial condition, assets (including intangible assets), liabilities, earnings or business of the Company other than any effect resulting solely from (a) the execution or announcement of this Agreement or pendency of the transactions contemplated hereby or (b) conditions generally affecting the Company's industry or the economy as a whole.

Section 3.2. REPRESENTATIONS AND WARRANTIES PERTAINING TO THE COMPANY. The Company represents and warrants to KLA-Tencor and Merger Sub that, except as set forth on the Disclosure Schedule attached hereto as EXHIBIT D (specifically identifying the relevant subsection hereof):

(a) ORGANIZATION AND QUALIFICATION. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate and other power and authority to own, lease and operate its properties and to carry on its business as it is now being conducted, except where the failure to do so would not, individually or in the aggregate, have a Material Adverse Effect. The Certificate of Incorporation and By-Laws of the Company, as amended to date, are attached hereto as EXHIBITS E and F, respectively. Except as set forth on the Disclosure Schedule, the Company is duly qualified as a foreign corporation to do business, and is in good standing, in the Commonwealth of Massachusetts and in each jurisdiction in which the character of the properties owned,

6

operated or leased by it or the nature of its activities is such that such qualification is required by applicable law, except where the failure to be so

duly qualified and in good standing that would not, individually or in the aggregate, have a Material Adverse Effect. All such jurisdictions are listed on the Disclosure Schedule.

(b) CAPITALIZATION. The authorized capital stock of the Company consists of (i) 10,000,000 shares of Common Stock, of which, as of the date of this Agreement, 2,994,888 shares were issued and outstanding and 314,754 shares were held as treasury stock; and (ii) 1,000,000 shares of Preferred Stock, \$.01 par value per share, of which, as of the date of this Agreement, no shares were issued and outstanding. There is no other capital stock of the Company authorized for issuance. The shares described in the first sentence of this Section 3.2(b) constitute the total issued and outstanding share capital of the Company. All of such shares have been duly authorized and validly issued, are fully paid, nonassessable and free of preemptive rights. In addition, the Company has issued (i) redeemable warrants to purchase up to 1,075,000 additional shares of Common Stock (the "Redeemable Warrants") and (ii) representatives' warrants (the "Representatives' Warrants") to purchase up to 95,000 additional shares of Common Stock and up to 95,000 additional Redeemable Warrants (the "Representatives' Additional Warrants"), each to purchase an additional share of Common Stock (the Redeemable Warrants, the Representatives' Warrants and the Representatives' Additional Warrants are sometimes hereinafter referred to collectively as the "Warrants"). As of the date of this Agreement, the Redeemable Warrants have an exercise price of \$7.80 per share of Common Stock, the Representatives' Warrants have an exercise price of \$9.60 per share of Common Stock and \$0.16 per Representatives' Additional Warrant, and the Representatives' Additional Warrants have an exercise price of \$12.48 per share of Common Stock. All of the Warrants expire in accordance with their terms on October 23, 2001. The offer and sale of all securities of the Company (including the Warrants) complied with all federal, state and foreign securities laws. As of the date of this Agreement, there were outstanding 263,382 Company Options held by the persons ("Optionholders") and in the amounts listed on the Disclosure Schedule. All other options or warrants to purchase or subscribe for the capital stock of the Company have expired or have been legally terminated. Except for 314,754 shares of Common Stock repurchased from K. Andrew Bernal, no shares of capital stock of the Company have been repurchased from stockholders. No shares of the Company's capital stock are reserved for issuance, except pursuant to the exercise of the Warrants and the Company Options. Other than the Warrants and the Company Options, there are no warrants, convertible instruments or other rights, agreements or commitments, contingent or otherwise, obligating the Company to issue, sell or purchase shares of capital stock. The books and records of the Company and the Subsidiary, including without limitation the books of account, minute books, stock certificate books and security ledgers, are complete and correct and accurately reflect the conduct of the business and affairs of the Company and the Subsidiary, taken together as a whole.

(c) SUBSIDIARIES. The Company owns 100% of the voting power and equity interest in QC Optics International, Inc., a Barbados corporation (the "Subsidiary"). The Company does not own, directly or indirectly, any equity interest in any entity other than the Subsidiary. Neither the Company nor the Subsidiary is a partner or joint venturer with any other person. Neither the Company nor the Subsidiary is subject to any obligation, contingent or otherwise, to provide funds to or make an investment (in the form of a loan, capital contribution

7

or otherwise) in any entity. There are no warrants, convertible instruments or other rights, agreements or commitments, contingent or otherwise, obligating the Subsidiary to issue, sell or purchase shares of its capital stock.

(d) AUTHORITY. Subject only to Stockholder approval, the Company has the corporate power and authority to execute, deliver and perform this Agreement, to execute, deliver and file the Certificate of Merger and to consummate the transactions contemplated thereby. This Agreement has been duly and validly authorized by all necessary corporate action on the part of the Company, subject only, in respect of the consummation of the Merger, to approval by the Stockholders of the Company holding a majority of the Company Shares. The Board of Directors of the Company has (i) determined that this Agreement and the transactions contemplated hereby, including the Merger, are fair to and in the best interests of the Stockholders, (ii) approved this Agreement and the transactions contemplated hereby, including the Merger, and (iii) resolved, subject to the provisions of Section 4.6(b), to recommend approval and adoption of this Agreement and the transactions contemplated hereby, including the Merger, by the Stockholders. This Agreement has been duly and validly executed and delivered by the Company and constitutes the valid and binding obligation of the Company, enforceable against it in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally or by general principles of equity. Upon execution and filing of the Certificate of Merger, the Certificate of Merger will have been duly executed and filed by the Company. Neither the execution, delivery and performance of this Agreement, the filing of the Certificate of Merger nor the consummation of the transactions contemplated hereby will (i) conflict with or result in a violation, breach, termination or acceleration of, or default under (or would result in a violation, breach, termination, acceleration or default

with the giving of notice or passage of time, or both) any of the terms, conditions or provisions of the Certificate of Incorporation or Bylaws of the Company, as amended, or of any note, bond, mortgage, indenture, license, agreement, warrant or other instrument or obligation to which either the Company or the Subsidiary is a party or by which the Company or the Subsidiary or any of their respective properties or assets may be bound or affected, except where such conflict, violation, breach, termination, acceleration or default would not, individually or in the aggregate, have a Material Adverse Effect; (ii) result in the violation of any order, writ, injunction, decree, statute, rule or regulation applicable to the Company or the Subsidiary or their respective properties or assets; (iii) result in the imposition of any lien, encumbrance, charge or claim upon any assets of the Company or of the Subsidiary; or (iv) except under the Consulting Agreement and except for the Required Severance Payments (as defined in Section 4.1(d)), entitle any employee to severance or other payments by the Company or create any other obligation to an employee, including an increase in benefits. Except for the approval by the Stockholders of the Merger, including, without limitation, the filing with the Securities and Exchange Commission (the "SEC") of preliminary and definitive forms of proxy statement, the filing of the Certificate of Merger with the Secretary of State of the State of Delaware, the filing of a Form 15 with the SEC, the filing of a Form 8-K with the SEC and such filings as may be required pursuant to the rules and regulations of the American Stock Exchange, no consent or approval by, or notification to or filing with, any court, governmental authority or third party, including without limitation, any filing under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, is required in connection with the execution, delivery and performance of this Agreement by the Company

8

or the consummation of the transactions contemplated hereby. Without limiting the generality of the foregoing, neither the provisions of Section 203 of the DGCL, nor Chapter 110E or Chapter 110F of the Massachusetts General Laws, nor any other antitakeover or similar statute or regulation applies to or purports to apply to the transactions contemplated by this Agreement.

(e) SEC FILINGS; FINANCIAL STATEMENTS.

(i) Since January 1, 1998, the Company has filed all forms, reports and documents required to be filed by it (collectively, the "SEC Reports") with the SEC. As of the respective dates they were filed, (A) the SEC Reports were prepared in accordance with the applicable requirements of the Securities Act of 1933, as amended (together with the rules and regulations promulgated thereunder, the "Securities Act"), or the Securities Exchange Act of 1934, as amended (together with the rules and regulations promulgated thereunder, the "Exchange Act"), as the case may be, and (B) none of the SEC Reports contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading.

(ii) Each of the financial statements (including, in each case, any notes and schedules thereto) contained in the SEC Reports complied as to form with the applicable accounting requirements and rules and regulations of the SEC and was prepared in accordance with United States generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods indicated (except as may be indicated in the notes thereto), and each presented fairly, in all material respects, the financial position of the Company as at the respective dates thereof and its results of operations and cash flows for the respective periods indicated therein, all in accordance with GAAP (except as otherwise indicated therein and subject, in the case of unaudited statements included in the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2001, to normal and recurring year-end adjustments which were not and would not, individually or in the aggregate, have a Material Adverse Effect).

(iii) The Company has heretofore made available to KLA-Tencor complete and correct copies of (i) all agreements, documents and other instruments not yet filed by the Company with the SEC but that are currently in effect and that the Company expects to file with the SEC after the date of this Agreement and (ii) all amendments and modifications that have not been filed by the Company with the SEC but that are currently in effect to all agreements, documents and other instruments that previously had been filed by the Company with the SEC and are currently in effect.

(f) NO UNDISCLOSED LIABILITIES; NO DEALINGS WITH SECURITY HOLDERS, OFFICERS, DIRECTORS OR EMPLOYEES. Except for (i) liabilities and obligations reflected or reserved against on the Company's balance sheet as of June 30, 2001, as filed with the SEC (the "Balance Sheet") (all of which liabilities and obligations are set forth on the Disclosure Schedule), (ii) liabilities and obligations disclosed in SEC Reports filed prior to the date of this Agreement and (iii) other liabilities and obligations incurred in the ordinary course of business since June 30, 2001 and that

would not, individually or in the aggregate, have a Material Adverse Effect, neither the Company nor the Subsidiary has any liabilities or obligations. As used in this Agreement, the term "liability" includes any indebtedness, claim, loss, damage, deficiency (including deferred income tax), cost, expense, guaranty or responsibility, absolute, accrued, contingent or otherwise, and whether due or to become due. The Disclosure Schedule sets forth a list of each outstanding commitment by the Company or the Subsidiary to make a capital expenditure, capital additions or capital improvements involving an amount in excess of \$10,000. Except for the Consulting Agreement, the Voting Agreement and severance payments to employees, neither the Company nor the Subsidiary has any contractual arrangement with, or commitment to or from, any of their respective security holders, officers, management, directors, employees or their family members (other than such as may have been entered into in the normal course of employment or in the ordinary course of business with holders of less than 5% of the Company's outstanding securities), including, without limiting the generality of the foregoing, any contractual arrangement or commitment whereby any of such persons are directly or indirectly a joint investor or coventurer with respect to, or owner, lessor, lessee, licensor or licensee of, any real or personal property, tangible or intangible, owned or used by, or a lender to or debtor of, the Company or of the Subsidiary.

(g) TAX MATTERS.

(i) For purposes of this Agreement, "Tax" means any federal, state, local or foreign income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental (including without limitation Taxes under Internal Revenue Code of 1986, as amended (the "Code") Section 59A), customs duties, capital stock, franchise, profits, withholding, social security (or similar), unemployment, disability, real property, personal property, sales, use, transfer, registration, value added, alternative or add-on minimum, estimated, or other tax or other fiscal charges of any kind whatsoever, including without limitation any interest, penalty, or addition relating thereto, whether disputed or not.

(ii) For purposes of this Agreement, "Tax Return" means any return, declaration, report, or information return or statement relating to Taxes, including without limitation any schedule or attachment thereto, and any amendment thereof.

(iii) The Company and the Subsidiary have in all material respects accurately prepared and duly and timely filed all Tax Returns that they were required to file. All such Tax Returns were correct and complete in all material respects. Except as set forth on the Disclosure Schedule since March 31, 1996, all Taxes owed by the Company and the Subsidiary (whether or not reflected on any Tax Returns) have been paid when due, other than those being contested in good faith and where adequate reserves have been established therefor. Except as set forth on the Disclosure Schedule, neither the Company nor the Subsidiary is currently the beneficiary of any extension of time within which to file any Tax Return. Since March 31, 1996, no claim or inquiry with respect to any material amount of Taxes has ever been made by an authority in a jurisdiction where the Company or the Subsidiary did not file Tax Returns that the Company or the Subsidiary is or may be subject to any Tax by that jurisdiction for any

10

period ending on or before the Effective Date. There are no liens or other security interests on any of the assets of the Company or the Subsidiary that arose in connection with any failure (or alleged failure) to pay any Tax.

(iv) For all periods beginning subsequent to March 31, 1996, neither the Company nor the Subsidiary has ever filed a consolidated return with a company other than the Company and the Subsidiary.

(v) The Company has delivered or made available to KLA-Tencor true and complete copies of the income, franchise, excise, sales, use, property and employment tax returns filed by the Company and the Subsidiary with any federal, state, local or foreign governmental authority since January 1, 1998, together with all examination reports and statements of deficiencies assessed, proposed in writing to be assessed against, or agreed to by the Company or the Subsidiary.

(vi) All Taxes of the Company and the Subsidiary attributable to Tax periods or portions thereof ending on or prior to the date of this Agreement, including Taxes that may become payable by

the Company or the Subsidiary in future periods in respect of any transactions or sales occurring on or prior to the date of this Agreement, that have not yet been paid have, in the aggregate, been adequately reflected as a liability on the books of the Company and the Subsidiary in accordance with GAAP, except as otherwise indicated on such books. All Taxes of the Company and the Subsidiary attributable to Tax periods or portions thereof ending on or prior to the Effective Date, including Taxes that may become payable by the Company and the Subsidiary in future periods in respect of any transactions or sales occurring on or prior to the Effective Date, that have not yet been paid will, in the aggregate, be adequately reflected as a liability on the books of the Company and the Subsidiary as of the Effective Date in accordance with GAAP, except as otherwise indicated on such books.

(vii) Without limiting the generality of the foregoing, the Company and the Subsidiary have withheld or collected and duly paid all Taxes required to have been withheld or collected and paid in connection with payments to foreign persons, sales and use Tax obligations, and amounts paid or owing to any employee, independent contractor, creditor, stockholder or other person.

(viii) Except as set forth on the Disclosure Schedule, none of the Tax Returns of the Company or the Subsidiary have been or, to the Company's knowledge, are being currently audited or examined by any governmental authority, nor have any deficiencies for any Tax been asserted against the Company or the Subsidiary.

(ix) There are no outstanding agreements or waivers extending the statute of limitations applicable to any Tax Return of the Company or the Subsidiary for any period.

(x) Neither the Company nor the Subsidiary has filed a consent under Code Section 341(f) concerning collapsible corporations. Neither the Company nor the

11

Subsidiary has made any payments, is obligated to make any payments, or is a party to any agreement that could obligate it to make any payments that will be an "excess parachute payment" under Code Section 280G. Neither the Company nor the Subsidiary has been a United States real property holding corporation within the meaning of Code Section 897(c)(2) during the applicable period specified in Code Section 897(c)(1)(A)(ii). Neither the Company nor the Subsidiary is a party to any Tax allocation or sharing agreement. Neither the Company nor the Subsidiary has any liability for any Taxes of any person (other than any of the Company and the Subsidiary) under Treas. Reg. Section 1.1502-6 (or any similar provision of federal, state, local, or foreign law), as a transferee or successor, by contract, or otherwise.

(h) PROPERTIES. Except as set forth in the Disclosure Schedule, the Company and the Subsidiary have good and marketable title to, or a valid and continuing leasehold interest in, all properties and assets, real and personal, reflected on the Balance Sheet or acquired by the Company or the Subsidiary since the date of the Balance Sheet (except personal property leases terminated, or personal property sold or otherwise disposed of, in the ordinary course of business since the date of the Balance Sheet), and all such assets (including the Intangibles (as defined in Section 3.2(m)) are free and clear of all mortgages, liens, attachments, pledges, encumbrances or security interests of any nature whatsoever, except for liens for Taxes not yet due and the rights of any lessor under any lease to which the Company or the Subsidiary is a party. Neither the Company nor the Subsidiary has ever owned any real estate. Except as set forth on the Disclosure Schedule, all leases pursuant to which the Company or the Subsidiary leases real or personal property are in good standing, and are valid and in full force and effect in accordance with their respective terms. There are no defaults under any such leases attributable to the Company or the Subsidiary, and no event has occurred that (whether or not with notice, lapse of time or both) would constitute a default attributable to the Company or the Subsidiary. To the knowledge of the Company, all buildings, improvements, machinery, equipment, vehicles and items of tangible personal property used in connection with the operations of the Company are structurally sound, are in good operating condition and repair, are adequate for the uses to which they are being put and are not in need of maintenance or repairs except for ordinary, routine maintenance, subject only to ordinary wear and tear.

(i) ENVIRONMENTAL, HEALTH AND SAFETY MATTERS. Neither the Company nor the Subsidiary is or has been in violation in any material respect of any law, regulation or ordinance relating to respective properties or facilities (including without limitation, any law, regulation or ordinance relating to pollution or protection of the environment or relating to building, health code, zoning, land use or similar matters). To the Company's knowledge, no real property currently or previously leased by the Company or the Subsidiary is or has been polluted or contaminated, nor has any real property currently or previously leased by the Company or the Subsidiary ever been the subject of environmental clean-up or remediation. Except as set forth on the Disclosure

Schedule, to the Company's knowledge, no real property currently or previously leased by the Company or the Subsidiary contains any Hazardous Material (as defined below), nor has any Hazardous Material been discharged or spilled thereon. Neither the Company nor the Subsidiary has ever owned or operated a petroleum or hazardous waste landfill or any petroleum or other hazardous waste treatment, storage or disposal facility. Neither the Company nor the Subsidiary has caused any past or present events, conditions, circumstances,

12

activities, practices, incidents or actions which will give rise to any common law or legal liability, or otherwise form the basis of any claim, action, suit, proceeding, hearing, or investigation, based on or related to the disposal, storage, handling, manufacture, processing, distribution, use, treatment, or transport, or the emission, discharge, release or threatened release into the environment, of any pollutant or waste. To the Company's knowledge, there are no proceedings pending or threatened affecting any real property currently or previously leased by the Company or by the Subsidiary which could have a Material Adverse Effect. To the Company's knowledge, no real property currently or previously leased by the Company or by the Subsidiary at any time is or has been on any federal or state "Superfund" list or on EPA's Comprehensive Response, Compensation and Liability Information System (CERCLIS) list or on any analogous state environmental agency list.

For purposes of this Agreement, "Hazardous Material" means any petroleum product or any flammable, explosive or radioactive material, or any hazardous or toxic waste, substance or material, including substances defined as "hazardous substances", "hazardous materials", "solid waste" or "toxic substances" under any applicable laws, rules and regulations relating to hazardous or toxic materials and substances, air pollution (including noise and odors), water pollution, liquid and solid waste, pesticides, drinking water, community and employee health, environmental land use management, stormwater, sediment control, nuisances, radiation, wetlands, endangered species, environmental permitting and petroleum products.

(j) ACCOUNTS RECEIVABLE. Except as set forth on the Disclosure Schedule, all accounts and notes receivable shown on the Balance Sheet and all accounts and notes receivable acquired by the Company or the Subsidiary subsequent to the date of the Balance Sheet to the date hereof are valid and enforceable, have arisen in the ordinary course of business and have either (i) been collected or, (ii) to the Company's knowledge, (A) are in the process of collection, (B) are collectible in the ordinary course of business and in any event within six months from the Effective Date and (C) are not subject to any defense, set-off, counterclaim or claim for refund, less the applicable allowances reflected on the Balance Sheet with respect to accounts and notes receivable shown thereon, or set up consistent with past practice on the books of the Company with respect to the accounts and notes receivable acquired subsequent to the date of the Balance Sheet.

(k) PURCHASE AND SALE COMMITMENTS. No outstanding purchase commitments by the Company or the Subsidiary are in excess of the normal, ordinary and usual requirements of the business of the Company. No outstanding commitment obligates the Company or the Subsidiary to sell any product or service at a price below the sum of direct materials and direct labor incurred by the Company or the Subsidiary to produce and deliver such product or to perform such service.

(l) GOVERNMENTAL AUTHORIZATIONS. Set forth on the Disclosure Schedule is a complete and accurate list of all governmental permits, licenses, franchises, concessions, zoning variances and other approvals, authorizations and orders which have been obtained in connection with the conduct of the business now being conducted by the Company and by the Subsidiary, the failure of which to so obtain would have a Material Adverse Effect. Such permits, licenses, franchises, concessions, zoning variances, approvals, authorizations and orders constitute all

13

governmental permits, licenses, franchises, concessions, zoning variances, approvals, authorizations and orders which are required under all applicable local, state, federal or foreign laws and regulations for the operation of the business being conducted by the Company and the Subsidiary as it has been heretofore conducted. All such governmental permits, licenses, franchises, concessions, zoning variances, approvals, authorizations and orders are presently in full force and effect, the Company and the Subsidiary are in compliance with the requirements thereof (except for minor violations that could not result in a suspension or forfeiture thereof), no suspension or cancellation of any of them is, to the knowledge of the Company, threatened, and the filing of the Certificate of Merger and the consummation of the Merger will not adversely affect the validity or effectiveness of, and will not require, for retention thereof after such change of ownership, the consent or approval of any party to, or any governmental agency having jurisdiction of, any such permit, license, franchise, concession, zoning variance, approval, authorization or order. The Company has no knowledge of any fact or circumstance which would prevent, limit or restrict the Company and the Subsidiary from continuing to

operate the Company's business in the present manner, except for facts or circumstances that would not, individually or in the aggregate, have a Material Adverse Effect, and to the Company's knowledge no new material requirements pertaining to the manner of operating its specific business (not businesses in general) have been issued or announced by any governmental authority during the past year, nor are there any disputes pending between the Company (or the Subsidiary) and any governmental authority about the operations of the Company or the Subsidiary as presently being conducted.

(m) PATENTS; TRADEMARKS. Except as set forth on the Disclosure Schedule, the Company owns or has the right to use, free and clear of any obligation of payment, encumbrance, lien or claim, all patents, patent and know-how licenses, trademarks, trade names, service marks, brand names and copyrights, and registrations and applications therefor, used in the conduct of its business or the use of which is necessary for its business as now being conducted (the "Intangibles"). Set forth on the Disclosure Schedule is a complete list of all patents, patent applications, registered trademarks or service marks or applications for such registration and registered copyrights or applications for such registration included within the Intangibles, and licenses, sublicenses or other rights entered into or granted by or to the Company or the Subsidiary with respect thereto (other than licenses by the Company entered into in the ordinary course of business or licenses to the Company of commercially available software pursuant to perpetual licenses providing for up-front payments not exceeding \$5,000 in any individual case). To its knowledge, the Company owns or possesses adequate rights to use, free and clear of any obligation of payment, encumbrance, lien or claim, all inventions, technology, technical know-how, processes, designs, trade secrets, vendor and customer lists and other confidential information required for or used in its business. Neither the Company nor the Subsidiary has directly or, to the Company's knowledge, indirectly provided any trade secrets, know how, or proprietary data to the U.S. Government. To the extent that the Company or the Subsidiary has provided to any third party, other than the U.S. Government, any trade secrets, know how, or proprietary data, such information has been provided subject to an adequate non-disclosure agreement. No person has made any claim or demand upon the Company or the Subsidiary pertaining to, and no proceeding is pending or, to the Company's knowledge, threatened, which challenges (i) the rights of the Company in respect of any Intangibles or (ii) the rights of the Company to any confidential information or trade secrets used in the conduct of

14

its business. No Intangible owned or to the Company's knowledge used by the Company or the Subsidiary is subject to any order, ruling, decree, judgment or stipulation by or with any court, arbitrator or administrative agency which is materially adverse to the business of the Company or the Subsidiary. Except as set forth on the Disclosure Schedule, no person has made any claim or demand alleging that the Company or the Subsidiary has, nor does the Company have any knowledge that the Company or the Subsidiary has, infringed, or engaged in the unauthorized use of, any patent, trademark, trade name, service mark, brand name or copyright, or any invention, technology, technical know-how, process, design, trade secret or other intellectual property of another. The Company has no knowledge of any infringement or unauthorized use by a third party of any patent, trademark, trade name, service mark, brand name or copyright, or any invention, technology, technical know-how, process, design, trade secret or other intellectual property owned by the Company or used by the Company pursuant to an exclusive license or other exclusive arrangement. Since March 31, 1996, each employee of the Company and of the Subsidiary has executed an Employee Patent and Confidential Information Agreement or similar agreement, copies of which have been made available to KLA-Tencor.

(n) INSURANCE. Except as set forth on the Disclosure Schedule, neither the Company nor the Subsidiary is in default with respect to any provisions of any policy of general liability, fire, title or other form of insurance held by it, except where such default would not, individually or in the aggregate, have a Material Adverse Effect. The Company and the Subsidiary are current in the payment of all premiums due or has reserved for such premiums due on such insurance, and have not failed to give any notice or present any claim thereunder in due and timely fashion, except for claims that are immaterial in both the nature of the claim and in the amount of such claim. All policies of insurance held by the Company and the Subsidiary are listed on the Disclosure Schedule. To the Company's knowledge, no basis exists which would jeopardize the coverage under any such insurance. Except as set forth on the Disclosure Schedule, under the terms of the policy relating thereto, no such insurance will be automatically terminated or canceled by reason of the execution, delivery and performance of this Agreement or the consummation of the transactions contemplated hereby. The Disclosure Schedule sets forth a list of all claims pending under the insurance policies listed on the Disclosure Schedule (including, in their aggregate amount, employee benefit claims other than health or dental insurance claims and workers' compensation claims in excess of \$5,000 per year).

(o) EMPLOYEE MATTERS AND BENEFIT PLANS.

(i) DEFINITIONS. For purposes of this Section 3.2(o), the following terms shall have the meanings set forth below:

(A) "AFFILIATE" shall mean any other person or entity under common control with the Company within the meaning of Section 414(b), (c), (m) or (o) of the Code and the regulations issued thereunder (including without limitation the Subsidiary);

(B) "COBRA" shall mean the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended;

15

(C) "COMPANY EMPLOYEE PLAN" shall mean any plan, program, policy, practice, contract, agreement or other arrangement providing for compensation, severance, termination pay, deferred compensation, performance awards, stock or stock-related awards, fringe benefits or other employee benefits or remuneration of any kind, whether written or unwritten or otherwise, funded or unfunded, including without limitation, each "employee benefit plan," within the meaning of Section 3(3) of ERISA which is or has been maintained, contributed to, or required to be contributed to, by the Company or any Affiliate for the benefit of any Employee, or with respect to which the Company or any Affiliate has or may have any liability or obligation;

(D) "DOL" shall mean the United States Department of Labor;

(E) "EMPLOYEE" shall mean any current or former or retired employee, officer or director of the Company or any Affiliate;

(F) "EMPLOYMENT AGREEMENT" shall mean each management, employment, severance, relocation, repatriation, expatriation, visas, work permit or other agreement, contract or understanding currently in force and effect between the Company or any Affiliate and any Employee;

(G) "ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended;

(H) "FMLA" shall mean the Family Medical Leave Act of 1993, as amended;

(I) "INTERNATIONAL EMPLOYEE PLAN" shall mean each Company Employee Plan that has been adopted or maintained by the Company or any Affiliate, whether informally or formally, or with respect to which the Company or any Affiliate will or may have any liability, for the benefit of Employees who perform services outside the United States;

(J) "IRS" shall mean the Internal Revenue Service;

(K) "MULTIEMPLOYER PLAN" shall mean any "Pension Plan" (as defined below) which is a "multiemployer plan," as defined in Section 3(37) of ERISA; and

(L) "PENSION PLAN" shall mean each Company Employee Plan which is an "employee pension benefit plan," within the meaning of Section 3(2) of ERISA.

(ii) SCHEDULE. Schedule 3.2(o)(ii) of the Disclosure Schedule contains an accurate and complete list of each Company Employee Plan, International Employee Plan, and each Employment Agreement. The Company does not have any plan or

16

commitment to establish any new Company Employee Plan, International Employee Plan, or Employment Agreement, to modify any Company Employee Plan or Employment Agreement (except to the extent required by law or to conform any such Company Employee Plan or Employment Agreement to the requirements of any applicable law, in each case as previously disclosed to KLA-Tencor in writing, or as required by this Agreement), or to adopt or enter into any Company Employee Plan, International Employee Plan, or Employment Agreement.

(iii) DOCUMENTS. The Company has provided to KLA-Tencor correct and complete copies of: (A) all agreements or other contracts embodying each Company Employee Plan, International Employee Plan, and each Employment Agreement including (without limitation) all amendments thereto and all related trust documents, administrative service agreements, group annuity contracts, group insurance contracts,

and policies pertaining to fiduciary liability insurance covering the fiduciaries for each Plan; (B) the most recent annual actuarial valuations, if any, prepared for each Company Employee Plan; (C) the three most recent annual reports (Form Series 5500 and all schedules and financial statements attached thereto), if any, required under ERISA or the Code in connection with each Company Employee Plan; (D) if the Company Employee Plan is funded, the most recent annual and periodic accounting of Company Employee Plan assets; (E) the most recent summary plan description together with the summary(ies) of material modifications thereto, if any, required under ERISA with respect to each Company Employee Plan; (F) all IRS determination, opinion, notification and advisory letters, and all applications and correspondence to or from the IRS or the DOL with respect to any such application or letter; (G) all communications material to any Employee or Employees relating to any Company Employee Plan and any proposed Company Employee Plans, in each case, relating to any amendments, terminations, establishments, increases or decreases in benefits, acceleration of payments or vesting schedules or other events which would result in any material liability to the Company; (H) all material correspondence to or from any governmental agency relating to any Company Employee Plan; (I) copies of all material COBRA forms and related notices (or such forms and notices as required under comparable law) specifically addressed to the Company Employee Plan; (J) the three most recent plan years discrimination tests for each Company Employee Plan; and (K) all registration statements, annual reports (Form 11-K and all attachments thereto) and prospectuses prepared in connection with each Company Employee Plan.

(iv) EMPLOYEE PLAN COMPLIANCE. (A) the Company has performed in all material respects all obligations required to be performed by it under, is not in default or violation of, and has no knowledge of any default or violation by any other party to, each Company Employee Plan, and each Company Employee Plan has been established and maintained in all material respects in accordance with its terms and in material compliance with all applicable laws, statutes, orders, rules and regulations, including but not limited to ERISA or the Code; (B) each Company Employee Plan intended to qualify under Section 401(a) of the Code and each trust intended to qualify under Section 501(a) of the Code has either received or is the subject of a favorable determination, opinion, notification or advisory letter from the IRS with respect to each such Company Employee

17

Plan as to its qualified status under the Code, including all amendments to the Code effected by the Tax Reform Act of 1986 and subsequent legislation, or has remaining a period of time under applicable Treasury regulations or IRS pronouncements in which to apply for such a letter and make any amendments necessary to obtain a favorable determination as to the qualified status of each such Company Employee Plan; (C) no "prohibited transaction," within the meaning of Section 4975 of the Code or Sections 406 and 407 of ERISA, and not otherwise exempt under Section 4975 of the Code or Section 408 of ERISA (or any administrative class exemption issued thereunder), has occurred with respect to any Company Employee Plan; (D) there are no actions, suits or claims pending, or, to the knowledge of the Company, threatened (other than routine claims for benefits) against any Company Employee Plan or against the assets of any Company Employee Plan, and, to the Company's knowledge, no basis for any such actions, suits or claims exists; (E) each Company Employee Plan (other than any stock option plan) can be amended, terminated or otherwise discontinued after the Effective Time, without material liability to the KLA-Tencor, Company or any of its Affiliates (other than ordinary administration expenses and such obligations as may exist under applicable federal, state and local laws); (F) there are no audits, inquiries or proceedings pending or, to the knowledge of the Company, threatened by the IRS or DOL with respect to any Company Employee Plan; and (G) neither the Company nor any Affiliate is subject to any penalty or Tax with respect to any Company Employee Plan under Section 502(i) of ERISA or Sections 4975 through 4980 of the Code.

(v) PENSION PLAN. Neither the Company nor any Affiliate has ever maintained, established, sponsored, participated in, or contributed to, any Pension Plan which is subject to Title IV of ERISA or Section 412 of the Code.

(vi) COLLECTIVELY BARGAINED, MULTIEmployer AND MULTIPLE EMPLOYER PLANS. At no time has the Company or any Affiliate contributed to or been obligated to contribute to any Multiemployer Plan. Neither the Company, nor any Affiliate has at any time ever maintained, established, sponsored, participated in, or contributed to any multiple employer plan, or to any plan described in Section 413 of the Code.

(vii) NO POST-EMPLOYMENT OBLIGATIONS. No Company Employee Plan provides, or reflects or represents any liability to

provide retiree health to any person for any reason, except as may be required by COBRA or other applicable statute.

(viii) HEALTH CARE COMPLIANCE. Neither the Company nor any Affiliate has, in any material respect, violated any of the health care continuation requirements of COBRA, the requirements of FMLA, the requirements of the Health Insurance Portability and Accountability Act of 1996, the requirements of the Women's Health and Cancer Rights Act of 1998, the requirements of the Newborns' and Mothers' Health Protection Act of 1996, or any amendment to each such act, or any similar provisions of state law applicable to its Employees.

18

(ix) EFFECT OF MERGER.

(A) Except as set forth on Schedule 3.2(o)(ix) of the Disclosure Schedule, the execution of this Agreement and the consummation of the transactions contemplated hereby will not (either alone or upon the occurrence of any additional or subsequent events) constitute an event under any Company Employee Plan, Employment Agreement, trust or loan that will or may result in any payment (whether of severance pay or otherwise), acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any Employee.

(B) Except as set forth on Schedule 3.2(o)(ix) of the Disclosure Schedule, no payment or benefit which will or may be made by the Company or its Affiliates with respect to any Employee will be characterized as a "parachute payment," within the meaning of Section 280G(b)(2) of the Code.

(x) EMPLOYMENT MATTERS. The Company and the Subsidiary: (A) are in compliance in all material respects with all applicable foreign, federal, state and local laws, rules and regulations respecting employment, employment practices, terms and conditions of employment and wages and hours, in each case, with respect to Employees; (B) have withheld and reported all amounts required by law or by agreement to be withheld and reported with respect to wages, salaries and other payments to Employees; (C) has received no notice, and has no reason to believe, that it is liable for any arrears of wages or any Taxes or any penalty for failure to comply with any of the foregoing; and (D) are not liable for any payment to any trust or other fund governed by or maintained by or on behalf of any governmental authority, with respect to unemployment compensation benefits, social security or other benefits or obligations for Employees (other than routine payments to be made in the ordinary course of business). There are no pending or threatened claims or actions against the Company or the Subsidiary under any worker's compensation policy or long-term disability policy; and, to the Company's knowledge, no basis for any such claims or actions which, individually or in the aggregate, would have a Material Adverse Effect exists.

(xi) LABOR. No work stoppage or labor strike against the Company or the Subsidiary is pending or, to the Company's knowledge, threatened. The Company does not know of any activities or proceedings of any labor union to organize any Employees. There are no actions, suits, claims, labor disputes or grievances pending, or, to the knowledge of the Company, threatened, relating to any labor, safety or discrimination matters involving any Employee, including, without limitation, charges of unfair labor practices or discrimination complaints, which, if adversely determined, would, individually or in the aggregate, result in any material liability to the Company, and no basis for any such actions, suits, claims, labor disputes or grievances exists. Neither the Company nor any of its subsidiaries has engaged in any unfair labor practices within the meaning of the National Labor Relations Act. Neither the Company nor the Subsidiary is presently, nor has either of them been in the past, party to, or bound by, any collective bargaining agreement or union contract with respect to Employees and no

19

collective bargaining agreement is being negotiated by the Company or by the Subsidiary.

(xii) INTERNATIONAL EMPLOYEE PLANS. Neither the Company nor the Subsidiary does now, nor has either of them ever had the obligation to, maintain, establish, sponsor, participate in, or contribute to any International Employee Plan.

(xiii) EMPLOYEES; LOANS. Set forth on Schedule 3.2(o)(xiii) of the Disclosure Schedule are accurate and complete lists of (i) the names, titles and location of all Employees as of the date hereof, including such Employees' current compensation (including bonus) arrangements and the last date of any increase in such Employees' compensation prior to the date hereof, and the names of any of such Employees on leave of absence or who are collecting disability payments; and (ii) all loans to Employees, including amount due, interest, term and collateral as of the date hereof.

(p) AGREEMENTS AND DOCUMENTS. The Company has previously furnished or made available to KLA-Tencor true, correct and complete copies of each document that is referred to in this Section 3.2(p), all of which are listed in the Disclosure Schedule:

(i) each document related to interests in real property owned, leased or otherwise used or claimed by the Company or by the Subsidiary;

(ii) (A) except as set forth on the Disclosure Schedule, each agreement of the Company which involves aggregate future payments by the Company or the Subsidiary of more than \$10,000 (other than with respect to the purchase of inventory in the ordinary course of business) in any calendar month or any agreement whose term extends beyond one year after the date hereof and as to which the Company or the Subsidiary has ongoing obligations thereunder (other than routine maintenance agreements); and (B) each agreement containing any covenant restricting the freedom of the Company or the Subsidiary to compete in any line of business or with any person;

(iii) all Employment Agreements or similar compensation agreements of the Company or the Subsidiary which may not be terminated by the Company without penalty within 45 days after the Closing;

(iv) all bonus, incentive compensation, deferred compensation, profit-sharing, stock option, retirement, pension, severance, indemnification, employee insurance, death benefit or other fringe benefit plans, agreements or arrangements of the Company or the Subsidiary (or applying to the Company or the Subsidiary) in effect, or under which any amounts remain unpaid, on the date hereof or to become effective after the date hereof;

(v) each agreement or other instrument or arrangement defining the terms on which any indebtedness of the Company or the Subsidiary (or a guarantee by the Company or the Subsidiary of indebtedness) is or may be issued, other than with respect to accounts payable incurred in the ordinary course of business;

20

(vi) the names and addresses of all banks in which the Company or the Subsidiary has accounts or lines of credit, and with respect to each such account or line of credit, the account numbers thereof and the names of all persons authorized to draw thereon;

(vii) all agency, distributor, sales representative and similar agreements relating to the business of the Company or the Subsidiary under which the Company or the Subsidiary has any further obligation or liability;

(viii) all licenses or similar agreements of the Company or the Subsidiary with respect to patents, trademarks, copyrights, or other intellectual property; and

(ix) all non-competition, inventions assignment and non-disclosure agreements with the current and employees of the Company or the Subsidiary.

Neither the Company nor the Subsidiary is a party to any oral contract or agreement which would be required to have been furnished or made available to KLA-Tencor under this Section 3.2(p) had such contract or agreement been committed to writing.

There is no default or breach, or claimed or purported or alleged default or breach on the part of the Company or the Subsidiary, or, to the knowledge of the Company, on the part of any other party thereto or basis on which with notice or lapse of time or both, a default or breach would exist, in any obligation to be performed under any lease, contract, plan, policy or other instrument or arrangement referred to in this Section 3.2(p), except for such breaches as would not, individually or in the aggregate, result in a Material Adverse Effect.

(q) NO CHANGES. Since the date of the Balance Sheet, except for the execution of this Agreement and the other agreements contemplated

hereby and the taking of actions contemplated hereby, there has not been:

(i) any Material Adverse Effect, other than continuing operating losses and losses attributable to the abandonment of leasehold improvements that will result when the Company vacates its premises in connection with the termination of the lease for its current space at 46 Jonspin Road, Wilmington, Massachusetts 01887;

(ii) any damage, destruction or loss (whether or not covered by insurance) to property which could reasonably be expected to have a Material Adverse Effect;

(iii) any declaration, setting aside or payment of any dividend, or other distribution, in respect of the capital stock of the Company or the Subsidiary, or any direct or indirect redemption, purchase or other acquisition of such stock;

21

(iv) except as set forth on the Disclosure Schedule, any option, warrant or right to purchase the capital stock of the Company or of the Subsidiary granted to any person, or any employment or deferred compensation agreement entered into between the Company or the Subsidiary and any of their respective officers, directors or consultants;

(v) any issuance or sale by the Company or by the Subsidiary of any stock (other than upon the exercise of stock options), bonds or other corporate securities, or any partial or complete formation, acquisition, disposition or liquidation of the Company or of the Subsidiary;

(vi) any labor union trouble (including without limitation any negotiation, or request for negotiation, with respect to any union representation or any labor contract) respecting the Company or the Subsidiary;

(vii) to the Company's knowledge, any statute, rule or regulation, or any government policy, adopted which pertains particularly to the Company's business (and not businesses in general) and which may materially and adversely affect the business or assets of the Company;

(viii) any mortgage, lien, attachment, pledge, encumbrance or security interest created on any asset, tangible or intangible, of the Company or of the Subsidiary, or assumed, either by the Company or by others, with respect to any such asset, except for liens for taxes not yet due, and for equipment leases and purchase money security interests entered into in the ordinary course of business;

(ix) any indebtedness or other liability or obligation (whether absolute, accrued, contingent or otherwise) incurred, or other transaction (except that reflected in this Agreement or attributable to the obligations of the Company under this Agreement or the preparation thereof) engaged in, by the Company or by the Subsidiary, except those in the ordinary course of business;

(x) any obligation or liability discharged or satisfied by the Company or by the Subsidiary, except items included in current liabilities shown on the Balance Sheet and current liabilities incurred since the date of the Balance Sheet in the ordinary course of business;

(xi) any sale, assignment, lease, transfer or other disposition of any tangible asset of the Company or of the Subsidiary, except in the ordinary course of business, or any sale, assignment, lease, transfer or other disposition of any of its patents, trademarks, trade names, brand names, copyrights, licenses or other intangible assets, except pursuant to license agreements entered into in the ordinary course of business;

(xii) any amendment, termination or waiver of any material right belonging to the Company or to the Subsidiary;

22

(xiii) any increase in the compensation or benefits payable or to become payable by the Company or by the Subsidiary to any of its officers or employees except for ordinary increases for non-management employees in accordance with prior practice;

(xiv) except as set forth on the Disclosure Schedule, any transaction or contract with a director or officer of the Company or of the Subsidiary (whether executive officer or division officer) or

a member of any such director's or officer's family, including a loan, change of employment conditions, change of pension rights or bonus, not approved in writing by KLA-Tencor; or

(xv) any audit of any Tax.

(r) LITIGATION OR PROCEEDINGS. Neither the Company nor the Subsidiary is engaged in, or a party to, or to the Company's knowledge threatened with, any claim or legal action or other proceeding before any court, any arbitrator of any kind or any administrative agency, or to its knowledge any governmental investigation, or any suspension or debarment proceeding, nor, to the knowledge of the Company, does any basis for any claim or legal action or other proceeding or governmental investigation or any suspension or debarment proceeding that could, individually or in the aggregate, have a Material Adverse Effect exist. There are no orders, rulings, decrees, judgments or stipulations to which the Company or the Subsidiary is a party by or with any court, arbitrator or administrative agency affecting the Company, its business or its properties.

(s) COMPLIANCE WITH LAWS. Except in any case that has not resulted in, and would not, individually or in the aggregate, a Material Adverse Effect, the Company and the Subsidiary (i) have complied in all respects with all applicable building, zoning, occupational safety and health, pension, export control, environmental control and other federal, state, local and foreign laws, ordinances, regulations, rules, orders and governmental policies applicable to their plants, structures or equipment or the operation thereof, and any employment, equal opportunity or similar laws, ordinances, regulations, rules, orders and governmental policies, and all other laws, ordinances, regulations, rules, orders and governmental policies applicable to them, their business or their respective assets; (ii) have not received any complaint from any governmental authority, and to the Company's knowledge none is threatened, alleging that the Company or the Subsidiary has violated any such law, ordinance, regulation, order or policy; (iii) have not received any notice from any governmental authority of any pending proceedings to take all or any part of the properties of the Company or of the Subsidiary (whether leased or owned) by condemnation or right of eminent domain and, to the Company's knowledge, no such proceeding is threatened; and (iv) are not party to any agreement or instrument, or subject to any charter or other corporate restriction or judgment, order, writ or injunction, which has resulted in, or which might reasonably be expected to result in, a Material Adverse Effect.

(t) CORPORATE PRACTICES. Since March 31, 1996, neither the Company nor the Subsidiary has ever, directly or indirectly: (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees, or to foreign or domestic political parties or campaigns, from corporate funds; (iii) violated any

23

provisions of the Foreign Corrupt Practices Act of 1977; (iv) established or maintained any unlawful or unrecorded fund of monies or other assets; (v) made any false or fictitious entry on its books or records; (vi) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any person; (vii) made any bribe, kickback, finder's fee, commission, or other payment or compensation of a similar or comparable nature, whether lawful or not, to any person or entity, private or public, regardless of form, whether in money, property or services, to obtain favorable treatment in securing business or to obtain special concessions, or to pay for favorable treatment for business secured or for special concessions already obtained; (viii) submitted, or caused to be submitted, any false claims against the U.S. Government or (ix) made, or caused to be made, any false statements to the U.S. Government.

(u) BROKERS AND FINDERS. Neither the Company nor the Subsidiary has employed any broker, agent or finder or incurred any liability on behalf of the Company or the Subsidiary for any brokerage fees, agents' commissions or finders' fees in connection with the transactions contemplated hereby.

(v) POWERS OF ATTORNEY. Neither the Company nor the Subsidiary has any powers of attorney or similar authorizations outstanding, other than those granted in the ordinary course of business, all of which are listed on the Disclosure Schedule.

(w) PRODUCT WARRANTIES. Copies of the terms and conditions of sale with respect to each product sold by the Company or the Subsidiary have been made available to KLA-Tencor. Except as set forth on the Disclosure Schedule, neither the Company nor the Subsidiary will have any contractual obligation with regard to any warranty claims after the first anniversary of the date of any such warranty which is currently in effect. To the Company's knowledge, the reserve established on Balance Sheet for the satisfaction of claims which may be made under product warranties in effect as of the Effective Date is adequate in amount to satisfy all product warranty claims which may be made with respect to any products sold by the Company or by the Subsidiary prior

to the Effective Date.

(x) BOARD APPROVAL. The Board of Directors of the Company has, as of August 16, 2001, unanimously (i) determined that the Merger is fair to, and in the best interests of the Company and its Stockholders, (ii) approved and deemed advisable, subject to Stockholder approval, this Agreement and the transactions contemplated hereby and (iii) subject to the provisions of Section 4.6(b), determined to recommend that the Stockholders approve and adopt this Agreement and approve the Merger.

(y) RESTRICTION ON BUSINESS ACTIVITIES. There is no agreement, commitment, judgment, injunction, order or decree binding upon the Company or the Subsidiary or to which the Company or the Subsidiary is a party which has or could reasonably be expected to have the effect of prohibiting or materially impairing any business practice of the Company, any acquisition of property by the Company or the conduct of business by the Company as currently conducted.

24

(z) COMPLETE COPIES OF MATERIALS. The Company has delivered or made available true and complete copies of each document (or summaries of same) that has been requested by KLA-Tencor or its counsel.

(aa) STATEMENTS TRUE AND CORRECT. This Agreement (including the Exhibits and any documents delivered pursuant hereto) does not contain any untrue statement of a material fact or omit any material fact required to be stated herein or therein or necessary to make the statements contained herein or therein, in the light of the circumstances under which they were made, not misleading.

Section 3.3. REPRESENTATIONS AND WARRANTIES OF KLA-TENCOR AND MERGER SUB. KLA-Tencor and Merger Sub represent and warrant to the Company that:

(a) ORGANIZATION AND QUALIFICATION. KLA-Tencor is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and has all requisite corporate and other power and authority to own, lease and operate its properties and to carry on its business as it is now being conducted except where the failure to do so would not, individually or in the aggregate, have a material adverse effect on the financial condition, assets (including intangible assets), liabilities, earnings or business of KLA-Tencor and its subsidiaries, taken together as a whole. Merger Sub is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and has all requisite corporate power and authority to carry on its business at it is now being conducted. Each of KLA-Tencor and Merger Sub is duly qualified to do business as a foreign corporation, and is in good standing, in each jurisdiction in which the character of the properties owned, operated or leased by the respective corporation or the nature of the respective corporation's activities is such that such qualification is required by applicable law, except where the failure to be so duly qualified and in good standing that would not, individually or in the aggregate, have a material adverse effect on the financial condition, assets (including intangible assets), liabilities, earnings or business of KLA-Tencor and its subsidiaries, taken together as a whole.

(b) AUTHORITY. Each of KLA-Tencor and Merger Sub has the corporate power and authority to execute, deliver and perform this Agreement, to execute, deliver and file the Certificate of Merger and to consummate the transactions contemplated hereby and thereby. This Agreement has been duly and validly authorized by all necessary corporate action on the part of KLA-Tencor and Merger Sub. This Agreement has been duly and validly executed and delivered by KLA-Tencor and Merger Sub and constitutes the valid and legally binding obligation of KLA-Tencor and Merger Sub, enforceable against them in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally or by general principles of equity. Neither the execution, delivery and performance of this Agreement, the filing of the Certificate of Merger nor the consummation of the transactions contemplated hereby will (i) conflict with or result in a violation, breach or termination or acceleration of, or default under (or would result in a violation, breach, termination, acceleration or default with the giving of notice or passage of time or both) any of the terms, conditions or provisions of the respective charter documents or Bylaws of KLA-Tencor or Merger Sub, as amended, or of any note, bond, mortgage, indenture, license, agreement or other instrument or

25

obligation to which KLA-Tencor or Merger Sub is a party, or by which KLA-Tencor or Merger Sub or any of their properties or assets may be bound or affected, except where such conflict, violation, breach, termination, acceleration or default would not, individually or in the aggregate, have a material adverse effect on the financial condition, assets, liabilities, earnings, business or prospects of KLA-Tencor and its subsidiaries, taken together as a whole, other than any effect resulting from conditions generally affecting KLA-Tencor's industry or the economy as a whole, (ii) result in the violation of any order, writ, injunction, decree, statute, rule or regulation applicable to KLA-Tencor

or Merger Sub, or their properties or assets or (iii) result in the imposition of any lien, encumbrance, charge or claim upon any of KLA-Tencor's assets. No consent or approval by, or notification to or filing with, any court, governmental authority or third party is required in connection with the execution, delivery and performance of this Agreement by KLA-Tencor or Merger Sub or the consummation of the transactions contemplated hereby, except for the filing of the Certificate of Merger with the Secretary of State of the State of Delaware.

(c) BROKERS AND FINDERS. Neither KLA-Tencor nor Merger Sub has employed any broker, agent or finder or incurred any liability for any brokerage fees, agents' commissions or finders' fees in connection with the transactions contemplated hereby.

(d) PROXY MATERIALS. None of the information supplied or to be supplied by KLA-Tencor and/or Merger Sub for inclusion in or incorporation by reference into the Proxy Statement (as defined in Section 4.4(a)) will, on the date the Proxy Statement is first mailed to the Stockholders or at the time of the Company's meeting of Stockholders, 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 made therein, in light of the circumstances under which they were made, not misleading.

(e) FINANCING. KLA-Tencor has sufficient funds on hand or available to it under bank lines of credit to fully satisfy all of KLA-Tencor's and Merger Sub's obligations under this Agreement, including, without limitation, the obligation to pay the Purchase Price in cash on the Effective Date and to pay all fees and expenses incurred by them in connection with the Merger.

(f) ACTIONS AND PROCEEDINGS. There are no actions, suits or claims or legal, administrative or arbitration proceedings pending or, to the knowledge of KLA-Tencor, threatened against KLA-Tencor and/or Merger Sub that individually or in the aggregate could reasonably be expected to interfere with the ability of KLA-Tencor and/or Merger Sub to consummate the transactions contemplated hereby.

ARTICLE 4

ADDITIONAL COVENANTS AND AGREEMENTS

Section 4.1. ACTS OF THE COMPANY. The Company agrees that, from the date hereof to the Closing, except to the extent that KLA-Tencor shall otherwise give its written consent, which

26

consent shall not be unreasonably withheld if consistent with the planned cessation of the Company's business, or as described below:

(a) BUSINESS IN ORDINARY COURSE. The Company will, and will cause the Subsidiary to, operate its business only in the ordinary course and consistent with past practice, and, to the extent of and consistent with such operation, except as otherwise provided herein, it will use its commercially reasonable efforts to preserve intact its present business organization and, except as otherwise provided herein, to preserve its relationships with employees and persons having business dealings with it.

(b) MAINTAIN PROPERTIES. The Company will, and will cause the Subsidiary to, maintain all of its properties in customary repair, order and condition, reasonable wear and use and damage by unavoidable casualty excepted, and take all steps reasonably necessary to maintain its Intangibles. The Company will not, and will cause the Subsidiary not to, sell, lease or exchange, or enter into any agreement to sell, lease or exchange, all or any portion of its assets other than respect to sales of inventory or licenses of software in the ordinary course of business.

(c) MAINTAIN MANAGEMENT. The Company will not, and will cause the Subsidiary not to, initiate or cause any changes in the persons serving as management of the Company other than as specifically contemplated by Section 4.1(d), below.

(d) COMPENSATION. The Company will not, and will cause the Subsidiary not to, (i) grant any increase in compensation or any bonus to any employee or member of management, or (ii) enter into or amend or alter any bonus, incentive compensation, deferred compensation, profit sharing, stock option, retirement, severance, indemnification, pension, insurance, death benefit or other fringe benefit plan, agreement or arrangement, or any employment or consulting agreement. Notwithstanding the foregoing, the Company may, prior to the Closing, pay the amounts set forth to the Company's employees as set forth in Schedule 4.1(d) hereto in satisfaction of (x) all of the obligations the Company would have to such persons as if such persons were terminated contemporaneously with or following the change in control resulting from the Merger and (y) all other obligations to such employees in accordance

with the Company's existing severance policy as of the date of this Agreement or under applicable laws (all such payments, collectively, the "Required Severance Payments").

(e) NO RELATED PARTY TRANSACTIONS. Other than in the ordinary course of business, the Company will not, and will cause the Subsidiary not to, enter into any transaction or contract with, or (except as expressly contemplated by this Agreement) make any other payment or commitment to, any of its security holders, officers, management, directors or employees or their family members, including the lending of any monies.

(f) INDEBTEDNESS. The Company will not, and will cause the Subsidiary not to, create, incur, assume, guarantee, or otherwise become liable with respect to any indebtedness other than in the ordinary course of business.

(g) MAINTAIN BOOKS. The Company will, and will cause the Subsidiary to, maintain its books, accounts and records in its usual, regular and ordinary manner.

27

(h) NO AMENDMENTS. The Company will not amend its Certificate of Incorporation or Bylaws and will cause the Subsidiary not to amend its charter or similar governing instruments; and the Company will, and will cause the Subsidiary to, maintain its corporate existence and powers and, except as set forth on the Disclosure Schedule, its qualifications as a foreign corporation in each jurisdiction where it is so qualified.

(i) PAY TAXES. The Company will, and will cause the Subsidiary to, file all Tax Returns and pay all Taxes as they become due.

(j) NO DISPOSITION OR ENCUMBRANCES. The Company will refrain from, and will cause the Subsidiary to refrain from, disposing of or encumbering any of its properties and assets other than in the ordinary course of business.

(k) INSURANCE. The Company will, and will cause the Subsidiary to, maintain insurance upon its properties and insurance in respect of the kinds of risks currently insured against, in accordance with its current practice.

(l) NO MERGERS. Subject to the provisions of Section 4.6(b), the Company will not merge or consolidate with any other corporation, or acquire any stock, or, except in the ordinary course of business, any business, property or assets of any other person, firm, association, corporation or other business organization.

(m) NO SECURITIES ISSUANCE. The Company will not, and will cause the Subsidiary not to, issue any shares of capital stock except pursuant to Company Options and Warrants outstanding as of the date hereof, or enter into any commitment or agreement, or grant any option, warrant or right, calling for the issuance of any shares of stock, and will not create or issue any securities convertible into any such shares or convertible into securities in turn so convertible, or enter into any commitment or agreement, or grant any option, warrant or right, calling for the issuance of any such convertible securities or split, combine or reclassify any of its capital stock or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock.

(n) DIVIDENDS; REPURCHASES. The Company will not declare any dividends on or in respect of shares of capital stock; nor will it redeem, repurchase or otherwise acquire any shares of stock.

(o) CONTRACTS. Except in the ordinary course of business or as set forth on the Disclosure Schedule, the Company will not, and will cause the Subsidiary not to, enter into, assume or cancel any material contract, agreement, obligation, lease, license or commitment, and it will not do any act or omit to do any act which would cause a material breach of or default under any material contract, commitment or obligation of the Company.

(p) ADVICE OF CHANGE. The Company will promptly advise KLA-Tencor in writing of the occurrence of any Material Adverse Effect, other than continuing operating losses or the termination of revenue.

28

(q) DUE COMPLIANCE. The Company will, and will cause the Subsidiary to, duly comply in all material respects with all laws, rules and regulations applicable to it and to the conduct of its business.

(r) NO WAIVERS OF RIGHTS. The Company will not, and will cause the Subsidiary not to, amend, terminate or waive any material right.

(s) CAPITAL COMMITMENTS. The Company will not, and will cause the Subsidiary not to make or commit to make any capital expenditure, capital addition or capital improvement of more than \$10,000 individually, or in the aggregate.

(t) NO BREACHES. The Company will not, and will cause the Subsidiary not to, take any action that would constitute or result in a breach of any representation or warranty herein, either as of the date made or on the Effective Date.

(u) CONFIDENTIAL INFORMATION. The Company shall not, and shall cause the Subsidiary not to, except as required by law or by agreements existing on the date hereof, disclose to any third person, and shall preserve and maintain and prevent the disclosure or publication of, any proprietary information or trade secrets belonging to the Company or the Subsidiary, except in the ordinary course of business.

(v) OBJECTIONS TO THE MERGER. The Company will promptly advise KLA-Tencor of any written objection to the Merger from any of its security holders.

(w) MATERIAL TAX ELECTION. The Company will not, and will cause the Subsidiary not to, make any material Tax election or settle or compromise any material federal, state, local or foreign Tax liability or agree to an extension of a statute of limitations except to the extent the amount of any such settlement has been reserved for on the Balance Sheet.

(x) DISCHARGE OF LIABILITIES. The Company will not, and will cause the Subsidiary not to, pay, discharge or satisfy any claims, liabilities or obligations (absolute, accrued, asserted or unasserted, contingent or otherwise), other than the payment, discharge or satisfaction in the ordinary course of business of liabilities reflected or reserved against on the Balance Sheet and liabilities arising after the date of the Balance Sheet in the ordinary course of business.

(y) REVALUATION OF ASSETS. The Company will not undertake any revaluation of any of its assets, including, without limitation, writing down the value of inventory or writing off notes or accounts receivable other than in the ordinary course of business or in accordance with GAAP consistently applied.

(z) ACCOUNTING CHANGES. The Company will not take any action to change accounting policies or procedures (including, without limitation, procedures with respect to revenue recognition, payments of accounts payable and collection of accounts receivable),

29

except as required by concurrent changes in GAAP or federal securities law applicable to companies generally.

(aa) INTELLECTUAL PROPERTY. The Company will not, and will cause the Subsidiary not to, license any of its Intangibles to any third party, other than in the ordinary course of business.

(bb) EXPENSE ACCOUNT. The Company will not, and will cause the Subsidiary not to, reimburse or otherwise pay its directors, officers or employees for any expenses or other costs incurred by such individuals and entities in the course of providing service to the Company (i) in excess of \$10,000 individually or \$20,000 in the aggregate from the date hereof through October 31, 2001, and (ii) in excess of \$10,000 individually or \$10,000 in the aggregate in each calendar month beginning October 31, 2001 through the Closing if the Closing does not occur by October 31, 2001 due to SEC review of the Proxy Statement, except reasonable and customary expenses (A) for travel as may be contemplated by Section 4.8 of this Agreement, (B) directly related to attendance at Company Board of Director meetings called for purposes directly related to the transactions contemplated by this Agreement, (C) incurred by Company employees providing field service (which costs will be billed to clients in receipt of any such service), (D) incurred by the Company in the course of providing service in accordance with the terms of its warranty obligations to the customers listed on Section 3.2(w) of the Disclosure Schedule, and (E) in connection with Diskcon and BACUS of up to \$5,000 per show.

Except as specifically provided in this Section 4.1, nothing contained in this Agreement shall give KLA-Tencor, directly or indirectly, the right to control or direct the Company's operations prior to the Effective Date. Prior to the Effective Date, the Company shall exercise, consistent with the terms and conditions of this Agreement, complete control and supervision over its operations.

Section 4.2. SATISFACTION OF CONDITIONS PRECEDENT. The parties hereby agree, subject to the terms and conditions provided in this Agreement, to use their reasonable efforts to take, or cause to be taken, all action, and to do, or cause to be done, all things necessary, appropriate or desirable under applicable laws and regulations to consummate the transactions contemplated by this Agreement, including the satisfaction of the conditions precedent contained in Article 5 hereof. Each party will use their respective reasonable efforts to obtain consents of all third-parties and governmental authorities necessary, appropriate or desirable for the consummation of the transactions contemplated by this Agreement, including without limitation the filing of the Certificate of

Merger with the Secretary of State of the State of Delaware in accordance with the DGCL.

Section 4.3. ACCESS TO RECORDS AND PROPERTIES. KLA-Tencor may, prior to the Closing, through its employees, agents and representatives, make or cause to be made such investigation as it deems necessary or advisable of the assets and business of the Company, but such investigation shall not affect the representations and warranties under Section 3.2 hereof. The Company agrees to permit KLA-Tencor and its employees, agents and representatives to have full access on reasonable notice and during regular business hours to its properties, books, records, contracts and other documents, to furnish to KLA-Tencor such financial and operating

30

data and other information with respect to its business and properties as KLA-Tencor shall from time to time reasonably request, and to authorize the Company's employees, agents and representatives to discuss the Company's affairs with employees, agents and representatives of KLA-Tencor. Without limiting the generality of the foregoing, the Company agrees to use its best efforts to cause Arthur Andersen LLP and Cayer Prescott Clune & Chatellier, LLP, to permit KLA-Tencor and its employees, agents and representatives to have full access on reasonable notice and during regular business hours to their work papers with respect to audits of the Company's financial statements.

Section 4.4. SEC FILING; DISTRIBUTION OF PROXY STATEMENT; WARRANT NOTICE; OPTION NOTICE; STOCKHOLDER APPROVAL; AMENDMENTS.

(a) SEC FILING. As promptly as practicable after the execution of this Agreement, the Company will prepare and file with the SEC a proxy statement relating to the terms of the Merger and this Agreement, the Company and its business operations, and the material facts concerning all payments which are "Parachute Payments" as defined in Section 280G(b)(2) of the Code which require stockholder approval, in form and substance reasonably satisfactory to KLA-Tencor and its counsel, to satisfy all requirements of applicable state and federal securities laws, the rules of the American Stock Exchange and the DGCL (the "Proxy Statement"). The Company will respond to any comments of the SEC and will cause the Proxy Statement to be mailed to its Stockholders at the earliest practicable time. The Company will notify KLA-Tencor promptly upon the receipt of any comments from the SEC or its staff in connection with the Proxy Statement and of any request by the SEC or its staff for amendments or supplements to the Proxy Statement or for additional information and will supply KLA-Tencor with copies of all correspondence between the Company or any of its representatives, on the one hand, and the SEC, or its staff on the other hand, with respect to the Proxy Statement.

(b) DISTRIBUTION. The Company shall take all action reasonably necessary in accordance with applicable law to convene a meeting of the Stockholders to be held at the earliest practicable time after the date of this Agreement for the purpose of approving and adopting this Agreement (including the transactions contemplated hereby). Without limiting the generality of the foregoing, as promptly as practicable after the execution of this Agreement, (i) the Company will submit to the Stockholders the Proxy Statement; (ii) the Company will submit to the holders of the Redeemable Warrants the notice (the "Warrant Notice") required by Section 15 of that certain Warrant Agreement dated October 23, 1996 between the Company and American Securities Transfer & Trust, Inc. (the "Warrant Agreement"); (iii) the Company will submit to the holders of the Representative's Warrants the notice (the "Representative's Notice") required by Section F of that certain Warrant Agreement dated October 23, 1996 between the Company and Schneider Securities, Inc. (the "Representative's Agreement"); and (iv) the Company will submit to the holders of all Company Options the notice (the "Option Notice") required by Section (f) of the standard form of option grant agreement issued pursuant to the Company's 1996 Stock Option Plan and the Company's 1996 Formula Stock Option Plan stating that all Company Options not exercised within 30 days of receipt of the Option Notice will be terminated upon the Closing of the Merger on the Effective Date. Neither the Proxy Statement, when mailed or at the time of the meeting of Stockholders to approve the Merger, nor the Warrant Notice, when mailed to the holders of the Redeemable Warrants, nor the

31

Representative's Notice, when mailed to the holders of the Representative's Warrant, nor the Option Notice, when mailed to the holders of the Company Options, shall contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, at the time in light of the circumstances under which they were made, not misleading; provided, however, that the Company shall not be deemed to be deemed to have breached this Section 4.4(b) to with respect to any information provided, or required to be provided, by or on behalf of KLA-Tencor. The Company shall submit the Proxy Statement to the Stockholders, and its Board of Directors shall recommend to the Stockholders the adoption of this Agreement and the approval of the Merger and such other matters referred to above; provided, however, that the Company's Board of Directors may, at any time prior to the Effective Time, withdraw, modify or change such recommendation in

accordance with the provisions of Section 4.6(b). The Company's obligation to call, give notice of, convene and hold a meeting of the Stockholders in accordance with this Section 4.4 shall not be limited or otherwise affected by the commencement, disclosures, announcement or submission by the Company of any Acquisition Proposal (as defined in Section 4.6(a) below), or by any withdrawal, amendment or modification of the recommendation by the Company's Board of Directors with pursuant to Section 4.6(b).

(c) STOCKHOLDER APPROVAL. The Company shall, at such meeting of the Stockholders, present this Agreement and the other matters for adoption by its Stockholders. Subject to the provisions of Section 4.6(b), the Company shall use all reasonable efforts (including without limitation, if requested by KLA-Tencor, promptly engaging a professional proxy solicitor reasonably acceptable to KLA-Tencor) to obtain all votes and approvals of the Stockholders necessary for the approval and adoption of this Agreement and the Merger under the DGCL, the applicable rules of the American Stock Exchange and the Company's Certificate of Incorporation and Bylaws.

(d) AMENDMENTS AND SUPPLEMENTS. If, at any time prior to the Effective Date, any event or circumstance relating to the Merger, the Company, or the Company's officers or directors should be discovered by the Company which should be set forth in an amendment or a supplement to the Proxy Statement, the Company shall promptly inform KLA-Tencor, and the Company shall, in consultation with its independent legal counsel, promptly amend or supplement the Proxy Statement. The Company shall deliver a copy of the amendment or supplement, as the case may be, to KLA-Tencor prior to its filing with the SEC. The form and substance of any such amendment or supplement shall be subject to the prior approval of KLA-Tencor, which approval shall not be unreasonably withheld or delayed.

Section 4.5. CERTAIN EMPLOYEE MATTERS.

(a) TERMINATION OF EMPLOYEES AND CONSULTANTS. As of the Closing, Company shall have taken all steps necessary to terminate effective upon the Closing all employees and consultants of Company or of the Subsidiary (to the extent not earlier terminated) in accordance with all applicable laws.

(b) NOTICES TO EMPLOYEES. The Company shall be responsible and assume all liability for all notices, benefits or payments due to any employees or consultants, and all notices,

32

payments, fines or assessments due to any government authority pursuant to any applicable foreign, federal, state or local law, common law, statute, rule or regulations with respect to the employment, discharge or layoff of employees or consultants by the Company or by the Subsidiary, including but not limited to the Worker Adjustment and Retraining Notification Act, the Code, COBRA and any rules and regulations thereunder; provided, however, that KLA-Tencor shall provide or cause its insurance carrier to provide COBRA continuation coverage to all Company employees and their eligible dependents and any other individual who becomes an M&A qualified beneficiary (as defined by Treasury Regulation Section 54.4980B-9, Q&A-4) as a result of the transactions contemplated by this Agreement). The Company shall provide prior to the Closing all information necessary or appropriate for KLA-Tencor to offer continuation coverage to such employees.

(c) TERMINATION OF 401(k) AND SEVERANCE PLANS. Effective as of the day immediately preceding the Effective Date, the Company and its Affiliates, as applicable, shall each terminate any and all Company Employee Plans, including without limitation, any and all plans intended to include a Code Section 401(k) arrangement (unless KLA-Tencor has previously provided written notice to the Company that such 401(k) plans shall not be terminated). Unless KLA-Tencor provides such written notice to the Company, no later than three business days prior to the Effective Date, the Company shall provide KLA-Tencor with evidence that such Company Employee Plans will be terminated (effective as of the day immediately preceding the Effective Date) pursuant to resolutions of the Company's Board of Directors. The form and substance of such resolutions shall be subject to review and approval of KLA-Tencor. The Company also shall take such other actions in furtherance of terminating each such Company Employee Plan as KLA-Tencor may reasonably require.

(d) PAYMENT OF SEVERANCE PAYMENTS. Immediately prior to the Closing, the Company shall pay all of the Required Severance Payments (set forth on Schedule 4.1(d) hereto); provided, however, that to the extent the Company will have a negative Net Cash Position after the payment of such Required Severance Payments, then the Company may defer the payment of an amount equal to the Permissible Shortfall (as defined in Section 5.1(r)) until after Closing and promptly, but in any event within seven calendar days after the Closing KLA-Tencor shall pay, or cause the Surviving Corporation to pay, any amount still owed under such Required Severance Payments to each respective recipient who has submitted to the Company a full settlement and release of any and all claims against the Company and KLA-Tencor (but in no event shall the aggregate amount paid by KLA-Tencor, or the Surviving Corporation, as the case may be, exceed the Permissible Shortfall amount). Each scheduled recipient of a Required

Severance Payment who shall not provide a full settlement and release of any and all claims against the Company and KLA-Tencor shall receive payments according to the timing schedule which would otherwise apply under the terms of the applicable original agreement providing for such severance.

Section 4.6 NO SOLICITATIONS.

(a) NO SOLICITATION OF TRANSACTIONS. Subject to Section 4.6(b), the Company agrees that: neither it nor any of its directors, officers or other representatives shall, directly or indirectly: (i) initiate, solicit, encourage or otherwise facilitate (including, except as otherwise

33

provided in Section 4.6(b), by way of furnishing information) any inquiries or the making of any proposal or offer with respect to a merger, reorganization, share exchange, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving, or any purchase or sale of all or any significant portion of the assets or any equity securities of, the Company (any such proposal or offer other than the Merger contemplated by this Agreement being hereinafter referred to as an "Acquisition Proposal"); (ii) have any discussion with or provide any confidential information or data to any person or entity relating to an Acquisition Proposal or engage in any negotiations concerning an Acquisition Proposal, or otherwise facilitate any effort or attempt to make or implement an Acquisition Proposal or accept an Acquisition Proposal; (iii) endorse or recommend any Acquisition Proposal; or (iv) enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any Acquisition Proposal; provided, however, that after receipt of an unsolicited, written, bona fide Acquisition Proposal that the Board of Directors of the Company reasonably concludes may constitute a Superior Proposal (as defined below), the Company may submit to the party making such Acquisition Proposal a written list of questions, the sole purpose of which is to elicit clarifications as to the material terms of the Acquisition Proposal so as to enable the Board of Directors of the Company to make a determination whether such Acquisition Proposal is in fact a Superior Proposal (it being agreed that any correspondence with such party shall be limited to questions and such questions shall be limited to the purpose of clarifying the material terms of such Acquisition Proposal and shall not solicit or encourage any new Acquisition Proposal or any change to the Acquisition Proposal, and it being further agreed that the Company shall provide KLA-Tencor with a copy of any correspondence delivered pursuant to this Section 4.6(a) simultaneously with the delivery of such correspondence to any third party). The Company further agrees that it will immediately cease and cause to be terminated (as of the date of this Agreement) any existing activities, discussions or negotiations with any parties conducted heretofore with respect to any Acquisition Proposal. Without limiting the foregoing, it is understood that any violation of the restrictions set forth in the preceding two sentences by (x) any investment banker, attorney or other advisor or representative of the Company in accordance with the instructions of the Company or with the knowledge of the Company, or (y) any officer or director of the Company in accordance with the instructions of the Company or with the knowledge of the Company shall be deemed to be a breach of this Section 4.6(a) by the Company.

In addition to the obligations of the Company set forth above in this Section 4.6(a), the Company as promptly as practicable shall advise KLA-Tencor orally and in writing of any inquiry, Acquisition Proposal or request for non-public information which the Company reasonably believes would lead to an Acquisition Proposal, the material terms and conditions of such inquiry, Acquisition Proposal or request, and the identity of the person or group making any such inquiry, Acquisition Proposal or request. The Company will keep KLA-Tencor informed as promptly as practicable in all material respects of the status and details (including material amendments or proposed material amendments) of any such inquiry, Acquisition Proposal or request.

(b) EXCEPTIONS. Nothing contained in Section 4.6(a) shall prevent the Company or the Company's Board of Directors from (i) complying with the requirements of Rule 14e-2(a) under the Exchange Act with respect to an Acquisition Proposal (to the extent applicable) and any other applicable statutory requirement; (ii) engaging in any discussions or

34

negotiations with, or providing any information to, any person or entity in response to an unsolicited bona fide written Acquisition Proposal by any such person or entity; or (iii) recommending such an unsolicited bona fide written Acquisition Proposal to the Company's Stockholders if and only to the extent that (A) such Board of Directors concludes in good faith (after consultation with its independent legal counsel and financial advisers) that such Acquisition Proposal is reasonably capable of being completed, taking into account all legal, financial, regulatory and other relevant aspects of the Acquisition Proposal and the person or entity making the Acquisition Proposal, and would, if consummated, result in a transaction more favorable to the Company's Stockholders than the transaction contemplated by this Agreement (any such more favorable Acquisition Proposal being referred to in this Agreement as a

"Superior Proposal") (provided, however, that no such Acquisition Proposal shall be deemed to be a Superior Proposal if any financing required to consummate the transaction contemplated by such Acquisition Proposal is not committed), (B) such Board of Directors determines in good faith after consultation with its independent legal counsel that such action is consistent with the satisfaction of its fiduciary duties under applicable law, (C) prior to providing any information or data to any person or entity in connection with a Superior Proposal, such Board of Directors receives from such person or entity an executed confidentiality agreement, (D) prior to providing any information or data to any person or entity or entering into discussions or negotiations with any person or entity, such Board of Directors notifies KLA-Tencor promptly of such inquiries, proposals or offers received by, any such information requested from, or any such discussions or negotiations sought to be initiated or continued with, the Company or any of its directors, officers or other representatives indicating, in connection with such notice, the name of such person or entity and the material terms and conditions of any proposals or offers (the "Notice of Superior Proposal") and (E) KLA-Tencor shall not have, within five business days of KLA-Tencor's receipt of the Notice of Superior Proposal, made an offer that the Company's Board of Directors by a majority vote determines in its good faith judgment (after consultation with a financial adviser) to be at least as favorable to the Company's Stockholders as such Superior Proposal (it being agreed that the Company Board shall convene a meeting to consider any such offer by KLA-Tencor promptly following the receipt thereof).

Section 4.7. INDEMNIFICATION.

(a) Subject to the occurrence of the Closing, KLA-Tencor agrees that all rights to indemnification or exculpation now existing in favor of each present and former director and officer of the Company (the "Indemnified Parties") as provided in the Company's Certificate of Incorporation or By-Laws as in effect as of the date hereof shall survive and remain in full force and effect for a period of three years after the Closing.

(b) KLA-Tencor understands and agrees that, prior to the Effective Time, the Company intends to obtain a "tail" insurance policy that provides coverage substantially similar to the coverage provided under the Company's directors and officers insurance policy in effect on the date of this Agreement for the individuals who are directors and officers of the Company on the date of this Agreement for events occurring prior to the Effective Time; provided, however, that KLA-Tencor shall be provided with at least five business days to review the terms (including without limitation, applicable policy thresholds and deductibles) of any such insurance policy prior to the time the Company incurs any obligation with respect thereto; and

35

provided, further, that the Company shall not pay more than \$60,000 to purchase such policy without KLA-Tencor's prior written consent.

Section 4.8. KOBE STEEL. As soon as practicable after the execution of this Agreement, the Company shall request a meeting with representatives of Kobe Steel USA Holdings, Inc. ("Kobe Steel") (which meeting shall be coordinated with and include Jeffrey L. Hall of KLA-Tencor, or another representative appointed by KLA-Tencor) to discuss the transactions contemplated by this Agreement. The Company shall use reasonable efforts to persuade Kobe Steel to become a party to, and to be bound by, a voting agreement with respect to the shares held by Kobe Steel.

Section 4.9. PATENT LIEN. As soon as practicable after the execution of this Agreement, the Company shall use its best efforts to cause State Street Bank and Trust Company to release the security interest held by it, and any other claims made by it, with respect to the Company's United States patent number 5602401.

ARTICLE 5

CONDITIONS TO OBLIGATIONS OF
KLA-TENCOR, MERGER SUB AND THE COMPANY

Section 5.1. CONDITIONS TO OBLIGATIONS OF KLA-TENCOR AND MERGER SUB. The obligations of KLA-Tencor and Merger Sub to consummate the transactions contemplated hereby are subject to the satisfaction, on or before the Closing, of the following conditions (unless waived in writing by KLA-Tencor and Merger Sub in the manner provided in Section 6.2 hereof):

(a) REPRESENTATIONS, WARRANTIES AND PERFORMANCE OF THE COMPANY. The representations and warranties of the Company set forth in Section 3.2 hereof that are qualified as to materiality shall be accurate on and as of the date hereof, and on and as of the Effective Date as though made on and as of the Effective Date except for those that speak as of a particular date which shall be accurate as of such date, except as set forth on the Disclosure Schedule, and the representations and warranties of the Company set forth in Section 3.2 hereof that are not so qualified shall be accurate in all material

respects on and as of the Effective Date as though made on and as of the Effective Date except for those that speak as of a particular date which shall be accurate in all material respects as of such date, except as set forth on the Disclosure Schedule; and the Company shall have performed in all material respects all obligations and complied with in all material respects all covenants required to be performed or to be complied with by it under this Agreement prior to the Closing. Since the date of this Agreement, there shall not have occurred any Material Adverse Effect, other than continuing operating losses and losses attributable to the abandonment of leasehold improvements that will result when the Company vacates its premises in connection with the termination of the lease for its current space at 46 Jonspin Road, Wilmington, Massachusetts 01887.

(b) AUTHORIZATION. All action necessary to authorize the execution, delivery and performance hereof by the Company and the consummation of the transactions contemplated

36

hereby, including the approval by the Stockholders of the execution, delivery and performance of this Agreement in accordance with the DGCL, shall have been duly and validly taken by the Company. The Company shall have furnished KLA-Tencor with a copy of all resolutions adopted by the Board of Directors and Stockholders of the Company in connection with such action, certified by the Secretary or Assistant Secretary of the Company, together with copies of such other instruments and documents as KLA-Tencor shall have reasonably requested.

(c) GOVERNMENTAL CONSENTS. Any governmental authority having jurisdiction over the Company, KLA-Tencor or Merger Sub, to the extent that its consent or approval is required by applicable law or regulation for the performance of this Agreement or the consummation of the transactions contemplated hereby, shall have granted any necessary consent or approval.

(d) CONTRACTUAL CONSENTS. The parties to each of the contracts, licenses, leases and other agreements, if any, identified on SCHEDULE 5.1(D) hereto shall have consented to the consummation of the transactions contemplated hereby or the assignment of such contract, license, lease or other agreement, as the case may be.

(e) GOOD STANDING CERTIFICATES. The Company shall have delivered to KLA-Tencor a long-form corporate good standing certificate from the State of Delaware and good standing certificates from each jurisdiction in which the Company is qualified to transact business.

(f) PRESIDENT'S CERTIFICATE. The Company shall have delivered to KLA-Tencor a certificate executed by the President of the Company, dated the Effective Date, certifying to the fulfillment of the conditions specified in Section 5.1(a).

(g) DISSENTERS' RIGHTS. The holders of less than 9% of the Company Shares shall have demanded and perfected their right to an appraisal of their Company Shares in accordance with the DGCL.

(h) LEGAL OPINION OF COUNSEL FOR THE COMPANY. KLA-Tencor shall have received an opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel for the Company, dated the Effective Date and in the form attached hereto as EXHIBIT G.

(i) NO LITIGATION OR PROCEEDINGS. No legal action or other proceedings shall be pending or threatened which may materially and adversely affect the ability of the parties to consummate of the transactions contemplated by this Agreement, or which may reasonably be expected to result in a Material Adverse Effect.

(j) AGREEMENTS IN FULL FORCE AND EFFECT. KLA-Tencor shall have delivered its signature to the Consulting Agreement and the Consulting Agreement and the Voting Agreement shall be in full force and effect.

(k) TERMINATION OF STOCK OPTIONS; WARRANT NOTICE. All Company Options shall have been exercised or shall have expired or have been legally terminated without liability

37

to the Company. The Company shall have submitted the Warrant Notice to the holders of the Redeemable Warrants pursuant to Section 15 of the Warrant Agreement, and the Representative's Notice to the holders of the Representative's Warrants pursuant to Section F of the Representative's Agreement, as required by Section 4.4 of this Agreement.

(l) RESIGNATIONS; EXECUTIVE EMPLOYMENT AGREEMENTS. (i) The Company shall have delivered to KLA-Tencor the written resignations of Chase, Jay L. Ormsby, Abdu Boudour, N. Guy Johnson, Marcia L. Olson, Freeman and Marguerite J. Hill from all positions with the Company and the Subsidiary, such resignations to be effective as of the Effective Date; (ii) the executive

employment agreements between the Company and each of such individuals shall have been legally terminated without further liability to the Company and KLA-Tencor; (iii) all other severance agreements, retention agreements and similar agreements to which the Company is a party or by which it is bound shall have been legally terminated without further liability to the Company or KLA-Tencor (except that, promptly following the Closing KLA-Tencor shall pay, or shall cause the Surviving Corporation to pay, an amount equal to the Permissible Shortfall in satisfaction of the remaining portion of the Company's Required Severance Payments); and (iv) the Company shall have delivered to KLA-Tencor an executed settlement and release from each scheduled recipient of the Required Severance Payments in form and substance reasonably acceptable to KLA-Tencor.

(m) TERMINATION OF CONSULTING AGREEMENT. That certain Consulting Agreement dated May 7, 2001 between the Company and David B. Lloyd shall have been legally terminated without liability to the Company.

(n) DOCUMENTS SATISFACTORY. The form and substance of all legal matters contemplated herein and of all papers used or delivered hereunder shall be reasonably acceptable to KLA-Tencor, and KLA-Tencor shall have received all documents that it may have reasonably requested in connection with the transactions contemplated hereby, in form and substance reasonably satisfactory to it.

(o) STOCKHOLDER APPROVAL. The adoption by the Stockholders of this Agreement and the approval of the Merger in accordance with the DGCL shall have been duly and validly obtained.

(p) COMPANY EMPLOYEE PLANS TERMINATED. All Company Employee Plans shall have been terminated and KLA-Tencor shall have received evidence to its reasonable satisfaction that such terminations were completed in accordance with all applicable laws.

(q) OUTSTANDING CAPITAL STOCK. There shall be no more than 3,010,000 Company Shares issued and outstanding immediately prior to the Effective Time (the "Closing Shares"), and KLA-Tencor shall have received a written certification of such fact, dated as of the Closing Date, from the Company's transfer agent with respect to the Closing Shares; notwithstanding the foregoing, the Closing Shares may be increased by the Additional Shares.

(r) NET CASH POSITION. As of the Effective Time, the Company's Net Cash Position shall not be less than (\$365,000) (the "Permissible Shortfall"); provided, however, that

38

in the event any portion of the amount listed from the company set forth on SCHEDULE 5.1(r) is not collected or becomes uncollectable, then the Permissible Shortfall amount may be increased by the uncollected or uncollectable amount, but in no event shall the Permissible Shortfall amount exceed \$515,000. "Net Cash Position" shall mean the difference between the Company's cash minus the Company's liabilities (net of legal reserves of \$125,250 and warranty reserves of \$50,000, provided, that no adjustment to such reserve accounts shall have been made (or shall have reason to be made) prior to the Effective Time and no payments against such reserves shall have been made (or shall have reason to be made) prior to the Effective Time) as of the Effective Time. For purposes of determining the Company's compliance with this Section 5.1(r) only as of the Effective Time, the calculation of Net Cash Position immediately prior to the Effective Time may be adjusted to the extent legal, SEC and printing fees incurred by the Company for services directly associated with the transactions contemplated by this Agreement, in the aggregate, exceed \$120,000. In addition, the Permissible Shortfall shall be increased by \$7,000 for each calendar day subsequent to October 31, 2001 and prior to the Effective Time.

Section 5.2. CONDITIONS TO OBLIGATIONS OF THE COMPANY. The obligations of the Company to consummate the transactions contemplated hereby are subject to the satisfaction, on or before the Closing, of the following conditions (unless waived by the Company in writing in the manner provided in Section 6.2 hereof):

(a) REPRESENTATIONS, WARRANTIES AND PERFORMANCE OF KLA-TENCOR AND MERGER SUB. The representations and warranties of KLA-Tencor and Merger Sub set forth in Section 3.3 hereof that are qualified as to materiality shall be accurate on and as of the date hereof, and on and as of the Effective Date as though made on and as of the Effective Date except for those that speak as of a particular date which shall be accurate as of such date, and the representations and warranties of KLA-Tencor and Merger Sub set forth in Section 3.3 hereof that are not so qualified shall be accurate in all material respects on and as of the Effective Date as though made on and as of the Effective Date except for those that speak as of a particular date which shall be accurate in all material respects as of such date; and KLA-Tencor and Merger Sub shall have performed in all material respects all obligations and complied with in all material respects all covenants required to be performed or to be complied with by them under this Agreement prior to the Closing.

(b) AUTHORIZATION. All action necessary to authorize the execution, delivery and performance hereof by KLA-Tencor and Merger Sub and the

consummation of the transactions contemplated hereby shall have been duly and validly taken by the Board of Directors and the stockholders of Merger Sub. KLA-Tencor and Merger Sub shall have furnished the Company with a copy of all resolutions adopted by the Board of Directors and the stockholders of Merger Sub in connection with such actions, certified by the Secretary or an Assistant Secretary of Merger Sub, together with copies of such other instruments and documents as the Company shall have reasonably requested.

(c) GOVERNMENTAL CONSENTS. Any governmental authority having jurisdiction over the Company, KLA-Tencor or Merger Sub, to the extent that its consent or approval is required by applicable law or regulation for the performance of this Agreement or the

39

consummation of the transactions contemplated hereby, shall have granted any necessary consent or approval.

(d) STOCKHOLDER APPROVAL. The adoption by the Stockholders of this Agreement and the approval of the Merger in accordance with the DGCL shall have been duly and validly obtained.

(e) GOOD STANDING CERTIFICATES. Each of KLA-Tencor and Merger Sub shall deliver to the Company a long form corporate good standing certificate from the State of Delaware.

(f) OFFICER'S CERTIFICATE. Each of KLA-Tencor and Merger Sub shall have delivered to the Company a certificate executed by an officer of KLA-Tencor and Merger Sub, respectively, dated the Effective Date, certifying to the fulfillment of the conditions specified in Section 5.2(a).

(g) NO LITIGATION OR PROCEEDINGS. No legal action or other proceedings shall be pending or threatened which may materially and adversely affect the ability of the parties to consummate the transactions contemplated by this Agreement.

(h) LEGAL OPINION OF COUNSEL FOR KLA-TENCOR. The Company shall have received an opinion of Morse, Barnes-Brown & Pendleton, P.C., counsel for KLA-Tencor and Merger Sub, dated the Effective Date and in the form attached hereto as EXHIBIT H.

(i) AGREEMENT IN FULL FORCE AND EFFECT. Chase shall have delivered his signature to the Consulting Agreement and the Consulting Agreement shall be in full force and effect.

(j) DOCUMENTS SATISFACTORY. The form and substance of all legal matters contemplated herein and of all papers used or delivered hereunder shall be reasonably acceptable to counsel for the Company and the Company shall have received all documents that such counsel may have reasonably requested in connection with the transactions contemplated hereby, in form and substance reasonably satisfactory to such counsel.

ARTICLE 6

MODIFICATION, TERMINATION AND WAIVER; EXPENSES

Section 6.1. MODIFICATION, AMENDMENTS AND WAIVERS. The parties may mutually amend any provision of this Agreement at any time prior to the Effective Date; provided, however, that any amendment effected subsequent to Stockholder approval shall be subject to the restrictions contained in the DGCL. No amendment of any provision of this Agreement shall be valid unless the same shall be in writing and signed by all of the parties.

40

Section 6.2. WAIVERS. The Company, on the one hand, and KLA-Tencor and Merger Sub, on the other hand, may, by a written signed instrument, extend the time for or waive the performance of any of the obligations of the other party hereto or waive compliance by such other party with any of the covenants or conditions contained herein.

Section 6.3. TERMINATION. At any time prior to the Closing, this Agreement may be terminated and the Merger and the other transactions contemplated by this Agreement may be abandoned, notwithstanding any requisite approval and adoption of this Agreement and the transactions contemplated by this Agreement, as follows:

(a) by mutual written consent of KLA-Tencor and the Company;

or

(b) by KLA-Tencor, upon a breach of any representation, warranty, covenant or agreement on the part of the Company set forth in this Agreement, or if any representation or warranty of the Company shall have become untrue, in either case such that the conditions set forth in Section 5.1(a)

would not be satisfied, or if the Company has more than 3,010,000 shares of Common Stock outstanding immediately prior to the Closing (not including any Additional Shares) (as the case may be, a "Terminating Company Breach"); provided, however, that, if such Terminating Company Breach is curable by the Company and for so long as the Company continues to exercise all reasonable efforts to cure such Terminating Company Breach, KLA-Tencor and Merger Sub may not terminate this Agreement under this Section 6.3(b); or

(c) by the Company, upon a breach of any representation, warranty, covenant or agreement on the part of KLA-Tencor or Merger Sub set forth in this Agreement, or if any representation or warranty of KLA-Tencor or Merger Sub shall have become untrue, in either case such that the conditions set forth in Section 5.2(a) would not be satisfied (a "Terminating KLA-Tencor Breach"); provided, however, that, if such Terminating KLA-Tencor Breach is curable by KLA-Tencor and for so long as KLA-Tencor continues to exercise all reasonable efforts to cure such Terminating KLA-Tencor Breach, the Company may not terminate this Agreement under this Section 6.3(c); or

(d) by KLA-Tencor or the Company, and without further liability to either KLA-Tencor or the Company if (i) any court of competent jurisdiction or other governmental entity shall have issued any order or taken any other action permanently restraining, enjoining or otherwise prohibiting the transactions contemplated by this Agreement, and such order or other action shall have become final and nonappealable; or (ii) there shall be any action taken, or any statute, rule, regulation or order enacted, promulgated, issued or deemed applicable to this Agreement, by a governmental entity that would make consummation of this Agreement illegal; or

(e) by KLA-Tencor or the Company if (i) the Board of Directors of the Company withdraws, modifies or changes its recommendation of this Agreement or the transactions contemplated hereby in a manner adverse to KLA-Tencor or shall have resolved to do so, or (ii) the Board of Directors of the Company shall, at a time when there is an Acquisition Proposal, fail to reaffirm such approval or recommendation upon the reasonable request of KLA-Tencor, or (iii) the Board of Directors of the Company shall have recommended to the

41

Stockholders an Acquisition Proposal or shall have resolved to do so or (iv) a tender offer or exchange offer for 10% or more of the outstanding shares of capital stock of the Company is commenced, and the Board of Directors of the Company fails, within ten days after such commencement, to recommend against acceptance of such tender offer or exchange offer by its Stockholders (including by taking no position with respect to the acceptance of such tender offer or exchange offer by the Stockholders); or

(f) by KLA-Tencor or the Company, if the Stockholders disapprove any matter submitted to them pursuant to Section 4.4 of this Agreement; provided, however, that the right to terminate this Agreement under this Section 6.3(f) shall not be available to the Company where failure to obtain approval shall have been caused by the Company's breach of this Agreement; or

(g) by KLA-Tencor or the Company, if the Closing does not occur by October 31, 2001 or, if the SEC reviews the Proxy Statement, the date determined by adding to October 31, 2001 the total number of calendar days included in the period commencing on the date that the SEC determines to review the Company's filings through and including the date that the SEC notifies the Company that it has completed its review (the "Termination Date"); provided, however, that the right to terminate this Agreement under this Section 6.3(g) shall not be available to any party whose failure to fulfill any obligation under this Agreement has been the cause of, or resulted in, the failure of the Closing to occur on or before the Termination Date.

Section 6.4. EFFECT OF TERMINATION. If this Agreement shall be terminated as provided in Section 6.3, this Agreement shall forthwith become void and there shall be no liability under this Agreement on the part of KLA-Tencor, Merger Sub or the Company or any of their respective officers or directors and all rights and obligations of each party hereto shall cease, except (i) as provided in Sections 6.5 and 7.2 and (ii) nothing herein shall relieve any party from liability for any willful breach hereof.

Section 6.5. EXPENSES; TERMINATION FEES.

(a) Except as set forth in this Section 6.5, all Expenses (as defined below) incurred in connection with this Agreement and the transactions contemplated by this Agreement shall be paid by the party incurring such expenses, whether or not the Merger or any other transaction is consummated. As used in this Agreement, "Expenses" shall include all out-of-pocket expenses (including, without limitation, all fees and expenses of counsel, accountants, experts and consultants to a party hereto and its affiliates) incurred by a party or on its behalf in connection with or related to the authorization, preparation, negotiation, execution and performance of this Agreement, the preparation, printing, filing and mailing of the Proxy Statement, the

solicitation of Stockholder approvals and all other matters related to the closing of the Merger and the other transactions contemplated by this Agreement.

(b) The Company agrees that, if KLA-Tencor shall terminate this Agreement pursuant to Section 6.3(b), (e), (f) or (g) and, prior to any such termination pursuant to Section 6.3(g), there shall exist a Superior Proposal, then the Company shall pay to KLA-Tencor an amount equal to \$250,000 (the "KLA-Tencor Termination Fee").

42

(c) KLA-Tencor agrees that, if the Company shall terminate this Agreement pursuant to Section 6.3(c), then KLA-Tencor shall pay the Company an amount equal to the sum of \$250,000 (the "Company Termination Fee").

(d) Each of KLA-Tencor, Merger Sub and the Company agrees that the payments provided for in Sections 6.5(b) and (c) shall be the sole and exclusive remedies of the parties upon a termination of this Agreement pursuant to Sections 6.3(b), (c), (e), (f) and (g), as the case may be, and such remedies shall be limited to the sums stipulated in Sections 6.5(b) and (c), regardless of the circumstances giving rise to such termination. The KLA-Tencor Termination Fee and the Company Termination Fee are intended by the parties to be liquidated damages to reimburse the Company or KLA-Tencor, as the case may be, for the Expenses incurred by it and to compensate the Company or KLA-Tencor, as the case may be, for its opportunity costs in pursuing the Merger; the parties agree that it will be difficult or impossible to quantify such opportunity costs, and, having considered the size of each of the KLA-Tencor Termination Fee and the Company Termination Fee in absolute terms and in relation to the value of the transactions contemplated by this Agreement, agree that such fees are reasonable approximations of the Expenses and opportunity costs the parties will incur pursuing the Merger.

(e) Any payment of a KLA-Tencor Termination Fee or a Company Termination Fee required to be made pursuant to this Section 6.5 shall be made not later than two business days after the termination of this Agreement. Any such payment shall be made by wire transfer of immediately available funds to an account designated by the party entitled to payment.

(f) In the event that either party shall fail to pay any amount payable pursuant to this Section 6.5, when due, such party shall be liable for all costs and expenses actually incurred or accrued by the other party (including, without limitation, fees and expenses of counsel) in connection with the collection under and enforcement of this Section 6.5, together with interest on such unpaid amount, commencing on the date that such amount became due, at a rate equal to the "prime rate" of announced by The Wall Street Journal from time to time, plus 2.00%.

ARTICLE 7

GENERAL

Section 7.1. NOTICES. All notices, requests, demands, consents and other communications which are required or permitted hereunder shall be in writing, and shall be deemed given when actually received or if earlier, (i) immediately upon sending by telecopy if the telecopier produces a legible record of such notice, (ii) one business day after deposit with a nationally recognized overnight courier, charges prepaid, or (iii) five days after deposit in the U.S. mail by certified mail, return receipt requested, postage prepaid, addressed as follows:

If to KLA-Tencor or Merger Sub:

43

KLA-Tencor Corporation
160 Rio Robles
San Jose, California 95134
Attention: Jeffrey L. Hall
Vice President, Mergers & Acquisitions
Telecopy Number: 408-875-2223

With copies to:

KLA-Tencor Corporation
160 Rio Robles
San Jose, California 95134
Attention: Stuart J. Nichols, Esq.
Vice President and General Counsel
Telecopy Number: 408-875-2002

and

Morse, Barnes-Brown & Pendleton, P.C.

Reservoir Place
1601 Trapelo Road
Waltham, Massachusetts 02451
Attention: Carl F. Barnes, Esq.
Telecopy Number: 781-622-5933

If to the Company, to:

QC Optics, Inc.
46 Jonspin Road
Wilmington, Massachusetts 01887
Attention: President
Telecopy Number: 978-657-4608

With a copy to:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Attention: Neil H. Aronson, Esq.
Telecopy Number: 617-542-2241

or to such other address as any party hereto may designate in writing to the other parties, specifying a change of address for the purpose of this Agreement.

44

Section 7.2. NON-SURVIVAL OF REPRESENTATIONS. The representations, warranties and agreements in this Agreement shall terminate upon the Closing or upon the termination of this Agreement pursuant to Section 6.3, as the case may be, except that (a) those covenants and agreements that by their terms apply or are to be performed in whole or in part after the Effective Time and this Article 7 shall survive the Effective Time for the respective periods set forth therein or, if no such period is specified, for six years and (b) the representations, warranties and agreements set forth in Section 6.5 and this Article 7 shall survive termination for the respective periods set forth therein or, if no such period is specified, for six years.

Section 7.3. ENTIRE AGREEMENT. This Agreement and the agreements specifically referred to herein supersede any and all oral or written agreements or understandings heretofore made relating to the subject matter hereof and constitute the entire agreement of the parties relating to the subject matter hereof, except for the Non-Disclosure Agreement dated February 21, 2001 executed by KLA-Tencor and the Company, attached hereto as EXHIBIT I (the "Non-Disclosure Agreement") which Non-Disclosure Agreement shall remain in full force and effect.

Section 7.4. NO IMPLIED RIGHTS OR REMEDIES. Except as otherwise expressly provided herein, nothing herein expressed or implied is intended or shall be construed to confer upon or to give any person, firm or corporation, other than the parties hereto, any rights or remedies under or by reason of this Agreement.

Section 7.5. HEADINGS. The headings in this Agreement are inserted for convenience of reference only and shall not be a part of or control or affect the meaning hereof.

Section 7.6. SEVERABILITY. If any provision of this Agreement shall be declared void or unenforceable by any judicial or administrative authority, the validity of any other provision shall not be affected thereby. The parties hereto further agree to replace such void or enforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the extent possible, the mutual economic, business and other purposes of such void or unenforceable provision.

Section 7.7. COUNTERPARTS. This Agreement may be executed in several counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Section 7.8. ARBITRATION; RELIEF.

(a) Except as set forth in Section 7.8(b), any controversy, dispute or claim arising out of or in connection with this Agreement, or the breach, termination or validity hereof, shall be settled by final and binding arbitration to be conducted by an arbitration tribunal in City of Boston, Massachusetts, pursuant to the rules of the American Arbitration Association. The arbitration tribunal shall consist of three arbitrators. The party initiating arbitration shall nominate one arbitrator in the request for arbitration and the other party shall nominate a second in the answer thereto within 30 days of receipt of the request. The two arbitrators so named will then jointly appoint the third arbitrator. If the answering party fails to nominate its arbitrator

45

within the thirty 30-day period, or if the arbitrators named by the parties fail to agree on the third arbitrator within 60 days, the office of the American Arbitration Association in City of Boston, Massachusetts shall make the necessary appointments of such arbitrator(s). The decision or award of the arbitration tribunal (by a majority determination, or if there is no majority, then by the determination of the third arbitrator, if any), including any award of fees and/or expenses, shall be final, and judgment upon such decision or award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such decision or award and an order of enforcement. In the event of any procedural matter not covered by the aforesaid rules, the procedural law of the Commonwealth of Massachusetts shall govern.

(b) Notwithstanding the provisions of, and in addition to the rights set forth in, Section 7.8(a), in the event of a breach of the provisions of this Agreement by a party to this Agreement prior to the Closing, the non-breaching party shall have the right to specific performance and injunctive relief, without the necessity of posting any bond or other security, it being acknowledged and agreed that money damages will not provide an adequate remedy.

(c) In the event litigation is maintained by a party to this Agreement against any other party to enforce an arbitration award rendered under Section 7.8(a) or to seek specific performance of injunctive relief under Section 7.8(b), then the party prevailing in such litigation shall be entitled to recover from the non-prevailing party reasonable attorneys' fees and costs of suit.

Section 7.9. EXHIBITS AND SCHEDULES. The Exhibits and Schedules attached hereto and referred to in this Agreement are a part of this Agreement for all purposes.

Section 7.10. ASSIGNMENT. This Agreement and the rights and duties hereunder shall be binding upon and inure to the benefit of the successors, assigns, heirs and legal and personal representatives of the parties hereto, but shall not be assignable or delegable by any party without the prior written consent of the other parties and any purported assignment without such prior written consent shall be null and void, except that KLA-Tencor and Merger Sub may assign this Agreement, or rights and duties hereunder, after the Closing.

Section 7.11. FURTHER ASSURANCES. Each party will execute and furnish to the other all documents and will do or cause to be done all other things that the other party may reasonably request from time to time in order to give full effect to this Agreement and to effectuate the intent of the parties.

Section 7.12. GENDER. In this Agreement, unless the context requires otherwise the singular includes the plural, the plural the singular, the masculine gender includes the neuter, masculine and feminine genders and vice versa.

Section 7.13. PUBLIC ANNOUNCEMENT. The content and timing of any public announcement pertaining to this Agreement shall be subject to the prior agreement and approval of KLA-Tencor and the Company; provided, however, that such approval shall not be unreasonably withheld or delayed.

46

Section 7.14. GOVERNING LAW. This Agreement shall be governed by the law of the Commonwealth of Massachusetts applicable to agreements made and to be performed wholly within such jurisdiction, without regard to the conflicts of laws provisions thereof.

[The remainder of this page has intentionally been left blank.]

47

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed under seal as of the date first written above.

KLA-TENCOR CORPORATION

By: /s/ John Kispert

John Kispert
Chief Financial Officer

KATMANDU ACQUISITION CORP.

By: /s/ Jeffrey L. Hall

Jeffrey L. Hall
President

QC OPTICS, INC.

By: /s/ Eric T. Chase

Eric T. Chase
President

STOCKHOLDER VOTING AGREEMENT

THIS STOCKHOLDER VOTING AGREEMENT (this "Agreement") is made this 31st day of August, 2001, by and among KLA-Tencor Corporation, a Delaware corporation ("KLA-Tencor"), QC Optics, Inc., a Delaware corporation ("Company"), and the stockholders of the Company listed on SCHEDULE A to this Agreement (collectively, the "Stockholders" and each, individually, a "Stockholder").

WHEREAS, as of the date hereof, the Stockholders collectively own of record shares of capital stock of the Company as set forth on SCHEDULE A attached hereto (such shares, together with any other voting or equity of securities of the Company hereafter acquired by any Stockholder prior to the termination of this Agreement, being referred to herein collectively as the "Shares");

WHEREAS, pursuant to a certain Agreement and Plan of Merger dated as of the date of this Agreement (the "Merger Agreement"), by and among KLA-Tencor, Katmandu Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of KLA-Tencor ("Merger Sub"), and the Company, KLA-Tencor has agreed to acquire the Company through a merger transaction (the "Merger") involving the merger of Merger Sub into the Company;

WHEREAS, as a condition to the willingness of KLA-Tencor to enter into the Merger Agreement, KLA-Tencor has required that the Stockholders agree, and in order to induce KLA-Tencor to enter into the Merger Agreement, the Stockholders are willing to agree, during the term of this Agreement, to vote in favor of the adoption of the Merger Agreement, the Merger and the transactions contemplated thereby and to restrict the transfer or disposition of any of the Shares;

WHEREAS, capitalized terms used in this Agreement without definition shall have such meanings as ascribed to them under the Merger Agreement;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements contained herein, and for other good and valuable consideration, the receipt of which is acknowledged by each party hereto, and intending to be legally bound hereby, the parties hereby agree, severally and not jointly, as follows:

Section 1. VOTING OF SHARES.

(a) Each Stockholder covenants and agrees that during the period beginning on the date hereof and ending on the earlier to occur of (i) the Effective Time and (ii) the termination of the Merger Agreement in accordance with its terms (such period the "Expiration Date") (A) by the parties pursuant to Section 6.3(a) of the Merger Agreement, (B) by KLA-Tencor pursuant to any provision of the Merger Agreement, or (C) by the Company pursuant to Section 6.3(c), (d), or (g) of the Merger Agreement, at any regular, special or adjourned meeting

1

of the stockholders of the Company, however called (a "Stockholders' Meeting"), and in any action by written consent of the stockholders of the Company (a "Written Consent"), such Stockholder will vote, or cause to be voted, all of its respective Shares (i) in favor of the adoption of the Merger Agreement (as the Merger Agreement may be modified or amended from time to time in a manner not adverse to the Stockholders) and the approval of the Merger as contemplated by the Merger Agreement, and (ii) against any Acquisition Proposal and against any other action or transaction that may reasonably be construed to make the consummation of the Merger by KLA-Tencor more difficult or expensive. Prior to the Expiration Date, no Stockholder shall enter into any agreement or understanding with any person or vote or give instructions in any manner inconsistent with this Section 1.

(b) Each Stockholder hereby grants to, and appoints, KLA-Tencor, and any individual designated in writing by KLA-Tencor, and each of them individually, as its proxy and attorney-in-fact (with full power of substitution), for and in its name, place and stead, to vote its Shares at any Stockholders' Meeting and in any Written Consent with respect to any of the matters specified in, and in accordance and consistent with, this Section 1. Each Stockholder understands and acknowledges that KLA-Tencor is entering into the Merger Agreement in reliance upon the Stockholder's execution and delivery of this Agreement. Each Stockholder hereby affirms that the irrevocable proxy set forth in this Section 1(b) is given in connection with the execution of the Merger Agreement, and that such irrevocable proxy is given to secure the performance of the duties of such Stockholder under this Agreement. Except as otherwise provided for herein, each Stockholder hereby (i) affirms that the proxy is coupled with an interest and may under no circumstances be revoked, (ii) ratifies and confirms all that the proxies appointed hereunder may lawfully do or cause to be done by virtue hereof and (iii) affirms that such irrevocable proxy is executed and intended to be irrevocable in accordance with the

provisions of Section 212 of the Delaware General Corporation Law. Notwithstanding any other provisions of this Agreement, the proxy granted hereunder shall automatically terminate upon the termination of this Agreement.

Section 2. TRANSFER OF SHARES.

(a) Each Stockholder covenants and agrees that during the period beginning on the date hereof and ending on the Expiration Date that such Stockholder will not directly or indirectly (i) sell, assign, transfer (including by merger, interspousal disposition pursuant to a domestic relations proceeding or otherwise by operation of law), pledge, encumber or otherwise dispose of any of its Shares, (ii) deposit any of its Shares into a voting trust or enter into a voting agreement or arrangement with respect to the Shares or grant any proxy or power of attorney with respect thereto which is inconsistent with this Agreement or (iii) enter into any contract, option or other voluntary arrangement or undertaking with respect to the direct or indirect sale, assignment, transfer (including by merger, interspousal disposition pursuant to a domestic relations proceeding or otherwise by operation of law) or other disposition of any Shares. In the event any party to this Agreement dies prior to the Expiration Date, then this Agreement shall be binding on the descendants, executors, administrators, heirs and assigns of such party. Any action or attempted action in violation of this Agreement shall be null and void.

2

(b) Promptly upon the execution of this Agreement, the Company agrees to notify the transfer agent of its Common Stock, \$.01 par value per share ("Common Stock") of the existence of this Agreement and to impose appropriate restrictions on such transfer agent against facilitating any attempted transfer of any of the Shares. Promptly upon the termination of this Agreement, the Company may notify the transfer agent of the termination of this Agreement and instruct the transfer agent to remove all restrictions on such transfer agent against facilitating any attempted transfer of any of the Shares, and, if requested by the Company, KLA-Tencor agrees to promptly concur with such notification and instructions.

Section 3. REPRESENTATIONS AND WARRANTIES OF THE STOCKHOLDERS. Each Stockholder on its own behalf hereby severally represents and warrants to KLA-Tencor, solely with respect to itself and its ownership of its Shares, but not with respect to any other Stockholder, as follows:

(a) OWNERSHIP OF SHARES. On the date hereof, and except as specifically set forth on SCHEDULE A attached hereto, such Shares are owned beneficially by such Stockholder or its nominee. Such Stockholder has sole voting power, without restrictions, with respect to all of such Shares. Stockholder does not beneficially own any shares of capital stock of the Company other than the Shares.

(b) POWER; BINDING AGREEMENT. Such Stockholder has the legal capacity, power and authority to enter into and perform all of its obligations under this Agreement. The execution, delivery and performance of this Agreement by such Stockholder will not violate any material agreement to which such Stockholder is a party, including, without limitation, any voting agreement, stockholders' agreement, partnership agreement or voting trust. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes a valid and binding obligation of such Stockholder, enforceable against such Stockholder in accordance with its terms.

(c) NO CONFLICTS. The execution and delivery of this Agreement do not, and the consummation of the transactions contemplated hereby will not, conflict with or result in any violation of, or default (with or without notice or lapse of time, or both) under, or give rise to a right of termination, cancellation or acceleration of any obligation or to loss of a material benefit under, any provision of any loan or credit agreement, note, bond, mortgage, indenture, lease, or other agreement, instrument, permit, concession, franchise, license, judgment, order, decree, statute, law, ordinance, rule or regulation applicable to such Stockholder or any of its properties or assets.

(d) NO ENCUMBRANCES. As of the date hereof the Shares are, and at all times up until the Expiration Date the Shares will be, free and clear of any rights of first refusal, co-sale rights, security interests, liens, pledges, claims, options, charges or other encumbrances.

Section 4. NO SOLICITATION. Prior to the termination of this Agreement in accordance with its terms, each Stockholder agrees, in its individual capacity as a stockholder of the Company, that it will not, nor will it authorize or permit any of its employees, agents and representatives to, directly or indirectly, (a) initiate, solicit or encourage any inquiries or the making of any Acquisition Proposal, (b) enter into any agreement with respect to any Acquisition Proposal, or (c) participate in any discussions or negotiations regarding, or furnish to

3

any person any information with respect to, or take any other action to

facilitate any inquiries or the making of any proposal that constitutes, or may reasonably be expected to lead to, any Acquisition Proposal. Notwithstanding the foregoing, each Stockholder who serves as an officer or director of the Company may take such actions as are allowed under the provisions of Section 4.6 of the Merger Agreement.

Section 5. TERMINATION. This Agreement shall terminate upon the earliest to occur of (i) the Effective Time, (ii) the written agreement of the parties hereto to terminate this Agreement, or (iii) any termination of the Merger Agreement in accordance with the terms thereof; provided, however, that termination of the Merger Agreement in accordance with its terms shall not relieve any party of liability for a breach hereof prior to termination.

Section 6. SPECIFIC PERFORMANCE. Each party expressly understands and agrees that any breach of this Agreement would cause irreparable harm to the other parties and that, in addition to any other remedy which such party might have, an aggrieved party shall be entitled to injunctive relief for, and to prevent, any such breach, without the necessity of posting any bond or other security. The breaching party hereby agrees that should any aggrieved party institute any action or proceeding for injunctive or similar equitable relief to enforce these covenants, the breaching party waives and agrees not to assert the claims or defenses that the aggrieved party has an adequate remedy at law or that the aggrieved party will not suffer irreparable damage.

Section 7. FIDUCIARY DUTIES. Each Stockholder is signing this Agreement solely in such Stockholder's capacity as an owner of its respective Shares or as trustee of a voting trust, and nothing herein shall prohibit, prevent or preclude such Stockholder from taking or not taking any action in his capacity as an officer or director of the Company.

Section 8. MISCELLANEOUS.

(a) All notices, requests, demands, consents and other communications which are required or permitted hereunder shall be in writing, and shall be deemed given when actually received or if earlier, (i) immediately upon sending by telecopy if the telecopier produces a legible record of such notice, (ii) one business day after deposit with a nationally recognized overnight courier, charges prepaid, or (iii) five days after deposit in the U.S. mail by certified mail, return receipt requested, postage prepaid, addressed as follows:

If to KLA-Tencor: KLA-Tencor Corporation
160 Rio Robles
San Jose, California 95134
Attention: Jeffrey L. Hall
Vice President, Mergers & Acquisitions
Telecopy Number: 408-875-2223

with copies to:

KLA-Tencor Corporation

4

160 Rio Robles
San Jose, California 95134
Attention: Stuart J. Nichols, Esq.
Vice President and General Counsel
Telecopy Number: 408-875-2002

and

Morse, Barnes-Brown & Pendleton, P.C.
Reservoir Place
1601 Trapelo Road
Waltham, Massachusetts 02451
Attention: Carl F. Barnes, Esq.
Telecopy Number: 781-622-5933

If to the Stockholders:

At the addresses set forth on SCHEDULE A attached hereto,

with copies to:

QC Optics, Inc.
46 Jonspin Road
Wilmington, Massachusetts 01887
Attention: President
Telecopy Number: 978-657-4608

and

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Attention: Neil H. Aronson, Esq.
Telecopy Number: 617-542-2241

or to such other address as any party hereto may designate in writing to the other parties, specifying a change of address for the purpose of this Agreement.

(b) This Agreement and the agreements specifically referred to herein, or in the Merger Agreement, supersede any and all oral or written agreements or understandings heretofore made relating to the subject matter hereof and constitute the entire agreement of the parties relating to the subject matter hereof, except for the Non-Disclosure Agreement. This Agreement may not be amended, modified or rescinded except by an instrument in writing signed by each of the parties hereto.

5

(c) If any provision of this Agreement shall be declared void or unenforceable by any judicial or administrative authority, the validity of any other provision shall not be affected thereby. The parties hereto further agree to replace such void or enforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the extent possible, the mutual economic, business and other purposes of such void or unenforceable provision.

(d) This Agreement shall be binding upon and inure to the benefit of the parties, their respective successors and permitted assigns.

(e) In this Agreement, unless the context requires otherwise the singular includes the plural, the plural the singular, the masculine gender includes the neuter, masculine and feminine genders and vice versa.

(f) This Agreement shall be governed by the law of the Commonwealth of Massachusetts applicable to agreements made and to be performed wholly within such jurisdiction, without regard to the conflicts of law provisions thereof.

(g) Except as set forth in Section 8(h), any controversy, dispute or claim arising out of or in connection with this Agreement, or the breach, termination or validity hereof, shall be settled by final and binding arbitration to be conducted by an arbitration tribunal in City of Boston, Massachusetts, pursuant to the rules of the American Arbitration Association. The arbitration tribunal shall consist of three arbitrators. The party initiating arbitration shall nominate one arbitrator in the request for arbitration and the other party shall nominate a second in the answer thereto within 30 days of receipt of the request. The two arbitrators so named will then jointly appoint the third arbitrator. If the answering party fails to nominate its arbitrator within the thirty 30-day period, or if the arbitrators named by the parties fail to agree on the third arbitrator within 60 days, the office of the American Arbitration Association in City of Boston, Massachusetts shall make the necessary appointments of such arbitrator(s). The decision or award of the arbitration tribunal (by a majority determination, or if there is no majority, then by the determination of the third arbitrator, if any), including any award of fees and/or expenses, shall be final, and judgment upon such decision or award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such decision or award and an order of enforcement. In the event of any procedural matter not covered by the aforesaid rules, the procedural law of the Commonwealth of Massachusetts shall govern.

(h) Notwithstanding the provisions of, and in addition to the rights set forth in, Section 8(g), in the event of a breach of the provisions of this Agreement by a party to this Agreement prior to the Closing, any non-breaching party shall have the right to specific performance and injunctive relief, it being acknowledged and agreed that money damages will not provide an adequate remedy.

(i) In the event litigation is maintained by a party to this Agreement against any other party to enforce an arbitration award rendered under Section 8(g) or to seek specific performance of injunctive relief under Section 8(h), then the party prevailing in such litigation shall be entitled to recover from the non-prevailing party reasonable attorneys' fees and costs of suit.

6

(j) No remedy conferred by any of the specific provisions of this Agreement is intended to be exclusive of any other remedy, and each and every remedy will be cumulative and will be in addition to every other remedy given here or now or hereafter existing at law or in equity or by statute or otherwise. The election of any one or more remedies will not constitute a waiver of the right to pursue other available remedies.

(j) This Agreement may be executed in several counterparts,

each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(k) No Stockholder shall have any liability for any misrepresentation or breach by any other Stockholder hereunder.

[Signature Page to follow]

7

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed under seal as of the date first written above.

KLA-TENCOR CORPORATION

QC OPTICS, INC.

By: /s/ John Kispert

By: /s/ Eric T. Chase

John Kispert
Chief Financial Officer

Eric T. Chase
President

STOCKHOLDERS:

/s/ Eric T. Chase

Eric T. Chase, in his capacity as
Trustee of the QC Optics Voting
Trust u/d/t dated as of
October 27, 1995

/s/ Eric T. Chase

Eric T. Chase, in his individual
capacity

/s/ John R. Freeman

John R. Freeman, in his individual
capacity

8

SCHEDULE A
TO
STOCKHOLDER VOTING AGREEMENT

STOCKHOLDER -----	SHARES HELD -----
Eric T. Chase, in his capacity as Trustee of the QC Voting Trust u/d/t dated as of October 27, 1995 c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	1,032,859 shares of Common Stock* *Beneficially owned as follows: Eric T. Chase - 634,517 shares; Jay L. Ormsby - 162,599 shares; John R. Freeman - 78,581 shares; Albert E. Tobey - 78,581 shares; and Abdu Boudour -78,581 shares.
Eric T. Chase, in his individual capacity c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	100 shares of Common Stock
John R. Freeman, in his individual capacity c/o QC Optics, Inc. 46 Jonspin Road Wilmington, Massachusetts 01887	100 shares of Common Stock

CONSULTING AND NONCOMPETITION AGREEMENT

This Consulting and Noncompetition Agreement ("Agreement") is made and entered into as of the 31st day of August, 2001 by and between KLA-Tencor Corporation (the "Company") and Eric T. Chase (the "Consultant").

WHEREAS, pursuant to a certain Agreement and Plan of Merger dated as of the date of this Agreement (the "Merger Agreement"), by and among the Company, Katmandu Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of the Company ("Acquisition"), and QC Optics, Inc., a Delaware corporation ("QC Optics"), the Company has agreed to acquire QC Optics through a merger transaction (the "Merger") involving the merger of Acquisition into QC Optics; and

WHEREAS, the Consultant shall resign as President of QC Optics effective upon the consummation of the Merger;

WHEREAS, the Company desires to retain the Consultant as an independent contractor to perform consulting services for the Company and the Consultant is willing to perform such services following the consummation of the Merger;

WHEREAS, the Company desires to preclude the Consultant from competing with the Company in certain fields of business for a period of two years following the consummation of the Merger;

WHEREAS, the execution and delivery of this Agreement is a condition precedent to the obligation of the Company to consummate the Merger; and

WHEREAS, capitalized terms used in the Agreement without definition shall have such meanings as ascribed to them under the Merger Agreement;

NOW, THEREFORE, for good and valuable consideration, the parties hereby agree as follows:

1. SERVICES AND COMPENSATION

Subject to the consummation of the Merger and commencing on the Effective Date, the Consultant agrees to perform for the Company the services described in EXHIBIT A to this Agreement (the "Services"), and the Company shall compensate the Consultant for the performance of such Services in such amounts and on such dates as described in EXHIBIT A, subject to the terms of this Agreement.

1

2. TERM AND TERMINATION

(a) TERM. This Agreement will commence on the Effective Date and will continue in effect for a period of two years after the Effective Date unless terminated prior thereto as provided below.

(b) TERMINATION.

(i) This Agreement will terminate automatically and without notice to or from either party if the Merger Agreement is terminated in accordance with its terms.

(ii) In the event that, after the Effective Date, the Company (A) shall discover that (I) on the Effective Date, the Merger Agreement (including the exhibits to the Merger Agreement and any documents delivered pursuant to the Merger Agreement) contained any untrue statement of a material fact or omitted any material fact required to be stated therein or necessary to make the statements contained therein, in the light of the circumstances under which they were made, not misleading; or (II) QC Optics failed to perform all material obligations and to comply with all material covenants required to be performed or to be complied with by it under the Merger Agreement prior to the Effective Date, and (B) any such misrepresentation(s) or failure(s) to perform resulted, individually or in the aggregate, in the Company incurring damages in excess of \$90,000, then the Company may terminate this Agreement upon written notice to the Consultant; provided, however, that the Company may not terminate this Agreement pursuant to this Section 2(b)(ii) in the event the Consultant agrees to reduce any payments owed to the Consultant hereunder by the amount of any such damages incurred by the Company in excess of \$90,000.

(iii) In the event that the Company fails to pay the Consultant, when due, the compensation specified in EXHIBIT A or materially breaches any other provision of this Agreement, the Consultant may (i) give written notice to the Company of its intent to terminate this Agreement for breach and (ii) terminate this Agreement upon further written notice to the Company if such breach has not been cured within 30 days of the initial notice

related to the breach.

(iv) In the event that the Consultant fails to perform the Services specified in EXHIBIT A or materially breaches any other provision of this Agreement, the Company may (i) give written notice to the Consultant, referring to this Section (b)(iv), of its intent to terminate this Agreement for breach and (ii) terminate this Agreement upon further written notice to the Consultant if such breach has not been cured within 30 days of the initial notice related to the breach.

(c) SURVIVAL. Upon such termination all rights and duties of the parties toward each other shall cease except that:

(i) in the event that this Agreement is terminated by the Company pursuant to Section 2(b)(ii) or (iv), the Company shall pay to the Consultant, within 30 days of the effective date of termination, only those amounts owing to the Consultant for Services completed prior to the termination date, in accordance with the provisions of EXHIBIT A, and the Company shall

2

have no further obligation to compensate the Consultant with respect to any period, or for any Services performed, after such termination date;

(ii) in the event that this Agreement is terminated by the Consultant pursuant to Section 2(b)(iii), the Company shall pay to the Consultant, within 30 days of the effective date of termination, all remaining amounts which would have become due to Consultant for Services had this Agreement not be terminated and the Consultant had performed all Services hereunder; and

(iii) the Consultant's obligations under Section 8 and 9 of this Agreement shall survive any termination of this Agreement pursuant to Section 2(b)(iv), but shall not survive any termination pursuant to Section 2(b)(i),(ii) or (iii); and

(iv) in any event, Sections 3, 6 and 7 and Sections 10 through 15 shall survive the termination of this Agreement.

3. ASSIGNMENT

Neither this Agreement nor any right hereunder or interest herein may be assigned or transferred by either party without the express written consent of the other, and the obligations of the Company to make payments hereunder may not be assigned to any entity (except to any successor to all or substantially all of the Company's assets or business, whether by merger or otherwise) without the express written consent of the Consultant.

4. INDEPENDENT CONTRACTOR

It is the express intention of the parties that the Consultant is an independent contractor. Nothing in this Agreement shall in any way be construed to constitute the Consultant as an agent, employee or representative of the Company, but the Consultant shall perform the Services hereunder as an independent contractor. The Consultant acknowledges and agrees that the Consultant is obligated to report as income all compensation received by the Consultant pursuant to this Agreement, and the Consultant agrees to and acknowledges the obligation to pay all self-employment and other taxes thereon. The Consultant further agrees to indemnify and hold harmless the Company and its directors, officers, and employees from and against all taxes, losses, damages, liabilities, costs and expenses, including reasonable attorney's fees and other legal expenses, arising directly or indirectly from (i) any grossly negligent, reckless or intentionally wrongful act of the Consultant and/or (ii) any material breach by the Consultant of any of the covenants contained in this Agreement. Subject to compliance with the provisions of Sections 7, 8 and 9, nothing in this Agreement shall preclude the Consultant from accepting consulting positions or other employment with third parties.

5. NO BENEFITS

The Consultant acknowledges and agrees and it is the intent of the parties hereto that the Consultant receive no Company-sponsored benefits either as an independent contractor or as an employee. Such benefits include, but are not limited to, paid vacation, sick leave, medical insurance and 401(k) participation. If the Consultant is reclassified by a state or federal agency or court as an

3

employee, the Consultant will receive no Company-sponsored benefits except those mandated by state or federal law, even if by the terms of the Company's benefit plans, in effect at the time of such reclassification, the Consultant would otherwise be eligible for such benefits.

6. CONFIDENTIALITY

(a) DEFINITION. "Confidential Information" means any proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customers, customer lists, markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances or other business information belonging to the Company, QC Optics and/or their respective affiliates, and known by or disclosed to Consultant, whether directly or indirectly and whether in writing, orally or by drawings or inspection of parts or equipment.

(b) NON-USE AND NON-DISCLOSURE. The Consultant will not, during the term of this Agreement and for a period of five years after its termination or expiration, use any Confidential Information for any purpose whatsoever other than the performance of the Services on behalf of the Company or disclose any Confidential Information to any third party. It is understood that said Confidential Information shall remain the sole property of the Company, Katmandu or their respective affiliates. The Consultant further agrees to take all reasonable precautions to prevent any unauthorized disclosure of such Confidential Information by him or his assistants, employees or agents. Notwithstanding the foregoing, Confidential Information does not include information which (i) has become publicly known and made generally available through no wrongful act of the Consultant, (ii) has been rightfully received by the Consultant from a third party who is authorized to make such disclosure, (iii) is required to be disclosed by the Consultant to comply with applicable laws or governmental regulations, or (iv) has been independently developed by the Consultant after the termination or expiration of this Agreement without reference to or reliance upon the Confidential Information.

7. OWNERSHIP OF INVENTIONS AND INTELLECTUAL PROPERTY

It is the parties' intention that the Company shall own exclusively all rights and economic interests in the tangible and intangible results of the Consultant's Services hereunder ("Work Product") and all intellectual property of every kind and description embodied therein or related thereto. Accordingly, the Consultant agrees as follows:

(i) All tangible Work Product which is a copyrightable work of authorship will be deemed a work made for hire owned by the Company under United States copyright laws; if an invention, Work Product is deemed to be owned by the Company upon creation.

(ii) The Consultant will maintain adequate and current written records of all Work Product which shall be available to and remain the property of the Company at all times.

4

(iii) The Consultant shall promptly and fully disclose in writing to the Company all trade secrets embodied in or associated with the Work Product which are related to the business activities of the Company and are authored, conceived, created or reduced to practice by the Consultant (whether alone or jointly with others) during the term of this Agreement or within the five-year period after its termination or expiration and which result from Confidential Information whether or not patentable or copyrightable or within any particular definition of trade secret.

(iv) The Consultant hereby assigns irrevocably and unconditionally, to the fullest extent permitted by law under any interpretation of the relationship between the parties, all right, title and interest (including without limitation all intellectual property rights) embodied in or associated with the Work Product which are related to the business activities of the Company and are authored, conceived, created or reduced to practice by the Consultant during the term of this Agreement or which result thereafter from Confidential Information.

(v) Promptly upon request by the Company and at the Company's expense, the Consultant shall execute and deliver to the Company all applications, assignments, agreements and other instruments reasonably requested and take such reasonable actions as the Company may deem necessary to fully vest the foregoing rights in the Company or to evidence such vesting. If the Company is unable, after reasonable effort, to secure the Consultant's signature on any patent application, copyright registration or other similar document, the Consultant hereby irrevocably designates and appoints the Company and its duly authorized representatives as the Consultant's agent and attorney-in-fact to execute and file any such application or registration and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent, copyright registration and other forms of intellectual property protection with the same legal force and effect as if executed by the Consultant.

(vi) The Consultant hereby waives in favor of the Company and its assigns and licensees any and all artist's or moral rights he may have pursuant to any state, provincial or federal laws or statutes of the United States in respect of any Work Product, and all similar rights under the laws of all jurisdictions.

8. NON-COMPETITION

For a period of two years after the Effective Date, the Consultant will not directly or indirectly (i) as an individual proprietor, partner, officer, employee, director, joint venturer, consultant, or in any similar capacity develop, design, produce, market, sell, license or render (or assist any other person in developing, designing, producing, marketing, selling, licensing or rendering) products, computer software or services (A) in the areas of laser-based defect detection systems for computer hard disk, flat panel display, semiconductor or other markets or (B) competitive with those being produced, marketed, sold, licensed or rendered by, or, to the knowledge of Consultant, those being developed or designed or under development by, the Company or QC Optics on the Effective Date, provided, however, that notwithstanding the foregoing, nothing contained herein shall preclude the Consultant from purchasing or owning securities of any such

5

business provided that the Consultant's holdings do not exceed 5% of the issued and outstanding securities of any class of securities of such business, or (ii) solicit, divert or take away, or attempt to divert or to take away, the business or patronage of any of the clients, customers or accounts, or prospective clients, customers or accounts, of the Company which were contacted, solicited or served by the Company while the Consultant was engaged by the Company.

9. SOLICITATION OF EMPLOYEES

The Consultant agrees that, for a period of two years after the date of this Agreement (regardless of its earlier termination, if any, except as provided in Section 2(c)(iii)), he shall not, either directly or indirectly, solicit, induce, recruit or encourage any of the employees of the Company or its affiliates to leave their employment, or take away such employees, or attempt to solicit, induce, recruit, encourage or take away such employees, either for the Consultant or for any other person or entity; provided, however, that this shall not limit solicitations published or posted generally, not specifically targeted to employees of the Company, QC Optics and/or their respective affiliates.

10. RETURN OF COMPANY DOCUMENTS

The Consultant agrees that, at the time of completion of the Services, and at any other time upon the request of the Company, the Consultant will deliver to the Company (and will not keep in the Consultant's possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items developed by the Consultant pursuant to the performance of this Agreement or otherwise belonging to the Company, QC Optics and/or their respective affiliates, successors or assigns.

11. GOVERNING LAW

This Agreement shall be governed by the law of the Commonwealth of Massachusetts applicable to agreements made and to be performed wholly within such jurisdiction, without regard to the conflicts of law provisions thereof.

12. ARBITRATION; RELIEF

(a) Except as set forth in Section 12(b), any controversy, dispute or claim arising out of or in connection with this Agreement, or the breach, termination or validity hereof, shall be settled by final and binding arbitration to be conducted by an arbitration tribunal in City of Boston, Massachusetts, pursuant to the rules of the American Arbitration Association. The arbitration tribunal shall consist of three arbitrators. The party initiating arbitration shall nominate one arbitrator in the request for arbitration and the other party shall nominate a second in the answer thereto within 30 days of receipt of the request. The two arbitrators so named will then jointly appoint the third arbitrator. If the answering party fails to nominate its arbitrator within the thirty 30-day period, or if the arbitrators named by the parties fail to agree on the third arbitrator within 60 days, the office of the American Arbitration Association in City of Boston, Massachusetts shall make

6

the necessary appointments of such arbitrator(s). The decision or award of the arbitration tribunal (by a majority determination, or if there is no majority, then by the determination of the third arbitrator, if any), including any award

of fees and/or expenses, shall be final, and judgment upon such decision or award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such decision or award and an order of enforcement. In the event of any procedural matter not covered by the aforesaid rules, the procedural law of the Commonwealth of Massachusetts shall govern.

(b) Notwithstanding the provisions of, and in addition to the rights set forth in, Section 12(a), in the event of a breach of the provisions of this Agreement by a party to this Agreement, the non-breaching party shall have the right to specific performance and injunctive relief, without the necessity of posting any bond or other security, it being acknowledged and agreed that money damages will not provide an adequate remedy.

(c) In the event litigation is maintained by a party to this Agreement against any other party to enforce an arbitration award rendered under Section 12(a) or to seek specific performance of injunctive relief under Section 12(b), then the party prevailing in such litigation shall be entitled to recover from the non-prevailing party reasonable attorneys' fees and costs of suit.

13. ENTIRE AGREEMENT

This Agreement and its exhibit constitute the entire agreement of the parties and supersedes any prior agreements between them, whether written or oral, with respect to the subject matter hereof. No waiver, alteration, or modification of any of the provisions of this Agreement shall be binding unless in writing and signed by duly authorized representatives of the parties hereto.

14. SEVERABILITY

The invalidity or unenforceability of any provision of this Agreement, or any terms thereof, shall not affect the validity of this Agreement as a whole, which shall at all times remain in full force and effect.

15. COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

THE CONSULTANT

/s/ Eric T. Chase

Eric T. Chase, individually

Address: -----

KLA-TENCOR CORPORATION

By: /s/ John Kispert

John Kispert
Chief Financial Officer

Address: 160 Rio Robles
San Jose, CA 95134

EXHIBIT A

SERVICES AND COMPENSATION

1. CONTACT. The Consultant's principal Company contact:

Name: Jeffrey L. Hall

Title: Vice President, Mergers & Acquisitions

2. SERVICES AND COMPENSATION.

The Consultant shall render the following Services to the Company as requested from time to time by the Company:

- a. Assist the Company with the integration and reorganization of QC Optics in accordance with plans to be developed by the Company;
- b. Act as a senior technical advisor to the Company's research and development organization, spending not more than 36 days in any year and not more than four days per month on site at the Company's headquarters or at other locations reasonably requested by the Company;
- c. Act as a representative (but not to provide field services) to interact with QC Optics customers on behalf of the Company; and
- d. Perform such other Services as may be reasonably requested by the Company and agreed to by the Consultant.

During the term of this Agreement, but only if the Consultant is not then and has not been in breach of Sections 8 or 9 of the Agreement, the Company shall pay to the Consultant \$8,333 per month in arrears in consideration of the Services. In addition, the Company shall reimburse the Consultant for reasonable travel and other business expenses incurred by him with the prior written approval of the Company in the performance of the Services, including the costs to travel to the Company's facilities as set forth in Section 2(b), subject to such reasonable requirements with respect to substantiation and documentation as may be specified from time to time by the Company or its auditors.

3. NON-COMPETITION.

- a. Without limiting any provision of the Agreement, for a period of two years after the Effective Date, the Consultant shall comply in all respects with

A-1

Sections 8 and 9 of the Agreement.

- b. In consideration of the obligations of the Consultant set forth in Sections 8 and 9 of this Consulting Agreement, the Company shall pay the Consultant an amount equal to \$25,000 per quarter for a period not to exceed eight (8) quarters. Such quarterly payments will be paid as follows: (i) the first payment shall be paid on January 1, 2002 provided that the Consultant has been in compliance with the restrictions set forth in Sections 8 and 9 of this Consulting Agreement, and (ii) subsequent payments shall be paid on each of March 31, 2002, June 30, 2002, September 30, 2002, December 31, 2002, March 31, 2003, June 30, 2003 and September 30, 2003 if during any such quarter the Consultant has been in compliance with the restrictions set forth in Sections 8 and 9 of this Consulting Agreement.

4. DEATH, DISABILITY, ETC.

In the event that the Consultant, through death, disability or similar impairment, becomes unable to perform the Services and any other gainful employment, and if the Consultant is not and has not been in breach of Sections 8 or 9 of the Agreement, the Company shall pay to the Consultant, or the Consultant's estate or legal representative, as the case may be, (a) all of the amounts to which the Consultant may be entitled pursuant to Section 2 for such Services performed and completed prior to such death or disability event but which have not previously been paid and (b) all of the amounts provided in Section 3 which have not previously been paid.

A-2