

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

KLA INSTRUMENTS CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE 04-2564110
(State of Incorporation) (I.R.S. Employer Identification No.)

160 Rio Robles
San Jose, CA 95134
(Address, including zip code, of principal executive offices)

SECOND AMENDED AND RESTATED 1981 EMPLOYEE STOCK PURCHASE PLAN
(Full Title of the Plan)

Lisa C. Berry
Vice President, General Counsel
KLA INSTRUMENTS CORPORATION
160 Rio Robles
San Jose, CA 95134
(Name and address of agent for service)
(408) 468-4200
(Telephone number, including area code, of agent for service)

Copy to:
JUDITH M. O'BRIEN, ESQ.
WILSON SONSINI GOODRICH & ROSATI
Professional Corporation
650 Page Mill Road
Palo Alto, California 94304

<TABLE>

CALCULATION OF REGISTRATION FEE

<CAPTION>

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate offering Price(1)	Amount of Registration Fee
<S> Common Stock, \$.001 par value, to be issued upon exercise of options granted under the Restated 1981 Employee Stock Purchase Plan	<C> 800,000	<C> \$ 40.125	<C> \$ 32,100,000	<C> \$ 9,727.27
Total	800,000	\$ 40.125	\$ 32,100,000	\$ 9,727.27

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(1) The Proposed Maximum Offering Price Per Share was estimated in accordance with Rule 457(c) under the Securities Act solely for the purpose of calculating the registration fee, based on the average of the high and low price of the Registrant's stock as reported in the Nasdaq National Market on March 6, 1997. THE SECURITIES AUTHORITY OF THE STATE OF ISRAEL HAS EXEMPTED KLA INSTRUMENTS CORPORATION AND KLA INSTRUMENTS CORPORATION (ISRAEL) FROM THE REQUIREMENTS

UNDER ISRAELI LAW TO OBTAIN A PERMIT WITH REGARD TO THIS FORM S-8. NOTHING IN THE EXEMPTION GRANTED SHALL BE CONSTRUED AS AUTHENTICATING THE MATTER CONTAINED IN THIS FORM S-8 OR AS AN APPROVAL OF THEIR RELIABILITY OR ACCURACY OR AN EXPRESSION OF AN OPINION AS TO THE QUALITY OF THE SECURITIES OFFERED HEREBY.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The contents of the Registrant's Registration Statement on Form S-8 (File No. 033-88662) filed with the Securities and Exchange Commission on June 28, 1995 is incorporated by reference in this Registration Statement.

ITEM 8. EXHIBITS.

See Exhibit Index.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California, on March 7, 1997.

KLA INSTRUMENTS CORPORATION

By: /s/ Kenneth Levy

Kenneth Levy
Chairman and
Chief Executive Officer

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kenneth Levy and Lisa C. Berry, and each of them, their true and lawful attorneys and agents, with full power of substitution, each with power to act alone, to sign and execute on behalf of the undersigned any amendment or amendments to this Registration Statement on Form S-8 and to perform any acts necessary in order to file such amendments, and each of the undersigned does hereby ratify and confirm all that said attorneys and agents, or their or his or her substitutes, shall do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<TABLE>
<CAPTION>

Signature	Title	Date
-----	-----	----
<S> /s/ Kenneth Levy ----- Kenneth Levy	<C> Chief Executive Officer, Director and Chairman of the Board (Principal Executive Officer)	March 7, 1997
/s/ Kenneth L. Schroeder ----- Kenneth L. Schroeder	President, Chief Operating Officer and Director	March 7, 1997
/s/ Robert J. Boehlke ----- Robert J. Boehlke	Vice President, Administration and Finance Chief Financial Officer (Principal Financial and Accounting Officer)	March 7, 1997
/s/ Edward W. Barnholt ----- Edward W. Barnholt	Director	March 7, 1997
/s/ Leo J. Chamberlain	Director	March 7, 1997

 Leo J. Chamberlain
 /s/ Yoshio Nishi

 Yoshio Nishi
 /s/ Samuel Rubinovitz

 Samuel Rubinovitz
 /s/ Dag Tellefsen

 Dag Tellefsen
 </TABLE>

Director
 Director
 Director

March 7, 1997
 March 7, 1997
 March 7, 1997

II-3
 KLA INSTRUMENTS CORPORATION
 REGISTRATION STATEMENT ON FORM S-8
 INDEX TO EXHIBITS

<TABLE>
 <CAPTION>
 Exhibit
 Number

 <S>
 4.1
 4.2
 4.3
 5.1
 10.75
 23.1
 23.2
 24.1
 </TABLE>

Description -----
<C>
Certificate of Incorporation, as amended, of the Registrant is incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-3, dated February 2, 1994 (Commission File No. 0-9992)
Bylaws, as amended, of the Registrant is incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-3, dated February 2, 1994 (Commission File No. 0-9992)
Amended and Restated Rights Agreement dated as of August 30, 1995 between the Registrant and The First National Bank of Boston, as Rights Agent, is incorporated by reference to the Registrant's report on Form 8-A/A Amendment No. 1 to the Registration Statement on Form 8-A (filed September 24, 1996, Commission File No. 0-9992)
Opinion re legality
Second Amended and Restated 1981 Employee Stock Purchase Plan, as amended on November 18, 1996
Consent of Counsel (included in Exhibit 5.1)
Consent of Independent Accountants
Power of Attorney (see Page II-3)

March 7, 1997

KLA Instruments Corporation
160 Rio Robles
San Jose, CA 95134

RE: REGISTRATION STATEMENT ON FORM S-8

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 to be filed by you with the Securities and Exchange Commission on or about March 7, 1997 (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended, of (i) 1,600,000 shares of your Common Stock reserved for issuance under the 1982 Stock Option Plan (the "Stock Plan") and (ii) 800,000 shares of your Common Stock reserved for issuance under the Second Restated 1981 Employee Stock Purchase Plan (the "Purchase Plan"). The 1,600,000 shares of Common Stock reserved under the Stock Plan and the 800,000 shares of Common Stock reserved under the Purchase Plan are referred to collectively hereinafter as the "Shares," and the Stock Plan and the Purchase Plan are referred to hereinafter collectively as the "Plans." As your legal counsel, we have examined the proceedings taken and proposed to be taken in connection with the issuance, sale and payment of consideration for the Shares to be issued under the Plans.

It is our opinion that, when issued and sold in compliance with applicable prospectus delivery requirements and in the manner referred to in the Plans and pursuant to the agreements which accompany the Plans, the Shares will be legally and validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement and any amendments thereto.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Wilson Sonsini Goodrich & Rosati

KLA INSTRUMENTS CORPORATION

SECOND AMENDED AND RESTATED
1981 EMPLOYEE STOCK PURCHASE PLAN
(As Amended July 29, 1996)

1. Purpose. On October 6, 1981, the KLA Instruments Corporation 1981 Employee Stock Purchase Plan (the "Initial Plan") was adopted. On July 1, 1984, the Initial Plan was amended and restated in its entirety and retitled the KLA Instruments Corporation 1981 Employee Stock Purchase Plan as Amended and Restated (the "Second Plan"). On July 19, 1989, the Second Plan was amended and restated in its entirety and retitled the KLA Instruments Corporation Amended and Restated 1981 Employee Stock Purchase Plan (the "Third Plan"). On August 3, 1993, the Third Plan was amended and restated in its entirety as set forth herein and retitled the KLA Instruments Corporation Second Amended and Restated 1981 Employee Stock Purchase Plan (the "Plan").

Notwithstanding any other provision of the Plan to the contrary, the terms and conditions of the Initial Plan, the Second Plan, and the Third Plan shall remain in full force and effect as to options granted and as to shares of common stock of KLA Instruments Corporation ("KLA") purchased pursuant to the Initial Plan, the Second Plan, and the Third Plan, respectively.

Notwithstanding any other provision of the Plan to the contrary, if an employee participating in the Plan is subject to section 16 of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") any provisions of the Plan resulting from the amendment and restatement of the Second Plan and the Third Plan the application of which to such employee which would result in a "material increase" in the benefits accruing to such employee under the Plan such as to require stockholder approval of such provision for purposes of complying with Rule 16b-3 shall not apply to such employee and, instead, the applicable provision of the Initial Plan, the Second Plan, or the Third Plan, as the case may be, if any, shall apply to such employee. The Plan is established to provide eligible employees of KLA and any current or future parent and/or subsidiary corporations of KLA (collectively referred to as the "Company") with an opportunity through payroll deductions to acquire a proprietary interest in the Company by the purchase of common stock of KLA. (KLA and any such parent and/or subsidiary corporation of KLA shall be individually referred to herein as a "Participating Company." For purposes of the Plan, a parent corporation and a subsidiary corporation shall be as defined in sections 425(e) and 425(f) of the Internal Revenue Code of 1986, as amended (the "Code").)

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It is intended that the Plan shall qualify as an "employee stock purchase plan" under section 423 of the Code (including any future amendments or replacements of such section), and the Plan shall be so construed. Any term not expressly defined in the Plan but defined for purposes of section 423 of the Code shall have the same definition herein.

An employee participating in the Plan (a "Participant") may withdraw such Participant's accumulated payroll deductions (if any) therein at any time during an Offering Period (as defined below). Accordingly, each Participant is, in effect, granted an option pursuant to the Plan (a "Purchase Right") which may or may not be exercised at the end of an Offering Period and which is intended to qualify as an option described in section 423 of the Code.

2. Administration. The Plan shall be administered by the Board of Directors of KLA (the "Board") and/or by a duly appointed committee of the Board having such powers as shall be specified by the Board. Any subsequent references to the Board shall also mean the committee if a committee has been appointed. All questions of interpretation of the Plan or of any Purchase Right shall be determined by the Board and shall be final and binding upon all persons having an interest in the Plan and/or any Purchase Right. Subject to the provisions of the Plan, the Board shall determine all of the relevant terms and conditions of Purchase Rights granted pursuant to the Plan; provided, however, that all Participants granted Purchase Rights pursuant to the Plan shall have the same rights and privileges within the meaning of section 423(b)(5) of the Code. All expenses incurred in connection with the administration of the Plan shall be paid by the Company.

3. Share Reserve. The maximum number of shares which may be issued under the Plan shall be four million eight hundred thousand (4,800,000) shares of KLA's authorized but unissued common stock or treasury stock (the "Shares"). In the event that any Purchase Right for any reason expires or is cancelled or terminated, the Shares allocable to the unexercised portion of such Purchase Right may again be subjected to a Purchase Right.

4. Eligibility. Any employee of a Participating Company (including officers and directors who are also employees) is eligible to participate in the Plan except employees who own or hold options to purchase or who, as a result of participation in this Plan, would own or hold options to purchase, stock of the Company possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company within the meaning of section 423(b)(3) of the Code.

An employee who is also a director may participate in the Plan but may not purchase shares under the Plan until the Company's stockholders approve the

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Plan. In the event that stockholder approval of the Plan is not obtained prior to the last Purchase Date of an Offering Period in which a director who is also an employee is participating, then any cash balance in such Participant's account shall be refunded to the Participant as soon as practical after the last day of the Offering Period.

5. Offering Dates.

(a) Offering Periods. Except as otherwise set forth below, the Plan shall be implemented by offerings (individually an "Offering") of two (2) years duration (an "Offering Period"). An Offering Period shall commence on the first day of January and July of each year. The first Offering Period shall commence on July 1, 1989. Notwithstanding the foregoing, the Board may establish a different term for one (1) or more Offerings and/or different commencing and/or ending dates for such Offerings and/or additional Offerings, including, without limitation, an Offering commencing October 1, 1989. An employee who becomes eligible to participate in the Plan after an Offering Period has commenced shall not be eligible to participate in such Offering but may participate in any subsequent Offering provided such employee is still eligible to participate in the Plan as of the commencement of any such subsequent Offering. The Company shall have the authority to designate the maximum number of Offerings in which an eligible employee may participate at any one time. The first day of an Offering Period shall be the "Offering Date" for such Offering Period. In the event the first and/or last day of an Offering Period is not a business day, the Company shall specify the business day that will be deemed the first or last day, as the case may be, of the Offering Period.

(b) Purchase Periods. Each Offering Period shall consist of four (4) consecutive purchase periods of six (6) months duration (a "Purchase Period"). The last day of each Purchase Period shall be the "Purchase Date" for such Purchase Period. Notwithstanding the foregoing, the Board may establish a different term for one (1) or more Purchase Periods and/or different commencing dates and/or Purchase Dates for such Purchase Periods. In the event the first and/or last day of a Purchase Period is not a business day, the Company shall specify the business day that will be deemed the first or last day, as the case may be, of the Purchase Period.

(c) Governmental Approval; Stockholder Approval. Notwithstanding any other provision of the Plan to the contrary, any Purchase Right granted pursuant to the Plan shall be subject to (i) obtaining all necessary governmental approvals and/or qualifications of the sale and/or issuance of the Purchase Rights and/or the Shares, and (ii) in the case of Purchase Rights with an Offering Date after an amendment of the Plan, obtaining any necessary approval of the stockholders of the Company required by paragraph 22.

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6. Participation in the Plan.

(a) Initial Participation. An eligible employee shall become a Participant on the first Offering Date after satisfying the eligibility requirements set forth in paragraph 4 and delivering to the Company not later than the close of business on the date seven (7) days prior to such Offering Date or on a date as may be established by the Company from time to time (the "Subscription Date") a subscription agreement indicating the employee's election to participate in the Plan and authorizing payroll deductions. An eligible employee who does not deliver a subscription agreement to the Company on or before the Subscription Date shall not participate in the Plan for that Offering Period or for any subsequent Offering Period unless such eligible employee subsequently enrolls in the Plan by complying with the provisions of paragraph 4 and by filing a subscription agreement with the Company on or before the Subscription Date for such subsequent Offering Period. The Company may, from time to time, change the Subscription Date as deemed advisable by the Company in its sole discretion for proper administration of the Plan.

(b) Continued Participation. Participation in the Plan shall continue until (i) the Participant ceases to be eligible as provided in paragraph 4, (ii) the Participant withdraws from the Plan pursuant to paragraph

11, or (iii) the Participant terminates employment as provided in paragraph 12. If a Participant is automatically withdrawn from an Offering at the end of a Purchase Period of such Offering pursuant to paragraph 11(c), then the Participant shall automatically participate in the Offering Period commencing on the next business day. At the end of an Offering Period, each Participant in such terminating Offering Period shall automatically participate in the first subsequent Offering Period according to the same elections contained in the Participant's subscription agreement effective for the Offering Period which has just ended, provided such Participant is still eligible to participate in the Plan as provided in paragraph 4. However, a Participant may file a subscription agreement with respect to such subsequent Offering Period if the Participant desires to change any of the Participant's elections contained in the Participant's then effective subscription agreement.

7. Right to Purchase Shares. During an Offering Period each Participant in such Offering Period shall have a Purchase Right consisting of the right to purchase that number of whole Shares arrived at by dividing Twenty Thousand Dollars (\$20,000) by eighty-five percent (85%) of the fair market value of the Shares on the Offering Date of such Offering Period; provided, however, that in no event shall a Participant have a Purchase Right for more than four thousand (4,000) Shares.

8. Purchase Price. The purchase price at which Shares may be acquired at the end of an Offering pursuant to the exercise of all or any portion of a Purchase Right granted under the Plan (the "Offering Exercise Price") shall be set by the Board;

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provided, however, that the purchase price shall not be less than eighty-five percent (85%) of the lesser of (a) the fair market value of the Shares on the Offering Date of such Offering Period, or (b) the fair market value of the Shares at the time of exercise of all or any portion of the Purchase Right. Unless otherwise provided by the Board prior to the commencement of an Offering Period, the Offering Exercise Price shall be eighty-five percent (85%) of the lesser of (a) the fair market value of the Shares on the Offering Date of such Offering Period or (b) the fair market value of the Shares at the time of exercise of all or any portion of the Purchase Right. For purposes of the Plan, the fair market value of the Shares at any point in time shall be determined by the Board based on such factors as the Board deems relevant; including, without limitation, the mean of the bid and asked price of the Shares on the date in question (or the immediately preceding business day in the event the date in question falls on a weekend or legal holiday) as reported on the National Association of Securities Dealers Automated Quotations system, if available.

9. Payment of Purchase Price. Shares which are acquired pursuant to the exercise of all or any portion of a Purchase Right for a given Offering Period may be paid for only by means of payroll deductions from the Participant's Compensation accumulated during the Offering Period. For purposes of the Plan, a Participant's "Compensation" with respect to an Offering shall include all amounts paid in cash and includable as "wages" subject to tax under section 3101(a) of the Code without applying the dollar limitation of section 3121(a) of the Code. Accordingly, Compensation shall include, without limitation, salaries, commissions, bonuses, overtime and amounts contributed to the Participant's Salary Reduction Account, as that term is defined in the Company's Employee Savings and Investment Plan (the "Savings and Investment Plan"). Compensation shall not include reimbursements of expenses, allowances, or any amount deemed received without the actual transfer of cash or any amounts directly or indirectly paid pursuant to the Plan or any other stock purchase or stock option plan or credits or benefits under the Savings and Investment Plan (other than as set forth above) or any other Company contributions or payments to any trust, fund, or plan to provide retirement, pension, profit sharing, health, welfare, death, insurance or similar benefits to or on behalf of such Participant or any other payments not specifically referenced above, except to the extent that the inclusion of any such item with respect to all Participants on a nondiscriminatory basis is specifically approved by the Board. Except as set forth below, the amount of Compensation to be withheld from a Participant's Compensation during each month shall be determined by the Participant's subscription agreement.

(a) Election to Decrease Withholding. During an Offering Period, a Participant may elect to decrease the amount withheld from his or her Compensation by filing an amended subscription agreement with the Company on or before the Change Notice Date. The "Change Notice Date" shall initially be the date fifteen (15)

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days prior to the end of the first pay period for which such election is to be effective; provided, however, the Company may change such Change Notice Date from time to time. A Participant may not elect to increase the amount withheld from the Participant's Compensation during an Offering Period.

(b) Limitations on Payroll Withholding. The amount of payroll withholding with respect to the Plan for any Participant shall be at least Ten

Dollars (\$10.00) per month but shall not exceed ten percent (10%) of the Participant's Compensation for any relevant pay period. Amounts shall be withheld in whole percentages only and shall be reduced by any amounts contributed by the Participant and applied to the purchase of Company stock pursuant to any other employee stock purchase plan qualifying under section 423 of the Code.

(c) Payroll Withholding. Payroll deductions shall commence on the first payday following the Offering Date and shall continue to the end of the Offering Period unless sooner altered or terminated as provided in the Plan.

(d) Participant Accounts. Individual accounts shall be maintained for each Participant. All payroll deductions from a Participant's Compensation shall be credited to such account and shall be deposited with the general funds of the Company. All payroll deductions received or held by the Company may be used by the Company for any corporate purpose.

(e) No Interest Paid. Interest shall not be paid on sums withheld from a Participant's Compensation

(f) Exercise of Purchase Right. On each Purchase Date of an Offering Period, each Participant who has not withdrawn from the Offering or whose participation in the Offering has not terminated on or before such last day shall automatically acquire pursuant to the exercise of the Participant's Purchase Right the number of whole Shares arrived at by dividing the total amount of the Participant's accumulated payroll deductions for the Purchase Period by the Offering Exercise Price; provided, however, that in no event shall the number of Shares purchased by the Participant exceed the number of Shares subject to the Participant's Purchase Right. No Shares shall be purchased on behalf of a Participant whose participation in the Offering or the Plan has terminated on or before the date of such exercise.

(g) Return of Cash Balance. Any cash balance remaining in the Participant's account shall be refunded to the Participant as soon as practical after the last day of the Offering Period. In the event the cash to be returned to a Participant pursuant to the preceding sentence is an amount less than the amount necessary to purchase a whole Share, the Company may establish procedures whereby such cash

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is maintained in the Participant's account and applied toward the purchase of Shares in the subsequent Purchase Period or Offering Period.

(h) Withholding. At the time the Purchase Right is exercised, in whole or in part, or at the time some or all of the Shares are disposed of, the Participant shall make adequate provision for foreign, federal and state tax withholding obligations of the Company, if any, which arise upon exercise of the Purchase Right and/or upon disposition of Shares. The Company may, but shall not be obligated to, withhold from the Participant's Compensation the amount necessary to meet such withholding obligations.

(i) Company Established Procedures. The Company may, from time to time, establish or change (i) a minimum required withholding amount for participation in any Offering, (ii) limitations on the frequency and/or number of changes in the amount withheld during an Offering, (iii) an exchange ratio applicable to amounts withheld in a currency other than United States dollars, (iv) payroll withholding in excess of or less than the amount designated by a Participant in order to adjust for delays or mistakes in the Company's processing of subscription agreements, (v) the date(s) and manner by which the fair market value of the Shares is determined for purposes of the administration of the Plan, and/or (vi) such other limitations or procedures as deemed advisable by the Company in the Company's sole discretion which are consistent with the Plan.

(j) Expiration of Purchase Right. Any portion of a Participant's Purchase Right remaining unexercised after the end of the Offering Period to which such Purchase Right relates shall expire immediately upon the end of such Offering Period.

10. Limitations on Purchase of Shares; Rights as a Stockholder.

(a) Fair Market Value Limitation. Notwithstanding any other provision of the Plan, no Participant shall be entitled to purchase Shares under the Plan at a rate which exceeds Twenty-Five Thousand Dollars (\$25,000) in fair market value, determined as of the Offering Date for each Offering Period (or such other limit as may be imposed by the Code), for each calendar year in which the Participant participates in the Plan.

(b) Allocation of Shares. In the event the number of Shares which might be purchased by all Participants in the Plan exceeds the number of Shares available in the Plan pursuant to all Offerings which have commenced, the Company shall make a pro rata allocation of the remaining Shares (and within each Offering, to each Participant in such Offering) in as uniform a manner as shall be practicable and as the Company shall determine to be equitable.

(c) Rights as a Stockholder and Employee. A Participant shall have no rights as a stockholder by virtue of the Participant's participation in the Plan until the date of the issuance of a stock certificate(s) for the Shares being purchased pursuant to the exercise of the Participant's Purchase Right. No adjustment shall be made for cash dividends or distributions or other rights for which the record date is prior to the date such stock certificate(s) are issued. Nothing herein shall confer upon a Participant any right to continue in the employ of the Company or interfere in any way with any right of the Company to terminate the Participant's employment at any time.

11. Withdrawal.

(a) Withdrawal From an Offering. A Participant may withdraw from an Offering by signing a written notice of withdrawal on a form provided by the Company for such purpose and delivering such notice to the Company at any time prior to the end of an Offering Period; provided, however, that if a Participant withdraws after the Purchase Date for a Purchase Period of an Offering, the withdrawal shall not affect Shares acquired by the Participant in such Purchase Period. Unless otherwise indicated by the Participant, withdrawal from an Offering shall not result in a withdrawal from the Plan or any succeeding Offering therein. By withdrawing from an Offering on a Purchase Date, a Participant may have Shares purchased on such Purchase Date and immediately commence participating in the Offering commencing immediately after such Purchase Date. A Participant is prohibited from again participating in an Offering upon withdrawal from such Offering. The Company may impose, from time to time, a requirement that the notice of withdrawal be on file with the Company for a reasonable period prior to the effectiveness of the Participant's withdrawal from an Offering.

(b) Withdrawal from the Plan. A Participant may withdraw from the Plan by signing a written notice of withdrawal on a form provided by the Company for such purpose and delivering such notice to the Company. Withdrawals made after a Purchase Date of an Offering Period shall not affect shares acquired by the Participant on such Purchase Date. In the event a Participant voluntarily elects to withdraw from the Plan, the Participant may not resume participation in the Plan during the same Offering Period, but may participate in any subsequent Offering under the Plan by again satisfying the requirements of paragraph 6. The Company may impose, from time to time, a requirement that the notice of withdrawal be on file with the Company for a reasonable period prior to the effectiveness of the Participant's withdrawal from the Plan.

(c) Automatic Withdrawal From an Offering. If the fair market value of the Shares on a Purchase Date of an Offering is less than the fair market value of the Shares on the Offering Date for such Offering, then every Participant

shall automatically (i) be withdrawn from the Offering at the close of the Purchase Date and after the acquisition of Shares for such Purchase Period, and (ii) be enrolled in the Offering commencing on the first business day subsequent to such Purchase Period. A Participant may elect not to be automatically withdrawn from an Offering pursuant to this paragraph 11(c) by delivering to the Company not later than the close of business on the last business day before the date seven (7) days prior to the Purchase Date a written notice indicating such election; provided, however, that the Company may change the date such notice is required to be delivered to the Company from time to time.

12. Termination of Employment. Termination of a Participant's employment with the Company for any reason, including retirement or death or the failure of a Participant to remain an employee eligible to participate in the Plan, shall terminate the Participant's participation in the Plan immediately. A Participant whose participation has been so terminated may again become eligible to participate in the Plan by again satisfying the requirements of paragraphs 4 and 6.

13. Repayment of Payroll Deductions. In the event a Participant's interest in the Plan or any Offering therein is terminated for any reason, the balance held in the Participant's account shall be returned as soon as practical after such termination to the Participant (or, in the case of the Participant's death, to the Participant's legal representative) and all of the Participant's rights under the Plan shall terminate. Such account balance may not be applied to any other Offering under the Plan. No interest shall be paid on sums returned to a Participant pursuant to this paragraph 13.

14. Transfer of Control. A "Transfer of Control" shall be deemed to have occurred in the event any of the following occurs with respect to the Control Company. For purposes of applying this paragraph 14, the "Control Company" shall mean the Participating Company whose stock is subject to the Purchase Right.

(a) the direct or indirect sale or exchange by the

stockholders of the Control Company of all or substantially all of the stock of the Control Company where the stockholders of the Control Company before such sale or exchange do not retain, directly or indirectly, at least a majority of the beneficial interest in the voting stock of the Control Company;

(b) a merger in which the stockholders of the Control Company before such merger do not retain, directly or indirectly, at least a majority of the beneficial interest in the voting stock of the Control Company; or

(c) the sale, exchange, or transfer of all or substantially all of the Control Company's assets (other than a sale, exchange, or transfer to one (1) or more

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corporations where the stockholders of the Control Company before such sale, exchange, or transfer retain, directly or indirectly, at least a majority of the beneficial interest in the voting stock of the corporation(s) to which the assets were transferred).

In the event of a Transfer of Control, the Board, in its sole discretion, shall either (i) provide that Purchase Rights granted under the Plan shall be fully exercisable to the extent of each Participant's account balance for the Offering Period as of a date prior to the Transfer of Control, as the Board so determines or (ii) arrange with the surviving, continuing, successor, or purchasing corporation, as the case may be, that such corporation assume the Company's rights and obligations under the Plan. All Purchase Rights shall terminate effective as of the date of the Transfer of Control to the extent that the Purchase Right is neither exercised as of the date of the Transfer of Control nor assumed by the surviving, continuing, successor, or purchasing corporation, as the case may be.

15. Capital Changes. In the event of changes in the common stock of the Company due to a stock split, reverse stock split, stock dividend, combination, reclassification, or like change in the Company's capitalization, or in the event of any merger, sale or other reorganization, appropriate adjustments shall be made by the Company in the Plan's share reserve, the number and class of shares of stock subject to a Purchase Right and in the purchase price per share of any outstanding Purchase Right, including, without limitation, the number of Shares subject to a Purchase Right as set forth in paragraph 7.

16. Non-Transferability. A Purchase Right may not be transferred in any manner otherwise than by will or the laws of descent and distribution and shall be exercisable during the lifetime of the Participant only by the Participant.

17. Reports. Each Participant who exercised all or part of the Participant's Purchase Right for a Purchase Period shall receive as soon as practical after the last day of such Purchase Period a report of such Participant's account setting forth the total payroll deductions accumulated, the number of Shares purchased and the remaining cash balance to be refunded or retained in the Participant's account pursuant to paragraph 9(g), if any.

18. Plan Term. This Plan shall continue until terminated by the Board or until all of the Shares reserved for issuance under the Plan have been issued or until December 31, 2000, whichever shall first occur.

19. Restriction on Issuance of Shares. The issuance of shares pursuant to the Purchase Right shall be subject to compliance with all applicable requirements of federal or state law with respect to such securities. The Purchase Right may not be exercised if the issuance of shares upon such exercise would constitute a violation of

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any applicable federal or state securities laws or other law or regulations. In addition, no Purchase Right may be exercised unless (i) a registration statement under the Securities Act of 1933, as amended, shall at the time of exercise of the Purchase Right be in effect with respect to the shares issuable upon exercise of the Purchase Right, or (ii) in the opinion of legal counsel to the Company, the shares issuable upon exercise of the Purchase Right may be issued in accordance with the terms of an applicable exemption from the registration requirements of said Act. As a condition to the exercise of the Purchase Right, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

20. Legends. The Company may at any time place legends or other identifying symbols referencing any applicable federal and/or state securities restrictions and any provision convenient in the administration of the Plan on some or all of the certificates representing shares of stock issued under the Plan. The Participant shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to a Purchase Right in the possession of the Participant in order to effectuate the provisions of this paragraph.

21. Transfer Restrictions. The Company, in its absolute discretion, may impose such restrictions on the transferability of the shares purchasable upon the exercise of a Purchase Right as it deems appropriate and any such restriction shall be set forth in the respective subscription agreement and may be referred to on the certificates evidencing such shares. The Company may require the employee to give the Company prompt notice of any disposition of shares of stock acquired by exercise of a Purchase Right within two years from the date of granting such Purchase Right or one year from the date of exercise of such Purchase Right. The Company may direct that the certificates evidencing shares acquired by exercise of a Purchase Right refer to such requirement to give prompt notice of disposition.

22. Amendment or Termination of the Plan. The Board may at any time amend or terminate the Plan, except that (i) such termination shall not affect Purchase Rights previously granted under the Plan except as permitted by the Plan, and (ii) no amendment may adversely affect a Purchase Right previously granted under the Plan (except to the extent permitted by the Plan or as may be necessary to qualify the Plan as an "employee stock purchase plan" pursuant to section 423 of the Code). In addition, an amendment to the Plan must be approved by the stockholders of the Company, within the meaning of section 423 of the Code, within twelve (12) months of the adoption of such amendment if such amendment would authorize the sale of more shares than are authorized for issuance under the Plan or would change the

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designation of corporations whose employees may be offered Purchase Rights under the Plan. Notwithstanding any other provision of the Plan to the contrary, in the event of an amendment to the Plan which affects the rights or privileges of Purchase Rights to be offered under the Plan, each Participant with an outstanding Purchase Right shall have the right to exercise such outstanding Purchase Right on the effective date of the amendment.

IN WITNESS WHEREOF, the undersigned Secretary of KLA Instruments Corporation certifies that the foregoing Second Amended and Restated 1981 Employee Stock Purchase Plan, as amended, was duly adopted by the Board of Directors of KLA Instruments Corporation on July 29, 1996.

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KLA INSTRUMENTS CORPORATION

SECOND AMENDED AND RESTATED
1981 EMPLOYEE STOCK PURCHASE PLAN

SUBSCRIPTION AGREEMENT

_____ Original Application
_____ Change in Percentage of Payroll Deductions

I hereby elect to participate in the Second Amended and Restated 1981 Employee Stock Purchase Plan (the "Stock Purchase Plan") of KLA Instruments Corporation (the "Company") and subscribe to purchase shares of the Company's common stock (the "Shares") as determined in accordance with the terms of the Stock Purchase Plan.

I hereby authorize payroll deductions in the amount of \$_____ or _____ percent of my compensation from each paycheck throughout the "Offering Period" (as defined in the Stock Purchase Plan) in accordance with the terms of the Stock Purchase Plan. (The amount deducted each [pay period] [month] must be at least [\$] and may be no greater than 10% of compensation for any pay period (if stated in percentages, must be in whole percentages).) I understand that these payroll deductions will be accumulated for the purchase of Shares at the applicable purchase price determined in accordance with the Stock Purchase Plan. I further understand that, except as otherwise set forth in the Stock Purchase Plan, Shares will be purchased for me automatically on the last day of the Purchase Period unless I withdraw from the Stock Purchase Plan or from the Offering Period by giving written notice to the Company or unless I terminate employment.

I understand that I will automatically participate in each subsequent Offering Period under the Stock Purchase Plan until such time as I file with the Company a notice of withdrawal from the Stock Purchase Plan or any such subsequent Offering Period on such form as may be established from time to time by the Company or I terminate employment.

I understand that I will be automatically withdrawn from an Offering Period and be automatically enrolled in the subsequent Offering Period if the

fair market value of the Shares on the purchase date of an Offering Period is less than the fair market value of the Shares on the first day of such Offering Period; provided, however, that I may elect not to be automatically withdrawn if I notify the Company in writing of such election no later than the close of business on the last business day before the date 7 days prior to the purchase date of such Offering Period.

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Shares purchased for me under the Stock Purchase Plan should be issued in the name set forth below. I understand that Shares may be issued either in my name alone or together with my spouse as community property or in joint tenancy.)

NAME: _____
ADDRESS: _____

MY SOCIAL SECURITY NUMBER: _____

I am familiar with the terms and provisions of the Stock Purchase Plan and hereby agree to participate in the Stock Purchase Plan subject to all of the terms and provisions thereof. I understand that the Board reserves the right to amend the Stock Purchase Plan and my right to purchase stock under the Stock Purchase Plan as may be necessary to qualify the Plan as an employee stock purchase plan as defined in section 423 of the Internal Revenue Code of 1986, as amended. I understand that the effectiveness of this subscription agreement is dependent upon my eligibility to participate in the Stock Purchase Plan.

Date: _____ Signature: _____

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KLA INSTRUMENTS CORPORATION
SECOND AMENDED AND RESTATED
1981 EMPLOYEE STOCK PURCHASE PLAN

NOTICE OF WITHDRAWAL

I hereby elect to withdraw from the current offering (the "Offering") of the common stock of KLA Instruments Corporation (the "Company") under the Second Amended and Restated 1981 Employee Stock Purchase Plan (the "Stock Purchase Plan"), and hereby request that all payroll deductions credited to my account under the Stock Purchase Plan with respect to the Offering (if any), and not previously used to purchase shares of common stock of the Company under the Stock Purchase Plan, be paid to me as soon as is practical. I understand that this Notice of Withdrawal automatically terminates my interest in the Offering.

As to participation in future offerings of stock under the Stock Purchase Plan, I elect as follows:

_____ I elect to participate in future offerings under the Stock Purchase Plan.

I understand that by making the election set forth above I will automatically participate in each subsequent Offering under the Stock Purchase Plan until such time as I file with the Company a notice of withdrawal from the Stock Purchase Plan or any such subsequent offering on such form as may be established from time to time by the Company or I terminate employment.

_____ I elect not to participate in future offerings under the Stock Purchase Plan.

I understand that by making the election set forth above I terminate my interest in the Stock Purchase Plan and that no further payroll deductions will be made unless I elect in accordance with the Stock Purchase Plan to become a participant in another offering under the Stock Purchase Plan.

I understand that if no election is made as to participation in future offerings under the Stock Purchase Plan, I will be deemed to have elected to participate in such future offerings.

Date: _____

Signature: _____

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated August 7, 1996, which appears on page 24 of the 1996 Annual Report to Stockholders of KLA Instruments Corporation, which is incorporated by reference in KLA Instruments Corporation's Annual Report on Form 10-K for the year ended June 30, 1996.

/s/Price Waterhouse LLP

San Jose, California
March 7, 1997