UNITED STATES	
SECURITIES AND EXCHANGE COMMISSION	

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

KLA CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

One Technology Drive, Milpitas, California

(Address of Principal Executive Offices)

04-2564110 (I.R.S. Employer Identification No.) 95035 (Zip Code)

Amended and Restated 1997 Employee Stock Purchase Plan ("ESPP")

(Full title of the plan)

Teri A. Little

Executive Vice President, Corporate Secretary and Chief Legal Officer
KLA Corporation

One Technology Drive, Milpitas, California 95035

(Name and address of agent for service)

(408) 875-3000

(Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☑	Accelerated Filer □			
Non-accelerated filer \Box (Do not check if a smaller reporting company)	Smaller reporting company □			
	Emerging growth company \square			
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box				

CALCULATION OF REGISTRATION FEE

Title of securities to be		Proposed maximum offering	Proposed maximum aggregate	
registered	Amount to be registered(1)	price per share (\$)	offering price (\$)	Amount of registration fee (\$)
Common Stock, par value				
\$0.001 per share issuable under				
the ESPP	807,304 (2)	112.21 (3)	90,587,581.80 (3)	10,979.21 (3)

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Amended and Restated 1997 Employee Stock Purchase Plan (the "ESPP") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.
- (2) Reflects an automatic increase to the number of shares of Registrant's Common Stock reserved for issuance under the ESPP, which increase is provided for in the ESPP.
- (3) Estimated in accordance with paragraphs (c) and (h) of Rule 457 under the Securities Act solely for the purpose of calculating the registration fee on the basis of 85% of \$132.01, which represents the average of the high and low price per share of the Registrant's common stock on August 15, 2019 as reported on the Nasdaq Global Select Market. Pursuant to the ESPP, the purchase price of the shares of the Registrant's common stock reserved for issuance thereunder will be at least 85% of the lower of the fair market value on (i) the first trading day of the offering period or (ii) the purchase date.

Explanatory Note

This Registration Statement on Form S-8 is being filed by KLA Corporation (the "Registrant") with the Securities and Exchange Commission (the "Commission") for the purpose of registering an additional 807,304 shares of the Registrant's common stock, par value \$0.001 per share, for issuance pursuant to the Registrant's Amended and Restated 1997 Employee Stock Purchase Plan. In accordance with General Instruction E to Form S-8, the contents of Registration Statement No. 333-22939 filed with Commission on March 7, 1997 are incorporated herein by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant hereby incorporates by reference in this Registration Statement the following documents and information previously filed with the Commission:

- (1) The Registrant's Annual Report on Form 10-K filed with the Commission on August 16, 2019 pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act");
- (2) All other reports filed by the Registrant with the Commission pursuant to Sections 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Registrant's Annual Report referred to in (1) above; and
- (3) The description of the Registrant's Common Stock as set forth in the Registration Statement filed by the Registrant on Form 8-A on March 29, 1989 (File No. 000-09992) pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended (the "1934 Act"), and any amendments or reports thereto filed with the SEC for the purpose of updating such description, including Amendment No. 1 to Form 8-A filed September 25, 1995 and Amendment No. 2 to Form 8-A filed September 24, 1996.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicate that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents; provided, however, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

	Incorporated by Reference				
Description	Form	Exhibit	File No.	Filing Date	Filed Herewith
Opinion of Jeffrey S. Cannon, Esq.					X
Consent of independent registered public accounting firm					X
Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1)					
Power of Attorney (included on signature page)					
Amended and Restated 1997 Employee Stock Purchase Plan	S-8	99.1	333-219734	August 4, 2017	
	Opinion of Jeffrey S. Cannon, Esq. Consent of independent registered public accounting firm Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1) Power of Attorney (included on signature page)	Opinion of Jeffrey S. Cannon, Esq. Consent of independent registered public accounting firm Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1) Power of Attorney (included on signature page)	Description Form Exhibit Opinion of Jeffrey S. Cannon, Esq. Consent of independent registered public accounting firm Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1) Power of Attorney (included on signature page)	Description Form Exhibit File No. Opinion of Jeffrey S. Cannon, Esq. Consent of independent registered public accounting firm Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1) Power of Attorney (included on signature page)	Description Form Exhibit File No. Filing Date Opinion of Jeffrey S. Cannon, Esq. Consent of independent registered public accounting firm Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1) Power of Attorney (included on signature page)

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Milpitas, State of California, on the 19th day of August 2019.

KLA CORPORATION

By: /s/ Richard Wallace Name: Richard Wallace

Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS:

That the undersigned officers and directors of KLA Corporation, a Delaware corporation, do hereby constitute and appoint Bren D. Higgins and Teri A. Little or any one of them, the lawful attorney-in-fact and agent, each with full power and authority to do any and all acts and things and to execute any and all instruments which said attorney and agent determines may be necessary or advisable or required to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules or regulations or requirements of the Securities and Exchange Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement, and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereof, and each of the undersigned hereby ratifies and confirms all that said attorneys and agents, or any one of them, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

~- g		
/s/ Richard Wallace RICHARD WALLACE	President, Chief Executive Officer and Director (principal executive officer)	August 19, 2019
/s/ Bren Higgins BREN HIGGINS	Executive Vice President and Chief Financial Officer (principal financial officer)	August 19, 2019
/s/ Virendra Kirloskar VIRENDRA KIRLOSKAR	Senior Vice President and Chief Accounting Officer (principal accounting officer)	August 19, 2019
/s/ Edward Barnholt EDWARD BARNHOLT	——Chairman of the Board	August 19, 2019
ROBERT CALDERONI	———Director	
/s/ John Dickson JOHN DICKSON	————Director	August 19, 2019
/s/ Emiko Higashi EMIKO HIGASHI	Director	August 19, 2019
/s/ Jeneanne Hanley JENEANNE HANLEY	——————————————————————————————————————	August 19, 2019
/s/ Kevin Kennedy KEVIN KENNEDY		August 19, 2019
/s/ Gary Moore GARY MOORE		August 19, 2019
/s/ Kiran Patel KIRAN PATEL	——————————————————————————————————————	August 19, 2019
/s/ Victor Peng VICTOR PENG	——————————————————————————————————————	August 19, 2019
ANA PINCZUK	——————————————————————————————————————	
/s/ Robert Rango ROBERT RANGO	————Director	August 19, 2019

Title

Date

Signature

EXHIBIT INDEX

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Exhibit						
Number	Description	Form	Exhibit	File No.	Filing Date	Filed Herewith
5.1	Opinion of Jeffrey S. Cannon, Esq.					X
23.1	Consent of Independent Registered Public Accounting Firm					X
23.2	Consent of Jeffrey S. Cannon, Esq. (included in Exhibit 5.1)					
24.1	Power of Attorney (included on signature page)					
99.1	Amended and Restated 1997 Employee Stock Purchase Plan	S-8	99.1	333-219734	August 4, 2017	

OPINION OF JEFFREY S. CANNON, ESQ.

August 19, 2019

KLA Corporation One Technology Drive Milpitas, California 95035

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

KLA Corporation, a Delaware corporation (the "Company"), is filing with the Securities and Exchange Commission a Registration Statement on Form S-8 (the "Registration Statement") for the purpose of registering under the Securities Act of 1933, as amended (the "Securities Act"), an additional 807,304 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock"), reserved for issuance under the Company's Amended and Restated 1997 Employee Stock Purchase Plan (the "ESPP"), as described in the Registration Statement. The additional shares of Common Stock reserved for issuance under the ESPP are referred to herein as the "Shares."

I have acted as Associate General Counsel to the Company with respect to the issuance of this opinion and, as such counsel, I have examined such documents and such matters of fact and law that I have deemed necessary for the purpose of rendering the opinion expressed herein. In such examinations, I have assumed the genuineness of all signatures and the authenticity of all documents submitted to me as originals and the conformity to original documents of all documents submitted to me as conformed or photostatic copies.

Based on the foregoing, I am of the opinion that when the Shares have been duly issued and delivered in accordance with the terms and conditions of the ESPP, such Shares will be validly issued, fully paid and non-assessable.

I hereby consent to the filing of this opinion as an Exhibit to the Registration Statement.

Sincerely,

/s/ Jeffrey S. Cannon

JEFFREY S. CANNON

Associate General Counsel and Assistant Secretary

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of KLA Corporation of our reportdated August 16, 2019 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in KLA Corporation's Annual Report on Form 10-K for the year ended June 30, 2019.

/s/ PricewaterhouseCoopers LLP San Jose, California August 16, 2019