FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Ty	pe Response	s)													
1. Name and Address of Reporting Person * Khan Ahmad A.				2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE			3. Date of Earliest Transaction (Month/Day/Year) 09/09/2015						X Officer (give title below) Other (specify below) EVP, Patterning Division						
(Street) MILPITAS, CA 95035				4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City) (State) (Zip)			(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned											
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	Execution Date, if any (Month/Day/Year)		ode nstr. 8)		tion 4. Securities Acquire (A) or Disposed of (Instr. 3, 4 and 5) (A) or		of (D) 5)	D) Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)		Form: Direct (D) or Indirect (I)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
Common	Stock		09/09/2015			Code M	V	3,250 (1)	<u>`</u>	Price \$ 0	13,727			(Instr. 4)	
Common Stock 09		09/09/2015			F		1,696 (2)	D	\$ 49.35	12,031	2,031		D		
Common Stock 09		09/09/2015			M		3,250 (3)	A	\$ 0	15,281		D			
Common Stock 09/09/201		09/09/2015			F		1,696 (4)	D	\$ 49.35	13,585			D		
Common Stock - Restricted Stock Units (5)										46,964	(6)		D		
Reminder:	Report on a s	separate line fo	or each class of secur				Pers cont the f	ons what ained in orm dis	no respo n this fo splays a	orm are	not requesting ntly valid		formation spond unle trol numbe	ss	1474 (9-02)
				Derivative Securi e.g., puts, calls, v							ly Owned				
1. Title of Derivative Security (Instr. 3)	tle of variety conversion or Exercise Price of Derivative Security		of Deri Secu Acq (A) Disp of (I	Number and I		nth/Day/Year)		Ame Und Seco	itle and ount of erlying prities tr. 3 and	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owners Form of Derivati Security Direct (or Indire	Beneficia Ownershi (Instr. 4) D) ect		
				Code V	(A)	(D)	Date Exer		Expirati Date	on Title	Amount or Number of Shares				

Reporting Owners

Ī		Relationships					
		Director	10% Owner	Officer	Other		
	Reporting Owner Name / Address						

Khan Ahmad A. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	EVP, Patterning Division	
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Signatures

Teri Little as Attorney-in-Fact for Ahmad A. Khan	09/11/2015	
**Signature of Reporting Person	Date	

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- On September 9, 2011, the Reporting Person received a grant of restricted stock units ("RSUs") covering 6,500 shares of KLA-Tencor common stock. On September 9, 2015, the Reporting Person vested in fifty percent (50%) of such RSUs.
- Pursuant to the terms of the September 9, 2011 RSU grant, 1,696 shares of KLA-Tencor common stock were automatically withheld on the vesting date to cover required tax (2) withholding. The fair market value of KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on the NASDAQ Stock Market on such vesting date.
- On September 9, 2011, the Reporting Person received a grant of performance-based RSUs that, following the completion of fiscal year 2013, was determined by the (3) Compensation Committee of KLA-Tencor's Board of Directors (in August 2013) to cover, based on KLA-Tencor's financial performance during fiscal years 2012 and 2013, 6,500 shares of KLA-Tencor common stock. On September 9, 2015, the Reporting Person vested in fifty percent (50%) of such performance-based RSUs.
- Pursuant to the terms of the September 9, 2011 performance-based RSU grant, 1,696 shares of KLA-Tencor common stock were automatically withheld on the vesting date (4) to cover required tax withholding. The fair market value of KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on the NASDAQ Stock Market on such vesting date.
- (5) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (6) Does not include performance-based RSUs, if any, held by the Reporting Person for which an assessment has not yet been made regarding the achievement of the applicable performance goals. Any such holdings will be reported on a Form 4 within two business days of the date such assessment is made.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.