## FORM 4

(Print or Type Pecnonces)

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

OMB APPROVAL
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

#### 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

(11mt of 1)	pe response	3)												
1. Name and Address of Reporting Person * Higgins Bren D.				2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]						5. Relationship of Reporting Person(s) to Issuer (Check all applicable)				
(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 & Chief Financial Officer				
(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 More than One Reporting Person Form filed by More than One Reporting Person				
(City) (State) (Zip)			Table I - Non-Derivative Securities Acqu						ired, Disposed of, or Beneficially Owned					
(Instr. 3)		2. Transaction Date (Month/Day/Year)		f Code (Instr. 8)		4. Securities Acquire (A) or Disposed of (I (Instr. 3, 4 and 5)			D) Beneficially Owned Following Reported Transaction(s)			Ownership Form:	Beneficial	
				(Month/Day/Year	Code	e V	Amour	(A) or (D)	Price	(Instr. 3 a	and 4)			Ownership (Instr. 4)
Common	Stock		09/09/2015		M		2,400 (1)	A	\$ 0	4,567		D		
Common Stock		09/09/2015		F		1,253 (2)	D	\$ 49.35	3,314		D			
Common Stock - Restricted Stock Units (3)									33,788 (4)		D			
Reminder:	Report on a s	separate line fo		Derivative Securit	ies Acqu	Person the	sons wi tained i form di Disposed	no responding this for splays and of, or Be	orm are a curre eneficial	e not requently valid	ction of inf uired to res OMB con	spond unle	ess	C 1474 (9-02)
1. Title of	2	3. Transaction	`	e.g., puts, calls, wa	arrants, 5.					itle and	8. Price of	9. Number	of 10.	11. Natur
	Conversion or Exercise Price of Derivative Security	ersion Date (Month/Day/Y	/Day/Year) Execution Day	te, if Transaction Code (Instr. 8)		and (Mo	and Expiration Date (Month/Day/Year)		Amo Und Secu	ount of lerlying urities tr. 3 and		Derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4)	Owner Form of Derivat Securit Direct or India	ship of Indirect Beneficia Ownershi (Instr. 4)
				Code V	(A) (I		e ercisable	Expirati Date	Title	Amount or Number of Shares				

#### **Reporting Owners**

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
Higgins Bren D. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			EVP & Chief Financial Officer				

### **Signatures**

Te	eri Little as Attorney-in-Fact for Bren D. Higgins	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).
- (1) On September 9, 2011, the Reporting Person received a grant of rerstricted stock units ("RSUs") covering 4,800 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, 1,253 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.
- (3) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- 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.