Martin Brian Form 4 May 11, 2009

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

SECURITIES

OMB APPROVAL OMB 3235-0287

Number:

Expires:

January 31,

2005

0.5

Estimated average

burden hours per response...

if no longer subject to Section 16. Form 4 or Form 5 obligations may continue.

See Instruction

Check this box

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1(b).

1. Name and Address of Reporting Person * 5. Relationship of Reporting Person(s) to 2. Issuer Name and Ticker or Trading Martin Brian Issuer Symbol KLA TENCOR CORP [KLAC] (Check all applicable) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) Director 10% Owner _X__ Officer (give title Other (specify C/O KLA-TENCOR 05/08/2009 below) CORPORATION, ONE Senior VP & General Counsel **TECHNOLOGY DRIVE** (Street) 4. If Amendment, Date Original 6. Individual or Joint/Group Filing(Check Filed(Month/Day/Year) Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting

MILPITAS, CA 95035

(State)

(Zin)

(City)

(City)	(State) (2	(State) (Zip) Table			e I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned								
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired on(A) or Disposed of (D) (Instr. 3, 4 and 5) (A) or		5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)					
Common Stock	05/08/2009	05/08/2009	Code V A	Amount 14,000	(D)	Price (1)	14,724 (2)	D					
Common Stock	05/08/2009	05/08/2009	F	5,005 (3)	D	\$ 26.18 (3)	9,719	D					
Common Stock - Restricted Stock Units (4)							32,922 (5)	D					

Edgar Filing: Martin Brian - Form 4

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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

SEC 1474 (9-02)

> 9. Nu Deriv Secur Bene Own Follo Repo Trans

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5.	6. Date Exerci	isable and	7. Title	e and	8. Price of	ç
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	Transacti	orNumber	Expiration Da	te	Amou	nt of	Derivative	J
Security	or Exercise		any	Code	of	(Month/Day/Y	(ear)	Under	lying	Security	,
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	Derivative	e		Securi	ties	(Instr. 5)]
	Derivative				Securities			(Instr.	3 and 4)		(
	Security				Acquired						J
					(A) or						J
					Disposed						-
					of (D)						(
					(Instr. 3,						
					4, and 5)						
									Amount		
									or		
						Date	Expiration Date	Title N	Number		
						Exercisable			of		
				Code V	(A) (D)				Shares		

Reporting Owners

Reporting Owner Name / Address	Relationships
Ranarting (Iwnar Nama / Address	

Director 10% Owner Officer Other

Martin Brian C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035

Senior VP & General Counsel

Signatures

Brian M. Martin 05/11/2009
**Signature of Date

Reporting Person

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 May 8, 2007, Mr. Martin received a grant of restricted stock units ("RSUs") covering 28,000 shares of KLA-Tencor Corporation common stock. On May 8, 2009, Mr. Martin vested in fifty percent (50%) of such RSUs.
- (2) Also includes 423 shares acquired by Mr. Martin under the KLA-Tencor Employee Stock Purchase Plan on December 31, 2008.
- Pursuant to the terms of the May 8, 2007 RSU grant, 5,005 shares of KLA-Tencor common stock were automatically withheld at vesting 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.

Reporting Owners 2

Edgar Filing: Martin Brian - Form 4

- (4) 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
- (5) regarding the achievement of the applicable performance goals. Any such holdings will be reported on 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.