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

OMB APPROVAL					
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hours per response	0.5				

hours per response.

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

(	e Responses	)													
1. Name and Address of Reporting Person DICKSON JOHN T  (Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE  (Street)				Susuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]      Date of Earliest Transaction (Month/Day/Year)     07/31/2007  4. If Amendment, Date Original Filed(Month/Day/Year)     08/02/2007							5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  _X_ Director 10% Owner				
										Of	ficer (give tit	le below)	Other	(specify below	)
										_X_ Form	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person				
MILPITA	S, CA 950	)35								Form	filed by Mo	re than One Rep	oorting Person		
(City	)	(State)	(Zip)				Ta	able I - Non-Deri	vative Securities A	Acquired, Di	sposed of	, or Benefic	ially Owned		
1.Title of Security (Instr. 3)  2. Transaction Date (Month/Day/Yea			ar) any	Date, if Code (Instruction (Instruction)		ode (Anstr. 8) (I	Securities Acquires a) or Disposed of (instr. 3, 4 and 5)  (A) or (D)  mount (D)  P	D) Owned Transac	Amount of Securities Beneficially byned Following Reported ransaction(s) (nstr. 3 and 4)		) I C (	Ownership Form: Direct (D)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
Reminder: F	Report on a se	eparate line for each	class of securities be	епепсіан	iy ow	ned dire	ectiy	Persons this form	who respond to are not require y valid OMB con	ed to respo	nd unles			n SEC	1474 (9-02)
			Table I						ed of, or Benefici vertible securities						
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if	4. Transact Code	puts, tion	<b>calls, w</b> 5. Numl	ber ive es ed	ants, options, con	vertible securities ole and Expiration	s) .	ng		9. Number of Derivative Securities Beneficially Owned Following Reported Transaction((Instr. 4)	Ownersh Form of Derivati Security Direct (I or Indire	Ownershi (Instr. 4)
Derivative Security	Conversion or Exercise Price of Derivative	Date	3A. Deemed Execution Date, if any	4. Transact Code	puts, tion	calls, w 5. Numl of Derivati Securiti Acquire (A) or Dispose of (D) (Instr. 3 and 5)	ber ive es ed	6. Date Exercisal Date	vertible securities ole and Expiration	7. Title and of Underlyi Securities	ng	Derivative Security	Derivative Securities Beneficially Owned Following Reported Transaction(s	Ownersh Form of Derivati Security Direct (I or Indire	nip of Indirect Beneficia Ownersh (Instr. 4)

## Reporting Owners

	Relationships					
Reporting Owner Name / Address	Director	10% Owner	Officer	Other		
DICKSON JOHN T C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X					

## **Signatures**

/s/ Brian Martin as Attorney-in-fact For John T. Dickson	11/01/2007
-*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) The Option is immediately exercisable for all the underlying shares.
- (2) The Option expiration date was reported incorrectly on the original Form 4.

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.