FORM 4	UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549	OMB APPROVAL	
☐ 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	OMB Number: 3235-0287 Estimated average burden hours per response...	0.5

(Print or Type Responses)

1. Name and Address of Reporting Person* MARKS MICHAEL E	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, 160 RIO ROBLES	3. Date of Earliest Transaction (Month/Day/Year) 08/02/2005	_X_ Director _____ 10% Owner _____ Officer (give title below) _____ Other (specify below)
(Street) SAN JOSE, CA 95130	4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person ____ Form filed by More than One Reporting Person
(City) (State) (Zip)		

Table 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 (A) or Disposed of (D) (Instr. 3, 4 and 5)			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)
			Code	V	Amount	(A) or (D)	Price			

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

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible 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 any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Non-Qualified Stock Option (right to buy)	$ 51.35	08/02/2005		A		2,500		08/02/2005	08/02/2015	Common Stock	2,500	$ 0	2,500	D	
Non-Qualified Stock Option (right to buy)	$ 40.24							05/11/2005	05/11/2015	Common Stock	2,500		2,500	D	
Non-Qualified Stock Option (right to buy)	$ 40.68							10/18/2004	10/18/2014	Common Stock	2,500		2,500	D	
Non-Qualified Stock Option (right to buy)	$ 44.76							01/25/2005	01/25/2015	Common Stock	2,500		2,500	D	

| Non-Qualified Stock Option (right to buy) | $ 59.44 | | | | | | 11/05/2003 | 11/05/2013 | Common Stock | 10,000 | | 10,000 | D | |

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MARKS MICHAEL E C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130	X			

Signatures

By: Stuart J. Nichols For: Michael E. Marks		08/03/2005
**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).

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.