

<b>OMB APPROVAL</b>	
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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**

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

1. Name and Address of Reporting Person* <u>Levy Asher</u>  (Last) (First) (Middle) ONE TECHNOLOGY DRIVE  (Street) MILPITAS CA 95035  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>KLA TENCOR CORP [ KLAC ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) CEO - Orbotech Ltd.
	3. Date of Earliest Transaction (Month/Day/Year) 02/20/2019	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**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			
Common Stock	02/20/2019		A		26,273 <sup>(1)</sup>	A	\$0	26,273	D	
Common Stock	02/20/2019		A		317 <sup>(2)</sup>	A	\$0	26,590	D	
Common Stock	02/20/2019		A		757 <sup>(3)</sup>	A	\$0	27,347	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		16,715 <sup>(5)</sup>	A	\$0	16,715 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		2,985 <sup>(7)</sup>	A	\$0	19,700 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		995 <sup>(8)</sup>	A	\$0	20,695 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		3,338 <sup>(9)</sup>	A	\$0	24,033 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		1,390 <sup>(10)</sup>	A	\$0	25,423 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		6,676 <sup>(11)</sup>	A	\$0	32,099 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		5,575 <sup>(12)</sup>	A	\$0	37,674 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		2,323 <sup>(13)</sup>	A	\$0	39,997 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		2,911 <sup>(14)</sup>	A	\$0	42,908 <sup>(6)</sup>	D	
Common Stock - Restricted Stock Units <sup>(4)</sup>	02/20/2019		A		1,213 <sup>(15)</sup>	A	\$0	44,121 <sup>(6)</sup>	D	

**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 Securities Underlying Derivative Security (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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (Right to Buy)	\$103.05	02/20/2019		A		2,576 <sup>(16)</sup>		06/21/2020 <sup>(17)</sup>	06/20/2025	Common Stock	2,576	\$0	2,576	D	
Non-Qualified Stock Option (Right to Buy)	\$53.81	02/20/2019		A		4,901 <sup>(18)</sup>		06/29/2019 <sup>(19)</sup>	06/28/2024	Common Stock	4,901	\$0	4,901	D	

**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 Securities Underlying Derivative Security (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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Non-Qualified Stock Option (Right to Buy)	\$44.94	02/20/2019		A		3,174 <sup>(20)</sup>		09/12/2019 <sup>(21)</sup>	09/11/2023	Common Stock	3,174	\$0	3,174	D	

**Explanation of Responses:**

- Received in exchange for 105,095 ordinary shares of Orbotech Ltd. in connection with the merger (the "Merger") of Tiburon Merger Sub Technologies Ltd. with and into Orbotech Ltd. Pursuant to the agreement governing the merger, each Orbotech ordinary share is entitled to receive \$38.86 and 0.25 of a share of KLA-Tencor Corporation common stock, with cash in lieu of a fractional share.
- Received in exchange for 1,666 vested options to purchase Orbotech Ltd. ordinary shares at an exercise price of \$15.57 per ordinary share in connection with the Merger.
- Received in exchange for 5,197 vested options to purchase Orbotech Ltd. ordinary shares at an exercise price of \$27.45 per ordinary share in connection with the Merger.
- Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- On February 20, 2019 the reporting person received a grant of RSUs which vest as to 50% of the award on July 1, 2019 and as to the remaining 50% of the award on December 31, 2019, subject to continued service.
- 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.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 4,887 ordinary shares of Orbotech Ltd. The RSUs vest in full on August 3, 2019.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 1,629 ordinary shares of Orbotech Ltd. The RSUs vest in full on August 3, 2019.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 5,464 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on each of September 12, 2019 and September 12, 2020.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 2,276 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on each of September 12, 2019 and September 12, 2020.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 10,928 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on each of September 12, 2019 and September 12, 2020.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 9,126 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on June 29, 2019 and 25% of the underlying shares on each of June 29, 2020 and 2021.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 3,803 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on June 29, 2019 and 25% of the underlying shares on each of June 29, 2020 and 2021.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 4,766 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on June 21, 2020 and 25% of the underlying shares on each of June 21, 2021 and 2022.
- Assumed by KLA-Tencor Corporation in connection with the Merger. Formerly represented unvested restricted stock units for 1,986 ordinary shares of Orbotech Ltd. The RSU vests as to 50% of the underlying shares on June 21, 2020 and 25% of the underlying shares on each of June 21, 2021 and 2022.
- Received in exchange for unvested options to purchase 4,217 Orbotech Ltd. ordinary shares at an exercise price of \$62.95 per share in connection with the Merger.
- Vests as to 50% of the underlying shares on June 21, 2020 and 25% of the underlying shares on each of June 21, 2021 and 2022.
- Received in exchange for unvested options to purchase 8,024 Orbotech Ltd. ordinary shares at an exercise price of \$32.87 per share in connection with the Merger.
- Vests as to 50% of the underlying shares on June 29, 2019 and 25% of the underlying shares on each of June 29, 2020 and 2021.
- Received in exchange for unvested options to purchase 5,196 Orbotech Ltd. ordinary shares at an exercise price of \$27.45 per share in connection with the Merger.
- Vests as to 50% of the underlying shares on each of September 12, 2019 and 2020.

**Remarks:**

/s/ Jeffrey Cannon, attorney-in-fact      02/21/2019

\*\* Signature of Reporting Person      Date

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

\* 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.

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