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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 8, 2007

KLA-TENCOR CORPORATION

(Exact name of registrant specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-09992
(Commission File Number)

04-2564110
(I.R.S. Employer
Identification No.)

160 Rio Robles, San Jose, California
(Address of principal executive offices)

95134
(Zip Code)

Registrant's telephone, including area code: (408) 875-3000

(Former name and former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions *see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

In meetings held on August 8 and August 13, 2007, the independent members of the Board of Directors (the "Independent Directors") of KLA-Tencor Corporation (the "Company") established the Company performance goals which are to be in effect for the 2008 fiscal year under the Company's Performance Bonus Plan (the "Plan"), an incentive bonus plan administered in conformity with Section 162(m) of the Internal Revenue Code. The performance goals are tied to the Company's profit from operations and revenue growth for the 2008 fiscal year. The Independent Directors also approved the bonus potential for each of the Company's executive officers at threshold, target and maximum levels of Company performance for the 2008 fiscal year. Following the close of the 2008 fiscal year, the Compensation Committee of the Company's Board of Directors (or, in the case of the Company's Chief Executive Officer, the Independent Directors) will determine the actual bonus amount for each executive officer participating in the Plan based on the actual levels at which the performance goals for that year are attained. The Compensation Committee or the Independent Directors (as applicable) will have the discretion to adjust the actual bonus amount that would otherwise be due upon the attainment of the performance goals, based on their assessment of the officer's performance for the 2008 fiscal year. The actual bonus amounts (if any) will be paid within ninety days after the close of such year.

The following executive officers will participate in the Plan for the 2008 fiscal year, with bonus potentials at the following threshold (i.e., the minimum amount payable if the initial performance threshold is satisfied), target and maximum levels:

<u>Executive Officer</u>	<u>Threshold</u>	<u>Award Level Target</u>	<u>Maximum</u>
Richard P. Wallace	\$ 280,000	\$ 700,000	\$ 2,275,000
John H. Kispert	\$ 212,400	\$ 531,000	\$ 1,725,750
Jeffrey L. Hall	\$ 78,000	\$ 195,000	\$ 633,750

The actual bonus award (if any) may be higher or lower depending upon the actual level at which the performance goals for the 2008 fiscal year are attained, but no executive officer will receive a bonus award under the Plan in excess of the maximum dollar award indicated for him above, and no executive officer will receive any bonus award under the Plan if the threshold level of Company performance is not attained.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

KLA-TENCOR CORPORATION

Date: August 14, 2007

By: /s/ JEFFREY L. HALL
Name: Jeffrey L. Hall
Title: Chief Financial Officer
