

**CHARTER OF THE AUDIT COMMITTEE
OF THE BOARD OF DIRECTORS
OF KLA-TENCOR CORPORATION**

As amended on November 7, 2013

I. PURPOSE

The purpose of the Audit Committee of the Board of Directors (the “Board”) of KLA-Tencor Corporation (the “Company”) shall be to oversee the accounting and financial reporting processes of the Company and audits of its financial statements; and to assist the Board in oversight and monitoring of: (i) the integrity of the Company’s financial statements; (ii) the Company’s compliance with legal and regulatory requirements, including but not limited to the applicable requirements of the Securities and Exchange Commission (the “SEC”) and the NASDAQ Stock Market (or any stock exchange on which securities of the Company are listed; together with the NASDAQ Stock Market, the “Stock Exchange”); (iii) the independent registered public accounting firm’s qualifications, independence and performance; (iv) the Company’s internal accounting and financial controls; (v) the development and enforcement of the Company’s Standards of Business Conduct and (vi) the Company’s enterprise risk management process. The Audit Committee will undertake those specific duties and responsibilities listed below, and such other duties as the Board of Directors may from time to time prescribe.

The Committee’s primary role is one of oversight. In carrying out its responsibilities, the Audit Committee is not providing and cannot provide any expert or special assurance as to the Company’s financial statements, or any professional certification as to the work of the independent registered public accounting firm. The Audit Committee is entitled to presume the integrity of those persons and organizations with whom it deals and the accuracy and completeness of the information they submit.

II. MEMBERSHIP

The Audit Committee shall be comprised of no fewer than three non-employee members of the Board. Members of the Audit Committee must meet the following criteria (as well as any criteria required by the applicable rules of the SEC and the Stock Exchange):

1. Each member must meet the requirements for independence as set forth in the applicable rules of the SEC and the Stock Exchange;
2. Each member will be able to read and understand fundamental financial statements, in accordance with the applicable Stock Exchange Audit Committee requirements;
3. At least one member shall be an “audit committee financial expert,” as determined by the Board of Directors in accordance with the applicable rules of the SEC and have past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or

background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities as required by the Stock Exchange rules; and

4. No member may have participated in the preparation of the financial statements of the Company or any of the Company's current subsidiaries at any time during the past three years.

III. STRUCTURE AND PROCESSES

1. Appointment and Chairman. The Board shall appoint the members of the Audit Committee, one of whom shall be designated as chairman of the Audit Committee, and such members shall serve at the discretion of the Board.
2. Meetings. The Audit Committee shall meet at least four times annually or more frequently as the Audit Committee may deem appropriate. A majority of the members of the Audit Committee shall constitute a quorum sufficient for the taking of any action by the Audit Committee, and the vote of a majority of the Audit Committee members present at a meeting at which a quorum is present shall be the act of the Audit Committee, unless in either case a greater number is required by this charter. The Audit Committee will meet regularly with management to discuss any matters that the Audit Committee deems appropriate. The Audit Committee will meet separately with the Chief Executive Officer and separately with the Chief Financial Officer of the Company at such times as are appropriate to review the financial affairs of the Company. The Audit Committee will meet separately with the independent registered public accounting firm of the Company, at such times as it deems appropriate, to fulfill the responsibilities of the Audit Committee under this charter. The Audit Committee will meet separately with the Director of Internal Audit (or his or her designee) at such times as are appropriate to discuss any matters that the Audit Committee or internal auditors believe should be discussed, and such meeting may be in private if the Audit Committee deems it appropriate.
3. Minutes. The Audit Committee shall keep written minutes of its meetings and deliver copies of the minutes to the corporate secretary for inclusion in the corporate records. The Company's General Counsel or his or her designee shall attend all Audit Committee meetings and shall keep minutes of such meetings. The minutes of such meetings will be approved by the Audit Committee as promptly as practicable and then will be communicated to the appropriate Company stakeholders.
4. Advisors. The Audit Committee shall identify advisors to the Audit Committee, and the Audit Committee chairman will report periodically at Board meetings on the adequacy, availability and need for independent advice.

IV. DUTIES AND RESPONSIBILITIES

The duties and responsibilities of the Audit Committee shall include:

1. Review and discuss with management and the independent registered public accounting firm the matters required to be discussed by the independent registered public accounting firm under auditing standards adopted by the Public Company Accounting Oversight Board (“PCAOB”), as such standards may be amended from time to time (“Auditing Standards”);
2. Review on a continuing basis the adequacy of the Company’s system of internal controls, including meeting periodically with the Company’s management and internal audit and its independent registered public accounting firm to review:
 - a. any significant deficiencies in the design or operation of the Company’s internal controls that could adversely affect the Company’s ability to record, process, summarize and report financial data;
 - b. any fraud, whether or not material, that involves management, or other employees who have a significant role in the Company’s internal controls;
 - c. related findings and recommendations of management, together with the independent registered public accounting firm’s attestation report; and
 - d. any disclosure regarding such system of internal controls required under SEC rules to be contained in the Company’s periodic filings and the attestations or reports by the independent registered public accounting firm relating to such disclosure, prior to the release of such documents.
3. Select, appoint, retain, and, if appropriate, replace the Company’s independent registered public accounting firm (or nominate the Company’s independent registered public accounting firm to be proposed for stockholder approval or ratification in any proxy statement or at any stockholders meeting), which shall be a registered public accounting firm as defined by the Sarbanes-Oxley Act of 2002 that is ultimately accountable to the Audit Committee and will report directly to the Audit Committee;
4. Oversee and evaluate the performance of the independent registered public accounting firm, including the lead partner of such firm assigned to the Company’s account;
5. Report at least annually to the Board regarding the Audit Committee’s assessment of the independent registered public accounting firm’s performance and independence;
6. Monitor the partner rotation of the independent registered public accounting firm;

7. Establish a policy for the Company's hiring of employees or former employees of the independent registered public accounting firm;
8. Pre-approve audit and non-audit services provided to the Company by the independent registered public accounting firm (or subsequently approving non-audit services in those circumstances where a subsequent approval is necessary and permissible); in this regard, the Audit Committee shall have the sole authority to approve the hiring and firing of the independent registered public accounting firm, all audit engagement fees and terms, and all non-audit engagements, as may be permissible, with the independent registered public accounting firm;
9. Review and provide guidance with respect to external audits of the Company's financial statements and the Company's relationship with its independent registered public accounting firm by:
 - (a) reviewing the independent registered public accounting firm's proposed audit scope, approach and independence;
 - (b) ensuring its receipt from the independent registered public accounting firm the written independence disclosures required by the applicable requirements of the PCAOB, and actively engaging in a dialogue with the independent registered public accounting firm with respect to any disclosed relationships or services that may impact the objectivity and independence of the independent registered public accounting firm and taking, or recommending that the full Board of Directors take, appropriate action to oversee the independence of the independent registered public accounting firm;
 - (c) discussing with the Company's independent registered public accounting firm the matters required to be discussed by the independent registered public accounting firm under the Auditing Standards;
 - (d) overseeing the resolution of disagreements between management and the independent registered public accounting firm in the event that they arise; and
 - (e) reviewing reports submitted to the Audit Committee by the independent registered public accounting firm in accordance with applicable SEC requirements.
10. Review and discuss with management and the independent registered public accounting firm the annual audited financial statements and quarterly unaudited financial statements and all internal controls reports (or summaries thereof), including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" to be included in the Company's Annual Reports on Form 10-K (or the Annual Reports to Stockholders

if distributed prior to the filing of Form 10-K) and Quarterly Reports on Form 10-Q, respectively, prior to their filing with the SEC;

11. Review other relevant reports or financial information submitted by the Company to any governmental body, or the public, including management certifications as required by the Sarbanes-Oxley Act of 2002 (Sections 302 and 906) and relevant reports rendered by the independent registered public accounting firm;
12. Recommend to the Board, if appropriate, that the Company's annual audited financial statements be included in the Company's Annual Report on Form 10-K;
13. Conduct a post-audit review of the financial statements and audit findings, including any significant suggestions for improvements provided to management by the independent registered public accounting firm;
14. Review before release the unaudited quarterly operating results in the Company's quarterly earnings release;
15. Oversee compliance with the requirements of the SEC for disclosure of services performed by the independent registered public accounting firm and of Audit Committee members' qualifications and activities;
16. Review, approve and monitor the Company's Standards of Business Conduct for (a) any offenses involving members of the executive staff, (b) any situations involving alleged fraud, or (c) any reports of alleged misconduct that would result in the Company being in violation of domestic or foreign laws, including SEC reporting obligations and the Foreign Corrupt Practices Act;
17. Review, in conjunction with counsel, any compliance matters that could have a significant impact on the Company's financial statements;
18. Review on an ongoing basis, but no less frequently than annually, all directors' and officers' related party transactions for potential conflict of interest situations, and approve all such transactions to the extent required by applicable SEC and Stock Exchange rules;
19. Evaluate on an annual basis the Audit Committee's own charter, structure, processes and membership requirements;
20. Evaluate the Audit Committee's own performance on a regular basis, which evaluation shall be reported to the Board;
21. Provide a report in the Company's proxy statement in accordance with the rules and regulations of the SEC;
22. Establish anti-fraud programs and procedures for receiving, retaining and treating complaints received by the Company regarding accounting, internal accounting controls or auditing matters;

23. Establish and monitor procedures for the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters;
24. Review the effectiveness of the internal audit function, including a review of activities and the organizational structure of the internal audit function;
25. Participate in the selection and performance reviews of the director of internal audit;
26. Review the proposed internal audit plan for the coming year, and the staffing and audit procedures to be utilized. During this review, the independence, objectivity and authority of the internal audit function will be assessed;
27. Through regular reports to the Audit Committee, ensure that significant findings and recommendations made by internal audit are received and discussed on a timely basis and that management responds on a timely basis to recommendations by the internal auditors;
28. Ensure the internal audit function has sufficient authority, support and access to Company personnel, facilities and records to carry out its work without restrictions or limitations;
29. Receive reports from the Company's General Counsel regarding any legal matter from which there is a reasonable likelihood of a significant impact on the Company's financial statements;
30. Receive reports from the Company's General Counsel on litigation filed by or against the Company and any process, policy or compliance issues raised by the litigation;
31. Receive reports from the Company's General Counsel (and, if necessary, directly from the Company's other attorneys, internal and external) regarding violations of law or any breaches of fiduciary duty by the Company or any agent of the Company and regarding compliance with the Company's Standards of Business Conduct;
32. Meet with management and the Company's General Counsel at least annually to discuss the Company's compliance with all relevant laws and regulations, including any related internal control systems to facilitate such compliance, as well as the status of any legal matters affecting the Company;
33. Receive reports from the independent registered public accounting firm regarding illegal acts that have been detected by or have otherwise come to the attention of the independent registered public accounting firm in the course of its audits and reviews;
34. Review and approve decisions made by the Company and its subsidiaries to enter into swaps (as defined under the Commodity Exchange Act and any associated

rules and regulations), including decisions to enter into swaps that are exempt from the clearing and exchange trading requirements under the Commodities Exchange Act and any associated rules or regulations;

35. Review and discuss with management at least annually the Company's insurance programs; and
36. Discuss at least annually the Company's risk assessment and risk management policies and meet with management and members of internal audit to discuss the Company's major financial risk exposures and the steps management has taken to monitor, control and mitigate such exposures.

In addition to the above responsibilities, the Audit Committee will undertake such other duties as the Board delegates to it, and will report, at least annually, to the Board regarding the Audit Committee's examinations and recommendations.

The Company will provide appropriate funding, as determined by the Audit Committee, to pay the independent registered public accounting firm, any independent counsel or other advisors hired by the Audit Committee and any administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its activities.

The Audit Committee is authorized to conduct any investigation appropriate to fulfilling its responsibilities, with full access to all books, records, facilities and personnel of the Company, and may retain, at the Company's expense, independent legal, accounting and other advisors as it deems necessary to assist it in conducting any such investigation.

V. COMPENSATION

Members of the Audit Committee shall receive such fees, if any, for their service as Audit Committee members as may be determined by the Compensation Committee in its sole discretion. Such fees may include retainers or per meeting fees. Fees may be paid in such form of consideration as is determined by the Compensation Committee.

Members of the Audit Committee may not receive any compensation from the Company except the fees and other compensation that they receive for service as a member of the Board or any committee thereof.

VI. DELEGATION OF AUTHORITY

The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to pre-approve audit and permissible non-audit services, provided such pre-approval decision is presented to the full Audit Committee at its scheduled meetings. In addition, the Audit Committee may from time to time create such subcommittees, consisting solely of members of the Audit Committee, as it may determine are appropriate to perform those duties as are specifically delegated to such subcommittees, which shall at all times remain subject to the oversight of the Audit Committee as a whole.