SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended June 30, 2003
OR
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition Period from To

Commission File No. 0-9992

KLA-TENCOR CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Delaware	**04-2564110**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification Number)**
160 Rio Robles, San Jose, California	**95134**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (408) 875-6000
Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
None	**None**

Securities Registered Pursuant to Section 12(g) of the Act:
Common Stock, $0.001 Par Value
Common Stock Purchase Rights
(Title of Class)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K

[ ]

The aggregate market value of the voting stock held by non-affiliates of the registrant based upon the closing price of the registrant's stock, as of September 10, 2003, was $10,755,202,546. Shares of common stock held by each officer and director and by each person or group who owns 5% or more of the outstanding common stock have been excluded in that such persons or groups may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Yes [X] No [ ]

Indicate by checkmark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Yes [X] No [ ]

The registrant had 193,903,231 shares of common stock outstanding as of September 10, 2003.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the 2003 Annual Meeting of Stockholders ("Proxy Statement") to be held on November 5, 2003, and to be filed pursuant to Regulation 14A within 120 days after registrant's fiscal year ended June 30, 2003, are incorporated by reference into Part III of this Report.

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SPECIAL NOTE REGARDING

FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements included in or incorporated by reference in this Annual Report on Form 10-K, other than statements of historical fact, are forward-looking statements. You can identify these and other forward-looking statements by the use of words such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "relies," "believes," "estimates," "predicts," "intends," "potential," "continue," or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. Such forward-looking statements include, among others, those statements regarding the future results of our operations; the recovery and upturn in the demand for semiconductors; technological trends in the semiconductor industry; our future product offerings and product features, as well as industry adoption of new technology; customers' results utilizing our products; anticipated revenue from various domestic and international regions; international sales and operations; maintenance of competitive advantage; success of our product offerings; completion of backlog; creation of development and engineering programs for research and development; attraction and retention of employees; the completion of any acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; the outcome of any litigation to which we are a party; results of our investment in leading edge technologies; enhancements of current products and strategic acquisitions; our future income tax rate; sufficiency of our existing cash balance, investments and cash generated from operations to meet our liquidity and working capital requirements; our use of derivative financial instruments to mitigate certain financial market risks; and the effectiveness of our efforts and the effects of hedging transactions.

Our actual results may differ significantly from those projected in the forward-looking statements in this report. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 1, "Business" in this Annual Report on Form 10-K. You should carefully review these risks and also review the risks described in other documents we file from time to time with the Securities and Exchange Commission, including the Quarterly Reports on Form 10-Q that we will file in fiscal 2004. You are cautioned not to place undue reliance on these forward-looking statements, and we expressly assume no obligations to update the forward-looking statements in this report that occur after the date hereof.

PART I

ITEM 1. BUSINESS

The Company

KLA-Tencor Corporation ("KLA-Tencor") is the world's leading supplier of process control and yield management solutions for the semiconductor and related microelectronics industries. Our comprehensive portfolio of products, software, analysis, services and expertise is designed to help integrated circuit ("IC") manufacturers manage yield throughout the entire fabrication process--from research and development to final mass-production yield analysis.

We offer a broad spectrum of products and services that are used by every major wafer, IC and photomask manufacturer in the world. These customers turn to us for inline wafer defect monitoring; reticle and photomask defect inspection; critical dimension ("CD") metrology; wafer overlay; film and surface measurement; and overall yield and fab-wide data analysis. These advanced products, coupled with our unique yield technology services, allow us to deliver the complete yield management solutions our customers need to accelerate their yield learning rates, reduce their yield excursion risks and adopt industry-leading yield management practices.

KLA-Tencor was formed in April 1997 through the merger of KLA Instruments and Tencor Instruments, two long-time leaders in the semiconductor equipment industry, each with over 20 years of experience. KLA Instruments Corporation was incorporated in Delaware in 1975; Tencor Instruments was incorporated in California in 1976. Effective April 30, 1997, Tencor Instruments merged into a wholly owned subsidiary of KLA Instruments Corporation. Immediately following this merger, KLA Instruments changed its name to KLA-Tencor.

Additional information about KLA-Tencor is available on our web site at www.kla-tencor.com. KLA-Tencor makes available free of charge on its web site its Annual Report on Form 10-K, its Quarterly Reports on Form 10-Q, its Current Reports on Form 8-K and amendments to those Reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file them with or furnish them to the Securities and Exchange Commission ("SEC"). Information contained on our web site is not part of this Annual Report on Form 10-K or our other filings with the SEC.

Industry

General Background

The semiconductor fabrication process begins with a bare silicon wafer--a round disk that is six, eight or twelve inches in diameter, about as thick as a credit card and gray in color. The process of manufacturing wafers is in itself highly sophisticated, involving the creation of large ingots of silicon by pulling them out of a vat of molten silicon. The ingots are then sliced into wafers and polished to a mirror finish on one surface, upon which the circuits are made.

The fabrication of an IC, or "chip," is accomplished by depositing upon a silicon wafer a series of film layers that act as conductors, semiconductors or insulators. The deposition of these film layers is interspersed with numerous other process steps that create circuit patterns, remove portions of the film layers, and perform other functions such as heat treatment, measurement and inspection. Most advanced chip designs require over 300 individual steps, many of which are performed multiple times. Most chips consist of two main structures: the lower structure, typically consisting of transistors or capacitors, which perform the "smart" functions of the chip; and the upper structure, typically consisting of "interconnect" circuitry, which connects the components in the lower structure.

Current Trends

Companies that anticipate future market demands by developing and refining new technologies and manufacturing processes, as well as bringing them into production, are better positioned to lead in the semiconductor market. During past industry cycles, semiconductor manufacturers generally contended with one key new technology or market trend, such as a specific design rule shrink. In today's market, the leading semiconductor manufacturers are investing in bringing a multitude of new technologies into production at the same time, including copper interconnects, new materials, sub-0.10-micron design rules and 300-mm wafers (the next larger wafer size, from which more than twice as many ICs can be produced as from 200-mm wafers).

While many of these technologies have been adopted at the development and pilot production stages, significant challenges and risks associated with each one have slowed their adoption into full-volume production. For example, as design rules decrease, yields become more sensitive to the size and density of defects, while device performance characteristics (namely speed or capacity) become more sensitive to such parameters as line width and film thickness variation. Copper introduces new physical defects, which are harder to find within the interconnect structure, as well as electrical defects, which cannot be detected using conventional optical inspection systems. New process materials like low-k dielectrics, silicon-on-insulator ("SOI") and 193-nm photoresists require extensive characterization before they can be made manufacturable. Larger 300-mm wafers are more susceptible to damage than 200-mm wafers since they can bend or bow twice as much, creating stress on the wafer that can result in yield loss. Film uniformity is also more difficult to maintain on these larger wafers. Moving several of these advanced technologies into production at once only adds to the risks that chipmakers face since technical challenges in bringing any one of these into production could also slow the adoption of the other technologies.

Our key activities during fiscal year 2003 involved the development of new process control and yield management tools that enable chipmakers to accelerate the adoption of these new technologies into full-volume production, while minimizing their associated risks. With our portfolio of application-focused technologies and our dedicated yield technology expertise, we are in a position to be the single source for comprehensive yield management solutions that enable our customers to achieve first-to-market success for their next-generation products.

The continuing evolution of semiconductor devices to smaller linewidth geometries and more complex multi-level circuitry has significantly increased the cost and performance requirements of the capital equipment used to manufacture these devices. Construction of an advanced wafer fabrication facility today can cost over $3 billion, a substantial increase over the cost of previous-generation facilities. As a result, chipmakers are demanding increased productivity and higher returns from their manufacturing equipment. Because our process control and yield management equipment typically represents only a small, but growing, percentage of the total investment required to build a fabrication facility, our customers are better able to leverage these increasingly expensive facilities and significantly improve their return on investment ("ROI").

Our Process Control and Yield Acceleration Solutions

Accelerating the yield ramp and maximizing the production yields of high-performance devices are key goals of modern semiconductor manufacturing. Achieving higher yields faster, along with higher performance characteristics, increases the revenue a manufacturer can obtain from each semiconductor wafer. Our systems are used to analyze product and process quality at all critical points in the wafer, photomask and IC manufacturing process, and provide feedback to our customers so that fabrication problems can be identified, addressed and eliminated. This ability to locate the source of defects and other process issues, as well as contain them, enables our customers to improve control over their manufacturing processes, as well as increase their yields and device value—thus maximizing their ROI and lowering their manufacturing costs.

The following are some of the methods used to accelerate yields and optimize device performance, all of which require the capture and analysis of data gathered through many measurements:

> Engineering analysis: This method of analysis is performed offline from the manufacturing process to identify, analyze and locate the source of defects or other manufacturing process issues. Engineering analysis equipment operates with very high sensitivity to enable comprehensive analysis of wafers. Because this method operates off the manufacturing line, high operational speeds are not required.

> Inline monitoring: This method of analysis is used to review the status of ICs during production. Information generated is used to determine whether the fabrication process steps are within required tolerances. It is also used to make any necessary real-time process adjustments before wafer lots move to subsequent process stations. Because information related to defects is needed quickly, inline monitoring requires both high throughput and high sensitivity.

Pass/fail tests: This method of analysis may be used at several different points in the manufacturing process to evaluate whether products meet performance specifications.

The most significant opportunities for yield and device performance improvement generally occur when production is started at new factories and technology shifts in existing factories. Equipment that helps a manufacturer quickly increase new product yields and optimize device performance enables the manufacturer to offer these new products in high volumes early in the product lifecycle—the time when they are likely to generate the greatest profits.

We are a leader in the design, manufacture, marketing and service of process monitoring and yield management systems for the semiconductor wafer, IC and photomask industries. Our technical expertise and understanding of customer needs enable us to provide unique yield management solutions and one of the broadest lines of process monitoring and yield optimization systems available. Our systems are used to analyze product and process quality at critical points during semiconductor manufacturing, as well as provide feedback to our customers that can be used to identify, address, contain and eliminate fabrication problems.

Products

We market and sell products to virtually all major semiconductor, wafer, photomask and data storage manufacturers worldwide. We combine our hardware—consisting of patterned and unpatterned wafer inspection, optical overlay metrology, e-beam review, reticle and photomask inspection, spectroscopic- and e-beam-based CD metrology, and film and surface measurement tools—with our advanced yield analysis and defect classification software to provide fab-wide yield management solutions that are optimized for the manufacturing process cells used in IC production, including lithography, etch, deposition and chemical mechanical planarization ("CMP"). Our offerings can be broadly categorized into five groups: Defect Inspection, Metrology, Yield Management Software Solutions, Data Storage, and Customer Service and Support.

Defect Inspection

Our defect inspection tools are used to detect, count, classify and characterize particles, pattern defects and electrical failures both inline at various manufacturing process stages and offline engineering analysis. We pioneered the market for automated defect inspection of semiconductor wafers and reticles more than two decades ago. Our portfolio includes all the tools necessary for our customers to detect, correlate and analyze physical and electrical defects, as well as determine and correct their cause.

High-Resolution Imaging Inspection

Our 2xxx wafer inspection series, first introduced in 1992, set the standard for high-sensitivity patterned wafer inspection through a unique combination of high-speed image processing, an ultra-broadband brightfield illumination source and our Segmented Auto Threshold technology. To date, more than one thousand 2xxx systems have been installed at customer facilities worldwide.

In 2000, we unveiled the 2350, an ultraviolet ("UV") inspection system to feature ultra-broadband brightfield illumination. Delivering an increase in throughput over the previous-generation 2xxx platform, the 2350 enabled the resolution of circuit patterns and defects for 0.13-micron and smaller processes. In 2001, we introduced an upgrade to the 2350, the 2351, which offers enhancements in sensitivity, throughput and ease of use. In June 2003, we introduced our latest-generation high-resolution imaging inspection system, the 2360, which incorporates multiple-bandwidth brightfield illumination and other enhancements to extend the performance of the 2xxx series to the 90-nm (0.09-micron) technology node and below.

High-Speed Laser Scattering Inspection

Our AIT wafer inspection family is designed for providing fast and accurate feedback on process tool performance, as well as advanced line monitoring for films, CMP, and non-critical etch and photo modules. The AIT series uses patented double-darkfield technology, which is a low-angle illumination technique particularly effective for detecting defects on planar surfaces such as post-CMP wafers. First introduced in 1995, the AIT platform has been continually enhanced over the years with increasing levels of sensitivity and throughput to address the inspection needs for 0.13-micron and smaller design rules.

In April 2003, we introduced the AITFusion and AITFusionUV, our latest-generation darkfield inspection systems. The AITFusion UV was developed specifically to address the special inspection and excursion monitoring needs of sub-100-nm processes on 300-mm wafers. The AITFusion UV's unique inline data processing capabilities speed the resolution of critical yield issues to lower the cost of inspection, thus accelerating chipmakers' ramp to volume-production yields.

Electrical Line Monitoring

Scanning electron microscopes ("SEMs") use an electron beam to image and measure surface features on a semiconductor wafer at a much higher resolution than images captured by optical microscopes. As the industry drives below the 0.13-micron node, the combination of smaller process windows, new materials and more complicated process integration at these smaller geometries has given rise to a new and challenging class of defects. Defects, which are small, sub-surface, or within high-aspect-ratio structures, can lead to significant yield and reliability issues in production. In addition, a majority of these new defects are electrical in nature and cannot be detected by optical inspection technologies.

Accelerating yield learning for today's advanced semiconductor manufacturing processes, especially in the development and early ramp phases, is made more difficult by the task of isolating these yield-killing defects from the thousands of non-relevant defects induced by material anomalies—a time-consuming process. In addition, due to the extremely tight process margins associated with today's advanced IC designs, these electrical defects can recur at random during volume production. Thus, e-beam inspection is essential—not only during IC development, where the highest levels of sensitivity are needed to root out the vast majority of these electrical defects, but also in production, where dedicated high-speed e-beam inspection systems are required at key process steps. We pioneered this market with the introduction of the industry's first e-beam inspection system more than a decade ago. Since that time, we have continued to leverage our expertise in e-beam technology to bring new solutions to market that will enable our customers to identify electrical defect mechanisms faster, thereby accelerating their yield ramps, time to market and time to profit on their next-generation chips.

Our µLoop™ methodology, introduced in 2001, provides a fab-wide framework of solutions that accelerates yield learning for new semiconductor processes in development through a merger of inspection, metrology and electrical test data. eD_o, the first product in the µLoop family, combines non-contact electrical test with inline physical defect inspection to produce a fast root-cause analysis method available in the industry today. Using eD_o, chipmakers can reduce the length of their yield-learning cycles.

In May 2003, we introduced the latest addition to our eSxx series, called eS30. Representing the culmination of more than 25 years of experience in wafer inspection, the eS30 is an e-beam inspection tool specifically designed for high-volume production line monitoring of electrical defects. The successor to our widely adopted eS20XP tool, the eS30 delivers better throughput, sensitivity and image resolution capability of its predecessor, while allowing users to classify defects in real time and trend by defect type. The eS30 is targeted to enable our customers to adopt and proliferate cost-effective electrical defect monitoring strategies in their high-volume production environments. The eS30 provides the sensitivity needed for advanced process development down to the 65-nm node.

Optical and E-beam Defect Review

Our defect review capability includes optical confocal and e-beam scanning technology. In 1995, we introduced the original CRS™ optical review system, which enables high-speed defect review and classification on both patterned and unpatterned 200-mm and 300-mm wafers. In 2000, we introduced the eV300 defect review system—an advanced, automated SEM designed to gather and analyze defect excursion information, as well as report the results with the improved sensitivity required at 0.13-micron and smaller design rules. The eV300 supplements optical review by providing topographical information, enabling more accurate defect classification than can be achieved by optical review systems alone.

Unpatterned Wafer Inspection

In 1997, we introduced the Surfscan SP1™ for bare wafer qualification, process monitoring and equipment monitoring applications. The SP1^{TBI} (Triple Beam Illumination) was introduced in 1998, and was designed with additional optical configurations needed to detect sub-micron defects on metal films and rough surfaces, while still providing sensitivity below 100-nm on polished silicon. The SP1^{TBI} is also used for detecting defects on non-uniform films, a critical requirement for CMP applications. In 1999, we introduced a surface nanotopography measurement capability for the SP1 that enhances lithography and CMP process monitoring for 0.13-micron process development. In 2001, we unveiled the SP1^{DLS}, the first 300-mm tool to provide brightfield, darkfield and nanotopography defect information in a single scan. It has the sensitivity to capture a wide variety of defects as small as 50-nm at high throughput speeds.

Macro After-Develop Inspection

In 1999, with the introduction of the 2401 macro defect inspection system we enabled our customers to automate after-develop inspection (“ADI”) for macro defects. Designed to replace inefficient manual macro ADI, the 2401 is an automated inspection system able to detect and classify front-end macro lithographic defects, which are 50 microns and larger in size. Manual ADI methods may capture a small fraction of photo-related defects as a result of wafer complexity, background patterning noise and human fatigue. In contrast, the 2401 captures most critical macro ADI defects, while providing defect classification and yield information to reduce scrap and enable continuous process improvements.

Macro defects, which can ruin the entire wafer, are costly to chipmakers in 300-mm production, since more than twice the number of die are at risk with these larger wafers compared to 200-mm wafers. In 2001, we introduced the 2430 macro ADI series, which brought the benefits of the 2401 to 300-mm production.

Photo Cell Monitoring

The introduction of thinner photoresists, new resist chemistries, tighter process windows and smaller design rules have all given rise to new and smaller defect types within the lithography cell—a large area of investment within the fab. Defect management in the lithography cell is thus critical for qualifying new lithography processes, and establishing a benchmark for controlling defects and minimizing yield losses during production. In 2002, we introduced our µPCM (Micro Photo Cell Monitor) solution to provide fabs with a methodology for identifying and eliminating lithography-related micro defects before product lots are placed at risk. Combining our most advanced defect management hardware and software tools, a new proprietary reticle design, optimized test wafers and industry-leading expertise, µPCM provides high sensitivity and capture rate required for reducing lithography-related micro defects. It monitors the health of the lithography cell and enables chipmakers to make rapid and accurate “go/no-go” decisions about their product reticles, track systems and exposure tools.

Backside Wafer Inspection

In 2002, we unveiled a new Backside Inspection Module (“BSIM”) option for the Surfscan SP1 series that provides an automated, non-destructive inspection solution for the backsides of patterned production wafers. Wafer backside defects can have a significant impact on wafer and process uniformity, both of which are critical issues in advanced 300-mm processing. Our field trials indicate that these backside defects can arise at nearly every process step, and result in yield loss—amounting to millions of dollars annually in lost revenue. The Surfscan SP1 with BSIM enables automated, non-destructive wafer backside inspection to be incorporated as a routine step into every process module, enabling recovery of these yield losses and helping chipmakers further realize the economic gains in moving to 300-mm.

Reticle Inspection

Error-free reticles are the first step in ensuring high yields in the manufacturing process, since defects in reticles can be replicated on wafers. Reticles are high-precision quartz plates that contain microscopic images of electronic circuits. Placed into steppers or scanners, these reticles are used to transfer circuit patterns onto wafers to fabricate ICs. The extension of optical lithography below the 0.13-micron node has resulted in the mask error enhancement factor, where reticle defects once too small to print on the wafer become enhanced in the lithography process to create yield-killing wafer defects. We pioneered the market for automated reticle and photomask inspection over two decades ago, and continue to be a market leader in addressing our customers’ evolving inspection requirements.

In 2000, we unveiled our TeraStar™ reticle inspection system for high-resolution reticle inspection down to the 100-nm node. With its ability to inspect up to a terapixel (one million by one million pixels) per reticle, TeraStar provides improvements in throughput compared to previous-generation systems. Tera™ algorithms enable the inspection of smaller linewidth geometries and complex resolution enhancement techniques, such as optical proximity correction ("OPC") assist features and phase shift masks ("PSMs"). Its high throughput and sensitivity make TeraStar ideal for pre- and post-pelliclization inspection in photomask manufacturing operations, as well as incoming quality control and reticle re-qualification in wafer fabs.

Reticle CD errors is a major cause of yield loss in IC manufacturing at the 0.13-micron node. In 2002, we introduced a new option on TeraStar, called TeraFlux™, which detects minute but relevant CD errors on contact- and via-layer reticles prior to their first use in the wafer fab. TeraFlux measures the energy that passes through the contact hole and compares it to another reference—either die or database—to look for unexpected energy variations. This enables the TeraStar system to capture reticle CD defects, such as incorrectly sized contacts or semi-transparencies—both of which will adversely affect the amount of light passing through the contact holes during the lithography process. By capturing these critical defects during reticle inspection and qualification, TeraFlux enables chipmakers to ramp their deep sub-wavelength lithography processes into production, while minimizing the costs associated with scrapped wafers.

In June 2003, we introduced TeraScan™, the successor to TeraStar. A deep ultraviolet ("DUV") reticle inspection tool developed for sub-90-nm IC production, TeraScan offers high sensitivity to detect classical defects (intrusions, extrusions and point defects) as small as 80-nm, and CD defects as small as 50-nm. TeraScan has the ability to inspect nearly any type of photomask used in IC production, regardless of reticle wavelength and resolution enhancement technology, for sub-90-nm design rules.

Metrology

Our metrology or process window optimization products provide virtually all of the critical measurements fabs require to manage their advanced manufacturing processes. With our unique combination of overlay, CD, film thickness and reflectivity measurements, IC manufacturers have the capabilities to maintain tight control of their lithography, etch, deposition and CMP processes.

<u>Optical Overlay</u>

Decreasing linewidths, larger die sizes and increasing numbers of layers in semiconductor devices all affect the tolerances for layer-to-layer matching, or overlay, and can result in overlay misregistration errors—a crucial cause of yield loss. Metrology systems are needed to measure the alignment between different layers of the semiconductor device to ensure overlay parameters are kept within specification.

KLA-Tencor's overlay metrology systems are more tolerant of process and substrate reflectivity variations than other optical systems, and provide the measurements that our customers need to fine-tune their lithography systems to compensate for these errors and improve process yield. In 2001, we unveiled Archer 10, which enables overlay measurements to within 2-nm for sub-0.13-micron and 300-mm production. To augment the performance of the Archer 10, we introduced a new software tool in 2002 called Archer Analyzer that conducts fully automated, real-time, on-tool overlay metrology analysis. Seamlessly integrated with the Archer 10, Archer Analyzer provides information, such as wafer lot dispositioning and stepper correction data, which helps chipmakers eliminate unnecessary wafer rework and quickly address variations in the performance of their lithography tools to minimize yield loss.

In February 2003, we introduced Archer AIM, our most advanced optical overlay metrology solution to date. Archer AIM leverages a grating-style target technology to capture design-rule overlay errors and improve the accuracy of stepper corrections. Archer targets are denser than traditional box-in-box targets, resulting in the collection of more process information for improved correlation to in-device overlay performance. They can also be segmented for each device layer to meet specific customer requirements. These benefits, combined with Archer AIM's precision performance, enable the system to reduce the total measurement uncertainty associated with traditional overlay metrology solutions for sub-100-nm design rules.

<u>Focus-Exposure Line Monitoring</u>

Focus-exposure control in lithography is a key challenge for CD control at the 0.13-micron node and below. Unseen lithography focus-exposure excursions can result in CD process variations that lead to lower yields, cause unnecessary and costly rework, and reduce scanner productivity. Monitoring focus and exposure variations inline is thus critical to maintaining tight CD control at these advanced design rules. A new option on our Archer overlay metrology platform, called MPX, enables lithographers to control stepper defocus and exposure variations on product wafers non-destructively. Leveraging dual-tone-design targets and analysis software, MPX can simultaneously provide separate exposure and focus measurements on product wafers with a high degree of sensitivity and precision. This enables MPX to provide fast and accurate feedback on the key parameters needed to maintain tight CD control in sub-0.13-micron IC production, without requiring periodic offline monitoring of the exposure tool.

<u>Process Window Monitoring</u>

Over time, optimal focus and exposure settings for a given lithography cell and process can drift and change in a variety of ways, such as CD variations during the patterning process, which result in significant yield losses. Knowing not just the optimal process settings, but also the size of the process window and the sensitivity to process variation, is critical for stable and efficient pattern transfer.

Our Process Window Monitor™ ("PWM") series of CD metrology systems enables chipmakers to monitor and match the process windows of every lithography cell and process in the fab in real time. Building upon the high precision, throughput and sensitivity of our CD SEM and optical CD metrology tools, the new eCD-1-PWM and SpectraCD-PWM series of systems enable a variety of exposure tool-based diagnostics to be off-loaded to the metrology tools, increasing production capacity and overall equipment effectiveness of lithography cells. In addition, enhanced focus-exposure process window information can be provided by the PWM systems to supplement information obtained by our Archer MPX technology to enable rapid excursion detection and root-cause analysis.

<u>E-Beam CD Metrology</u>

Every nanometer in CD variation in the IC manufacturing process affects device performance, which consequently impacts yield and bottom-line profitability. At the 90-nm node, reducing process variation by a single nanometer can improve microprocessor speed by 10 MHz.

The eCD 1— unveiled in February 2003—features the precision and resolution to meet the CD metrology performance requirements for the 90-nm technology node and beyond. The eCD 1 is based on a new platform, and all its design aspects have been precision suited for 90-nm node metrology requirements, and extendible to the 65-nm node. eCD 1 is well ***suited*** for applications involving 193-nm lithography and very-high-aspect-ratio structures.

Our pQC™ ("Pattern Quality Confirmation") software enables the eCD 1 to provide inline, real-time monitoring of feature shape integrity during the patterning process—enabling the detection of subtle variations in feature shape that can occur at and below the 0.13-micron node and go undetected by traditional CD SEM measurements. Our 8250-R reticle CD control system provides precise and high-throughput measurements on advanced reticles used in the production of sub-0.13-micron devices.

Spectroscopic CD Metrology

New materials that are used in advanced IC production, such as low-k dielectrics and photoresists for 193-nm lithography, are difficult to control during lithography and etch processes. As a result, they require taking more comprehensive data on device features and linewidths to identify and correct process variations and remain within process windows. Our SpectraCD™ system provides non-destructive simultaneous and extensive CD, feature-shape and film-thickness measurements for 193-nm lithography applications and sub-100-nm device production.

Wafer Geometry and Nanotopography Metrology

As device geometries shrink, semiconductor yields become increasingly dependent upon the flatness and nanotopography of wafer substrates. Even the slightest variation in topography on the wafer's surface can impact lithography and front-end CMP processes, affecting device performance and yields. The growing adoption of SOI wafers for high-speed, low-power applications is also driving the need for advanced metrology in SOI wafer manufacturing, since any variation in topography can ultimately affect device yield.

In 2002, we introduced NanoPro NP1, the industry's first single-tool solution for wafer geometry and nanotopography metrology. NanoPro NP1 combines wafer shape, thickness, flatness and nanotopography metrology in a single scan, and can monitor SOI and bare wafers inline throughout the wafer fabrication process—from grinding and etching to rough and final polish. It can be used to monitor all types of 200-mm and 300-mm wafers, including single-side polished, double-side polished, epitaxial and SOI wafers, as well as rough, pre-polished surfaces. With NanoPro NP1, wafer manufacturers obtain more comprehensive wafer characterization data needed for accelerating process improvement and development, as well as reducing production time.

Film Measurement

Our film measurement products measure a variety of optical and electrical properties of thin films. These products are used to control a wide range of wafer fabrication steps, where both within-wafer and wafer-to-wafer process uniformity are of paramount importance to semiconductor manufacturers—enabling them to achieve high device performance characteristics at low cost.

In 1995, we introduced the UV-1250SE, which brought a new technology to production, called spectroscopic ellipsometry ("SE"). Our third-generation SE thin-film measurement tool, the ASET-F5, addressed the film measurement needs that came from the continuing evolution of film development driven by shorter linewidths. In 1999, we introduced an enhanced version of the ASET-F5, known as the ASET-F5x. It incorporates a single wavelength ellipsometry ("SWE") option to complement the industry-leading SE and dual-beam spectrophotometry ("DBS") technologies incorporated in the ASET-F5 for even greater accuracy, repeatability and system-to-system matching.

In 2002, we unveiled SpectraFx 100, our latest-generation thin-film metrology system, which delivers the precision, matching and stability required for advanced film-measurement applications for 90-nm device production, including 193-nm lithography processes. Designed to fully support next-generation and "operator-free" 300-mm fabs with automation and tool-to-tool matching capabilities, SpectraFx 100 enables foundries and other multi-product high-volume chip manufacturers to reduce the process development time for advanced materials and accelerate their adoption into volume production. These materials include 193-nm photoresists, complex copper dual-damascene film stacks, and low-k and high-k dielectrics.

In July 2003, we introduced a new option for SpectraFx 100 called AccuFilm, which eliminates the effects of airborne molecular contamination ("AMC") on ultra-thin-film measurements. A key roadblock to achieving control of advanced gate processes below the 100-nm node, AMC grows rapidly on film surfaces and degrades the accuracy and repeatability of gate dielectric metrology. AccuFilm enables SpectraFx 100 to remove these contaminants from product wafers in a matter of seconds before taking film measurements at each measurement site without placing product at risk. It is a valuable enhancement for measuring extremely thin gate dielectric films, which are essential for the production of high-performance 90-nm and 65-nm devices.

Under development in fiscal year 2003 and introduced early in fiscal year 2004, KLA-Tencor also offers the MetriX 100, the industry's first inline, non-contact metal films metrology system to provide independent measurements of both film composition and thickness on product wafers. With film composition becoming as critical as film thickness in determining the functionality and reliability of advanced ICs, MetriX 100's ability to measure both parameters makes it an ideal tool for production line monitoring at the 90-nm node and process development for the 65-nm and below nodes.

Contamination Monitoring

Gate dielectric quality is critical to the speed and reliability of an IC. Below the 0.13-micron node, dielectrics become so thin (less than 20 angstroms, or the equivalent of 0.002 micron) that electrical performance characteristics of the dielectric films become just as critical as physical characteristics in determining overall transistor performance. Our Quantox™ product line provides non-contact, inline electrical performance measurements of all the key parameters that determine the quality of advanced gate dielectric films, including contamination and oxide thickness, as well as electrical capacitance and leakage.

In 2002, we introduced the latest addition to this product family, called Quantox XP. Quantox XP provides information on both the physical and electrical properties of advanced gate dielectric materials in real time. These materials include silicon oxynitride ("SiON") and high-k dielectrics, which are required for sub-0.13-micron IC production. Quantox XP data provides high correlation to device electrical test data, enabling chipmakers to predict transistor performance inline, rather than having to wait until end-of-line electrical test—a process that normally can take days or weeks to complete.

In-situ CMP End-Point Detection

In copper deposition, metal film thickness and uniformity can vary significantly from wafer to wafer. To compensate for these variances during CMP, chipmakers have traditionally had to either take copper wafers offline, which dramatically slows the production process, or instead use optical-only *in-situ* metrology methods, which provide limited information and unreliable end-point data. In 2001, we unveiled Precice™, a production-worthy *in-situ* film thickness and end-point control system for copper CMP that provides measurements in real time. Precice reduces the risk of process errors due to non-uniform polishing, thereby speeding the ramp of new copper processes and maximizing copper yields.

Surface Metrology

Our Stylus profilers measure the surface topography of films and etched surfaces, and are used in basic research and development as well as semiconductor production and quality control. In 1999, we introduced the HRP-240^{ETCH}, the latest generation of our HRP® high resolution profilers. This system combines the dishing and erosion measurement capabilities of our long-scan profilers with high-aspect-ratio etched feature measurement capability, which has historically been limited to atomic force microscopes. This allows customers to monitor their critical etch processes, such as shallow trench isolation (“STI”) and dual-damascene via/trench. We also provide stress measurement systems and capabilities, such as our new wafer bow and wafer stress option for our ASET-F5x and SpectraFx 100 thin-film metrology tools, which detects reliability-related problems such as film cracking, voiding and lifting.

Yield Management Software Solutions

Our productivity and analysis software systems translate raw inspection and metrology data into patterns that reveal process problems and help semiconductor manufacturers develop long-term yield improvement strategies.

Yield/Data Analysis and Management

In 1999, we acquired Taiwan-based ACME Systems, Inc., a provider of yield correlation software. Combining the newly acquired technology from ACME with our own yield management expertise led to the development of our Klarity ACE yield analysis software, which helps our customers quickly identify the source of defects and process problems, as well as correct them. With our acquisition of FINLE Technologies in 2000, we developed our Klarity ProDATA lithography data analysis software, which, along with our PROLITH lithography and etch simulation software, helps manufacturers reduce their advanced lithography development time and cost.

In 1999, we introduced our IMPACT XP™ automated defect classification (“ADC”) software, which provides consistent and accurate classification of yield-limiting defects to help our customers accelerate their ramp to higher process yields. IMPACT XP incorporates our SmartGallery™ tool, which reduces the setup time associated with ADC implementation in fabs. This is a critical requirement, particularly for foundries and application specific integrated circuit (“ASIC”) manufacturers, who specialize in short runs of multiple products. Our Real Time Classification™ (“RTC”) and inline ADC (“iADC”) technologies, which provide classification and binning of defect types in real time during inspection, are critical features on all of our latest-generation e-beam and optical inspection tools.

In 2001, we introduced our recipe management service, called iRecipe™, which allows factory engineers to quickly and easily access existing recipes and associated information that reside on a central database from any personal computer that is connected to the fab intranet. By integrating iRecipe into their fab network, chipmakers can reduce their inspection and metrology tool CoO, as well as improve their overall fab efficiency.

Data Storage Industry

Outside the semiconductor industry, we manufacture, sell and service yield management solutions to the data storage market. In the front-end of thin film head wafer manufacturing, we are the leading provider of the same process control equipment with which we serve the semiconductor industry, with particular strength in photolithography control. In the back-end of head manufacturing, we are the leading provider of a range of test equipment, including fly-height and head resonance testers, CD-SEMs and high resolution surface profilers. Additionally, we are leveraging our expertise in magnetics to meet customers’ needs in the emerging MRAM (magnetic random access memory) market.

Customer Service and Support

We enhance the value of our products through our customer service and support programs, which provide comprehensive worldwide service and support across all our product lines. We also offer yield technology services to improve our customers’ ROI.

Global Support Services

Our customer support organization is responsible for much of the support of our customers following the shipment of the equipment and software, including on-site repair, telephone support, system installation, relocation services and selected post-sales applications.

As part of our customer support program, we offer iSupport™, a fast, comprehensive and secure online capability that enables our technical support and applications engineers to remotely access data from our tools and operate them in real time to diagnose and rapidly resolve problems when they occur--all via a secure online connection controlled by the customer at all times. With the remote diagnostics capabilities offered by iSupport, customers can achieve such benefits as improved tool productivity and overall equipment effectiveness, as well as lower CoO.

In 2002, we unveiled our new iPartner™ portfolio of customer support offerings, which leverages a combination of online and on-site resources to cut customer service costs, while at the same time boosting tool uptime. Based on our iSupport technology, the iPartner program takes a tiered approach that allows customers to scale at any time to the support level that matches their unique and evolving manufacturing requirements. It is designed to factor in the change in service and support requirements that occur as process and product cycles mature. With 7x24 iPartner online support, customers work with our online engineers to resolve common issues, while reducing the need for on-site dispatch. This results in reduced service costs for the customer and increased tool uptime. Even when an on-site visit is needed for complex issues, our online engineers diagnose the problem and then identify and order the necessary parts so that the local customer support engineer arrives on-site with the solution and needed parts in hand to quickly resolve the problem. This approach reduces mean time to repair, further cutting service costs and increasing tool uptime.

In one of our most recent initiatives to strengthen our global customer support infrastructure, we opened Asia-Pacific's first online support center in Taiwan in March 2003. Staffed by multilingual technical experts, the Taiwan Online Support Center utilizes our iSupport technology to help customers throughout Taiwan, China and the Southeast Asia region better protect their investment in our tools, while reducing their service costs. In the coming months, we plan to open more online support centers to help our customers in other regions to enjoy the immediate benefits of increased coverage and faster response time, while reducing the need for on-site support.

Our educational services offer a comprehensive selection of technical courses—from maintenance and service training to basic and advanced applications and operation. We offer both standard and customized courses for individuals and groups, at the user's location or at any of our three training facilities. We also offer self-paced learning packages, including video, computer-based training and study plans.

Yield Technology Services

Our Yield Technology Services group provides the systems, software and yield management expertise to speed the implementation of customers' yield improvement programs. This practice provides a broad range of services and support, including new fab yield management solution planning, factory and field customer applications training, dedicated ramp management support, integrated yield management consulting and applications support for effective solution implementation, and regional customer response centers with remote-access diagnostics. Use of our consulting practice provides accelerated yield learning rates and improved device performance for maximum ROI.

Customers

To support our growing, global customer base, we maintain a significant presence throughout the United States, Europe, Asia-Pacific and Japan, staffed with local sales and applications engineers, customer and field service engineers and yield management consultants. We count among our largest customers leading semiconductor manufacturers from each of these regions. In fiscal 2003, one customer (Intel Corporation) accounted for 11% of total revenues. In fiscal 2002 and 2001, no single customer accounted for more than 10 percent of our revenues.

Our business depends upon the capital expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for ICs and products utilizing ICs. We do not consider our business to be seasonal in nature, but it is cyclical with respect to the capital equipment procurement practices of semiconductor manufacturers and is impacted by the investment patterns of such manufacturers in different global markets. Downturns in the semiconductor industry or slowdowns in the worldwide economy could have a material adverse effect on our future business and financial results.

Sales, Service and Marketing

Our sales, service and marketing efforts are focused on building long-term relationships with our customers. We focus on providing a single and comprehensive resource for the full breadth of process control and yield management products and services. Customers benefit from the simplified planning and coordination, as well as the increased equipment compatibility found when dealing with a single supplier. Our revenues are derived primarily from product sales, principally through our direct sales force and, to a lesser extent, through distributors.

We believe that the size and location of our field sales, service and applications engineering, and marketing organizations represent a competitive advantage in our served markets. We have direct sales forces in the U.S., Europe, Asia-Pacific and Japan. We maintain an export compliance program that is designed to fully meet the requirements of the U.S. Departments of Commerce and State.

As of June 30, 2003, we employed over 2,300 sales and related personnel, service engineers and applications engineers. In addition to sales and service offices in the U.S., we conduct sales, marketing and services out of wholly-owned subsidiaries or branches of U.S. subsidiaries in a variety of countries, including China, France, Germany, Israel, Italy, Japan, South Korea, Malaysia, Singapore, Taiwan, Thailand and the United Kingdom. International revenues accounted for approximately 69%, 67%, and 66% of our revenues in fiscal 2003, 2002, and 2001 respectively. Additional information regarding our revenues from foreign operations for our last three fiscal years is incorporated by reference from Note 11 of the Notes to the Consolidated Financial Statements found under Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

We believe that sales outside the U.S. will continue to be a significant percentage of our revenues. Our future performance will depend, in part, on our ability to continue to compete successfully in Asia, one of the largest markets for the sale of yield management services in process monitoring equipment. Our ability to compete in this area is dependent upon the continuation of favorable trading relationships between countries in the region (especially Taiwan, China, Japan and South Korea) and the United States, and our continuing ability to maintain satisfactory relationships with leading semiconductor companies in the region.

International sales and operations may be adversely affected by imposition of governmental controls, restrictions on export technology, political instability, trade restrictions, changes in tariffs and the difficulties associated with staffing and managing international operations. In addition, international sales may be adversely affected by the economic conditions in each country. The revenues from our international business may also be affected by fluctuations in currency exchange rates. Although we attempt to manage the currency risk inherent in non-dollar sales through "hedging," there can be no assurance that such efforts will be adequate. These factors could have a material adverse effect on our future business and financial results.

Backlog

Our backlog for system shipments and associated warranty totaled $509 million at June 30, 2003. We include in our backlog only those customer orders for which we have accepted purchase orders and assigned shipment dates within twelve months. We exclude from backlog orders for non-released products. We expect to fill the present backlog of orders during fiscal 2004; however, all orders are subject to cancellation or delay by the customer with limited or no penalty. Due to possible customer changes in delivery schedules and to cancellation of orders, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

Research and Development

The market for yield management and process monitoring systems is characterized by rapid technological development and product innovation. These technical innovations are inherently complex and require long development cycles and appropriate professional staffing. We believe continued and timely development of new products and enhancements to existing products are necessary to maintain our competitive position. Accordingly, we devote a significant portion of our human and financial resources to research and development programs and seek to maintain close relationships with customers to remain responsive to their needs. As part of our customer relationships, we may enter into certain strategic development and engineering programs whereby our customers offset certain of our research and development costs.

Our key research and development activities during fiscal year 2003 involved development of process control and yield management equipment especially reticle inspection and advanced wafer inspection for smaller feature sizes, copper-based devices and 300-mm wafers. For information regarding our research and development expenses during the last three fiscal years, including costs offset by our strategic development and engineering programs, see Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this Annual Report on Form 10-K.

In order to make continuing developments in the semiconductor industry, we are committed to significant engineering efforts toward both product improvement and new product development. New product introductions may contribute to fluctuations in operating results, since customers may defer ordering existing products. If new products have reliability or quality problems, those problems may result in reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products and additional service and warranty expenses. On occasion, we have experienced reliability and quality problems in connection with certain product introductions, resulting in some of these consequences. There can be no assurance that we will successfully develop and manufacture new hardware and software products, or that new hardware and software products introduced by us will be accepted in the marketplace. If we do not successfully introduce new products, our results of operations will be affected adversely.

Manufacturing, Raw Materials and Supplies

We perform system design, assembly and testing in-house and utilize an outsourcing strategy for the manufacture of components and major subassemblies. Our in-house manufacturing activities consist primarily of assembling and testing components and subassemblies that are acquired through third-party vendors and integrating those subassemblies into our finished products. Our principal manufacturing activities take place in San Jose and Milpitas, California, with additional operations in San Diego and Hayward, California, and Migdal Ha’Emek, Israel. As of June 30, 2003, we employed approximately 960 manufacturing and 1,000 engineering personnel.

Many of the parts, components and subassemblies (collectively “parts”) are standard commercial products, although certain items are made to our specifications. We use numerous vendors to supply parts for the manufacture and support of our products. Although we make reasonable efforts to ensure that these parts are available from multiple suppliers, this is not always possible; and certain parts included in our systems may be obtained only from a single supplier or a limited group of suppliers. We endeavor to minimize the risk of production interruption by selecting and qualifying alternative suppliers for key parts, by monitoring the financial condition of key suppliers and by ensuring adequate inventories of key parts are available to maintain manufacturing schedules.

Although we seek to reduce our dependence on sole and limited source suppliers, in some cases the partial or complete loss of certain of these sources could disrupt scheduled deliveries to customers, damage customer relationships and have a material adverse effect on our results of operations.

Competition

The worldwide market for process control and yield management systems is highly competitive. In each of our product markets, we face competition from established and potential competitors, some of which may have greater financial, research, engineering, manufacturing and marketing resources than us, such as Applied Materials, Inc. and Hitachi Electronics Engineering Co., Ltd. We may also face future competition from new market entrants from other overseas and domestic sources. We expect our competitors to continue to improve the design and performance of their current products and processes and to introduce new products and processes with improved price and performance characteristics. We believe that to remain competitive, we will require significant financial resources to offer a broad range of products, to maintain customer service and support centers worldwide and to invest in product and process research and development.

Significant competitive factors in the market for process control and yield management systems include system performance, ease of use, reliability, installed base and technical service and support. We believe that, while price and delivery are important competitive factors, the customers’ overriding requirement is for systems that easily and effectively incorporate automated and highly accurate inspection and metrology capabilities into their existing manufacturing processes, thereby enhancing productivity.

Our process control and yield management systems for the semiconductor industry are intended to compete based upon performance and technical capabilities. These systems may compete with less expensive and more labor-intensive manual inspection devices.

Management believes that we are well positioned with respect to both our products and services. However, any loss of competitive position could negatively impact our prices, customer orders, revenues, gross margins, and market share, any of which would negatively impact our operating results and financial condition.

Acquisitions

We continue to pursue a course of strategic acquisitions and alliances to expand our technologies, product offerings and distribution capabilities. In fiscal 2002, we acquired substantially all of the assets of QC Optics, Inc. (“QC Optics”), a manufacturer of laser-based inspection systems for semiconductor, flat panel and computer hard disk manufacturing industries.

The financial position and results of operations of this acquisition were immaterial in relation to those of KLA-Tencor and this transaction was accounted for as a purchase. Further details of our acquisitions during the last three fiscal years are included in Note 3 of the Notes to the Consolidated Financial Statements found under Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

Acquisitions involve numerous risks, including management issues and costs in connection with integration of the operations, technologies, and products of the acquired companies, possible write-downs of impaired assets, and the potential loss of key employees of the acquired companies. The inability to manage these risks effectively could negatively impact our operating results and financial condition.

Patents and Other Proprietary Rights

We protect our proprietary technology through reliance on a variety of intellectual property laws, including patent, copyright and trade secrets. We have filed and obtained a number of patents in the United States and abroad and intend to continue to pursue the legal protection of our technology through intellectual property laws. In addition, from time to time we acquire license rights under U.S. and foreign patents and other proprietary rights of third parties.

Due to the rapid pace of innovation within the process control and yield management systems industry, we believe that our protection of patent and other intellectual property rights is less important than factors such as our technological expertise, continuing development of new systems, market penetration, installed base and the ability to provide comprehensive support and service to customers.

No assurance can be given that patents will be issued on any of our applications that license assignments will be made as anticipated or that our patents, licenses or other proprietary rights will be sufficiently broad to protect our technology. No assurance can be given that any patents issued to or licensed by us will not be challenged, invalidated or circumvented or that the rights granted hereunder will provide us with a competitive advantage. In addition, there can be no assurance that we will be able to protect our technology or that competitors will not be able to independently develop similar or functionally competitive technology.

Employees

As of June 30, 2003, we employed a total of approximately 4,900 persons. None of our employees are represented by a labor union. We have experienced no work stoppages and believe that our employee relations are good.

Competition is intense in the recruiting of personnel in the semiconductor and semiconductor equipment industry. We believe that our future success will depend in part on our continued ability to hire and retain qualified management, marketing and technical employees.

ITEM 2. PROPERTIES

Information regarding our principal properties at June 30, 2003 is set forth below:

Location	Type	Principal use	Footage	Ownership
Phoenix, AZ	Office	Sales and Service	9,736	Leased
Hayward, CA	Plant	Manufacturing	14,150	Leased
Livermore, CA	Office and plant	Engineering, Manufacturing, and Service	241,252	Owned (1/2 Vacant)
Milpitas, CA	Office, plant and warehouse	Research, Engineering, Marketing, Manufacturing, Service and Sales Administration	727,302	Owned
San Diego, CA	Office, plant and warehouse	Research, Engineering, Marketing, Manufacturing and Service	36,985	Leased
San Jose, CA	Office, plant and warehouse	Corporate Headquarters, Research, Engineering, Marketing, Manufacturing, Service and Sales Administration	120,114 603,325	Leased Owned
Colorado Springs, CO	Office	Sales and Service	6,902	Leased
Portsmouth, NH	Office	Sales and Service	6,000	Leased
Beaverton, OR	Office	Sales and Service	13,075	Leased
Austin, TX	Office	Sales and Service	43,841	Leased
Richardson, TX	Office	Sales and Service	14,989	Leased
Boise, ID	Office	Sales and Service	5,965	Leased
Albuquerque, NM	Office	Sales and Service	7,946	Leased
Hopewell Junction, NY	Office	Sales and Service	8,736	Leased
Shanghai, China	Office	Sales, Service, and Warehouse	39,706	Leased
Wokingham and Basingstoke, England	Office	Sales and Service	11,425	Leased
Meylan, Corbeil, and Rousset, France	Office	Sales and Service	16,467	Leased
Dresden and Puchheim, Germany	Office	Sales and Service, Warehouse	14,007	Leased
Migdal Ha'Emek and Herzliya, Israel	Office and plant	Research, Engineering, Marketing, Manufacturing and Service and Sales Administration	66,738	Leased
Milan, Avezzano, and Catania, Italy	Office	Sales and Service	9,041	Leased
Yokohama, Japan	Office	Sales, Service, and Warehouse	66,361	Leased
Singapore	Office	Sales and Service	23,465	Leased
Kiheung, South Korea	Office	Sales and Service	11,579	Leased
Hsinchu, Tainan, and Taipei, Taiwan	Office	Sales and Service	109,356	Leased

We also lease office space for other, smaller sales and service offices in several locations throughout the world. Our operating leases expire at various times through June 30, 2012 with renewal options at the fair market value for additional periods up to five years. Additional information of these leases is incorporated by reference from Note 8 of the Notes to the Consolidated Financial Statements found under Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K. We believe our properties are adequately maintained and suitable for their intended use and that our production facilities have capacity adequate for our current needs.

ITEM 3. LEGAL PROCEEDINGS

We are named from time to time as a party to lawsuits in the normal course of our business. Litigation, in general, and intellectual property and securities litigation in particular, can be expensive and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. We believe that we have defenses in each of the cases set forth below and are vigorously contesting each of these matters.

ADE Corporation

On October 11, 2000, ADE Corporation (“ADE”), a competitor, filed a patent infringement lawsuit against us in the U.S. District Court in Delaware. ADE claimed damages and sought an injunction under U.S. Patent No. 6,118,525 (“'525 patent”). We filed a counterclaim in the same court alleging that ADE has infringed four of our patents. We are seeking damages and a permanent injunction against ADE. In addition, we are seeking a declaration from the District Court that ADE’s patent is invalid and not infringed by us. On October 22, 2001, we filed a separate action for declaratory judgment against ADE in the Northern District of California requesting a declaration that U.S. Patent No. 6,292,259 (“'259 patent”) is invalid and not infringed. That action has now been consolidated with the prior action in the Delaware proceeding, and ADE has amended its complaint in that proceeding to allege that we are infringing the ‘259 patent. On August 8, 2002, the magistrate presiding over the action issued a recommendation that the court enter summary judgment in our favor on the issue of non-infringement under ADE’s ‘525 patent. On the same day, the magistrate issued recommendations that the court enter summary judgment in favor of ADE on the issue of non-infringement of two of our patents. The district court judge subsequently substantially adopted the recommendations of the magistrate regarding claims construction.

Tokyo Seimitsu Co. Ltd.

On June 27, 2001, we sued Tokyo Seimitsu Co. Ltd. and TSK America Inc. ("TSK"), a competitor, in the U.S. District Court in the Northern District of California alleging that TSK infringes on one of the Company's patents. The suit seeks damages and an injunction under U.S. Patent No. 4,805,123 ("`123 patent"). TSK filed a counterclaim in the same court seeking a declaration that the `123 patent is invalid, unenforceable and not infringed, and also alleged violations of the antitrust and unfair competition laws. The district court judge has entered a ruling that calls into question the validity of the patent in suit. We are examining remedies in connection with that determination.

Although we cannot predict the outcome of these claims, we do not believe that any of these legal matters will have a material adverse effect on our financial position. Were an unfavorable ruling to occur in one or more of the pending claims, there exists a possibility of a material impact on our operating results for the period in which the ruling occurred.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

KLA-Tencor’s common stock is traded on the NASDAQ Stock Market and is quoted on the NASDAQ National Market under the symbol KLAC. The price per share reflected in the following table represents the range of high and low closing prices for our common stock on the NASDAQ National Market for the periods indicated.

2003	**High**	**Low**
First Quarter	$46.30	$26.63
Second Quarter	45.80	26.15
Third Quarter	41.41	31.64
Fourth Quarter	49.36	36.19

2002	**High**	**Low**
First Quarter	$59.45	$31.57
Second Quarter	56.96	29.31
Third Quarter	69.47	47.86
Fourth Quarter	68.66	43.40

As of September 10, 2003, there were 1,008 stockholders of record of our common stock. We have never paid cash dividends to our stockholders and have no plans to pay cash dividends in the foreseeable future.

Equity Compensation Plans

The following table summarizes our stock option plans as of June 30, 2003:

	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under stock option plan
Stock option plan approved by stockholders	20,930,487	$ 27.70	12,925,303[(1)]

Stock option plan not approved by stockholders[2]	8,803,471	35.53	3,994,415
Total	29,733,958	$ 29.94	16,919,718

(1) In July 2003, an additional 5,750,290 shares were reserved for future issuance in accordance with the stock option plan's evergreen feature.
(2) Officers and directors are not eligible to receive options granted under this plan.

ITEM 6. SELECTED FINANCIAL DATA

The following tables reflect selected consolidated summary financial data for each of the last five fiscal years. This data should be read in conjunction with Item 8, "Financial Statements and Supplementary Data," and with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K. The per share data shown below have been restated to reflect KLA-Tencor's two-for-one stock dividend, effective January 19, 2000.

Years ended June 30, *(in thousands, except per share data)*	**2003**	**2002**	**2001**	**2000**	**1999**
Consolidated Statements of Operations:					
Revenues	$1,323,049	$1,637,282	$2,103,757	$1,498,812	$ 843,181
Income (loss) from operations	138,722	244,893	458,468	311,541	(10,334)
Income before cumulative effect of change in accounting principle	137,191	216,166	373,058	253,798	39,212
Cumulative effect of change in accounting principle, net of tax	--	--	(306,375)	--	--
Net income	$ 137,191	$ 216,166	$ 66,683	$ 253,798	$ 39,212
Earnings per share:					
Income before cumulative effect of change in accounting principle					
Basic	$ 0.72	$ 1.15	$ 2.01	$ 1.39	$ 0.22
Diluted	$ 0.70	$ 1.10	$ 1.93	$ 1.32	$ 0.21
Cumulative effect of change in accounting principle, net of tax					
Basic	--	--	$ (1.65)	--	--
Diluted	--	--	$ (1.59)	--	--
Net income					
Basic	$ 0.72	$ 1.15	$ 0.36	$ 1.39	$ 0.22
Diluted	$ 0.70	$ 1.10	$ 0.34	$ 1.32	$ 0.21

Pro forma amounts for the periods beginning before July 1, 2000 have not been presented as the effect of the change in accounting principle could not be reasonably determined. See Note 1 of the Notes to the Consolidated Financial Statements found under Item 8, "Financial Statements and Supplementary Data."

June 30, *(in thousands)*	**2003**	**2002**	**2001**	**2000**	**1999**
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$1,487,883	$1,333,583	$1,143,860	$ 964,383	$ 755,183
Working capital	1,155,327	931,798	912,861	1,056,927	590,024
Total assets	2,866,597	2,717,718	2,744,551	2,203,503	1,584,900
Shareholders' equity	2,215,541	2,030,228	1,760,466	1,708,676	1,232,583

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related notes included in Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. This discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward looking statements as a result of certain factors, including but not limited to those discussed in "Risk Factors" and elsewhere in this Annual Report on Form 10-K. (See "Special Note Regarding Forward-Looking Statements.")

CRITICAL ACCOUNTING POLICIES AND THE USE OF ESTIMATES

The preparation of our Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We based these estimates and assumptions on historical experience, and evaluate them on an on-going basis to ensure they remain reasonable under current conditions. Actual results could differ from those estimates. We discuss the development and selection of the critical accounting estimates with the audit committee of our board of directors on a quarterly basis, and the audit committee has reviewed the Company's disclosure relating to them in this Annual Report on Form 10-K. The items in our financial statements requiring significant estimates and judgments are as follows:

Revenue Recognition We recognize revenue when persuasive evidence of an arrangement exists, the sale price is fixed or determinable, delivery has occurred or services rendered, and collectibility is reasonably assured. We changed our interpretation of "delivery" based on guidance provided in SEC Staff Accounting Bulletin No. 101 (SAB 101) effective July 1, 2000. Prior to adoption of SAB 101, we generally recognized system revenue when title transferred to the customer (mostly upon shipment). System revenue includes hardware and software that is incidental to the product. We now generally recognize system revenue upon positive affirmation by the customer that the system has been installed and is operating according to pre-determined specifications. This positive affirmation is generally evidenced by an acceptance document signed by the customer. This change has the impact of prolonging the cycle time between order placement and revenue recognition. In limited cases, we allow for exceptions where we recognize system revenue upon shipment if acceptance is not required; however, these exceptions have accounted for approximately 3.1% and 2.5% of our revenue for the fiscal years ended 2003 and 2002. Shipping charges billed to customers are included in system revenue and the related shipping costs are included in cost of sales. (See Note 1 of Notes to Consolidated Financial Statements under "Revenue Recognition" for detailed description of exceptions.)

Revenue from software license fees is typically recognized upon shipment if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate a portion of the total fee to any undelivered elements of the arrangement. Such undelivered elements in these arrangements typically consist of services and/or upgrades. If vendor-specific objective evidence does not exist for the undelivered elements of the arrangement, all revenue is deferred until such evidence does exist, or until all elements are delivered, whichever is earlier. In instances where an arrangement to deliver software requires significant modification or customization, license fees are recognized under the percentage of completion method of contract accounting. Allowances are established for potential product returns and credit losses. To date, revenue from license fees have been less than 10% of total revenue.

Spare parts revenue is recognized when the product has been shipped, risk of loss has passed to the customer and collection of the resulting receivable is probable.

Service and maintenance revenue is recognized ratably over the term of the maintenance contract. If maintenance is included in an arrangement, which includes a software license agreement, amounts related to maintenance are allocated based on vendor specific objective evidence. Consulting and training revenue is recognized when the related services are performed.

The deferred system profit balance as of June 30, 2003 was $177 million. This amount equals the amount of deferred system revenue that was invoiced and due on shipment and deferred under SAB 101 less applicable product and warranty costs. The deferred profit balance decreased from $194 million at June 30, 2002 primarily because shipments were lower than customer acceptance for which revenue was recognized during fiscal 2003.

We also defer the fair value of non-standard warranty bundled with equipment sales as unearned revenue. Non-standard warranty includes services incremental to the standard 40-hour per week coverage for twelve months. Non-standard warranty is recognized ratably as revenue when the applicable warranty term period commences. The unearned revenue balance decreased to $48 million at June 30, 2003 from $55 million at June 30, 2002 primarily due to the increase in service revenue recognized from fiscal 2002 to fiscal 2003.

Inventory Reserves We review the adequacy of our inventory reserves on a quarterly basis. For production inventory, our methodology involves matching our on-hand and on-order inventory with our build forecast over the next twelve months. We then evaluate the parts found to be in excess of the twelve-month demand and take appropriate reserves to reflect the risk of obsolescence. For spare parts inventory, we match our on-hand inventory against twenty-four months of usage. We then evaluate the parts in excess of the twenty-four month usage and take appropriate reserves to reflect risk of obsolescence. Both methodologies are significantly affected by the usage assumption. The longer the time period of estimated usage, the lower the reserves are required. Based on our past experience, we believe the twelve-month/twenty-four month time periods best reflect the reasonable and relative obsolescence risks. If actual demand or usage were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory may be required, which could have a material adverse effect on our business, financial condition and results of operations. Inventory reserves, once established, are not reversed until the related inventory has been sold.

Allowance for Doubtful Accounts A majority of our trade receivables are derived from sales to large multinational semiconductor manufacturers throughout the world. In order to monitor potential credit losses, we perform ongoing credit evaluations of our customers' financial condition. An allowance for doubtful accounts is maintained for potential credit losses based upon our assessment of the expected collectibility of all accounts receivable. The allowance for doubtful accounts is reviewed periodically to assess the adequacy of the allowance. We take into consideration (1) any circumstances of which we are aware of a customer's inability to meet its financial obligations; and (2) our judgments as to prevailing economic conditions in the industry and their impact on our customers. If circumstances change, and the financial condition of our customers were adversely affected resulting in their inability to meet their financial obligations to us, we may need to take additional allowances, which would result in a reduction of our net income.

Warranty We provide standard warranty coverage on our systems for twelve months, providing labor and parts necessary to repair the systems during the warranty period. We account for the estimated warranty cost as a charge to cost of sales when revenue is recognized. The estimated warranty cost is based on historical product performance and field expenses. Utilizing actual service records, we calculate the average service hours and parts expense per system and apply the labor and overhead rates to determine the estimated warranty charge. We update these estimated charges every quarter. The actual product performance and/or field expense profiles may differ, and in those cases we adjust our warranty reserves accordingly. The difference between the estimated and actual warranty costs tends to be larger for new product introductions for which there is limited or no historical product performance on which to base the estimated warranty expense; more mature products with longer product performance histories tend to be more stable in our warranty charge estimates. Non-standard warranty generally includes services incremental to the standard 40-hour per week coverage for twelve months. Non-standard warranty is deferred as unearned revenue and is recognized ratably as revenue when the applicable warranty term period commences.

Contingencies and Litigation We are currently named as a party to various legal proceedings, including those outlined in Part I, Item 3, "Legal Proceedings," in this Annual Report on Form 10-K. While we currently believe the ultimate outcome of these proceedings, both individually and in the aggregate, will not have a material adverse effect on our financial position but may adversely affect our quarterly operating results, the results of complex legal proceedings are difficult to predict. We would accrue the cost of an adverse judgment if, in our estimation, the adverse settlement is probable and we can reasonably estimate the ultimate cost to us. We have made no such accruals as of June 30, 2003.

Income Taxes We account for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes," which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. SFAS No. 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. We have determined that our future taxable income will be sufficient to recover all of our deferred tax assets. However, should there be a change in our ability to recover our deferred tax assets, we could be required to record a valuation allowance against our deferred tax assets. This would result in an increase to our tax provision in the period in which we determined that the recovery was not probable.

On a quarterly basis, we provide for income taxes based upon an annual effective income tax rate. The effective tax rate is highly dependent upon the geographic composition of worldwide earnings, tax regulations governing each region, availability of tax credits and the effectiveness of our tax planning strategies. We carefully monitor the changes in many factors and adjust our effective income tax rate on a timely basis. If actual results differ from these estimates, this could have a material effect on our financial condition and results of operations.

Results of Operations

During fiscal 2003 we continued to face a significant downturn in the semiconductor industry, which started in early calendar year 2001. In calendar year 2001, the demand for semiconductors dropped by approximately 32% and remained flat to slightly higher in calendar year 2002. Although new orders grew, quarter on quarter by approximately $21 million in the three months ended June 30, 2003, we are still cautious about the timing of a broad based turnaround in the growth of demand for semiconductors looking forward. Electronics industry analysts forecast semiconductor shipments for calendar year 2003 to grow over calendar year 2002.

Over the longer term, we expect process control to continue to represent a higher percentage of our customers' capital spending. We believe this increase in process control spending will be driven by the demand for more precise diagnostics capabilities to address multiple new defects as a result of further shrinking of device feature sizes, the transition to copper and other new materials, and the transition to new 300-millimeter fabs. We anticipate these factors will drive increased demand for our products and services when the semiconductor industry recovers.

New system and service orders by region were as follows (in millions):

	Fiscal Year	Fiscal Quarter 2003			
	2003	Fourth	Third	Second	First
United States	$ 374	$ 104	$ 98	$ 92	$ 80
Europe	167	39	40	58	30
Japan	289	101	64	67	57
Taiwan	135	28	44	17	46
Asia Pacific	216	65	70	52	29
Total orders	$1,181	$ 337	$ 316	$ 286	$ 242

KLA-Tencor's backlog for unshipped system orders as of June 30, 2003 was approximately $509 million, a majority of which we expect to ship over the next six to nine months. In addition, we have $351 million of SAB 101 deferred revenue that is related to products that have been delivered but are awaiting written acceptance from the customer.

Revenues and Gross Margin

Product revenue in fiscal 2003 decreased $368 million, or 26% to $1.06 billion, from $1.43 billion in fiscal 2002. Product revenue decreased $479 million, or 25%, to $1.43 billion in fiscal 2002 from $1.91 billion in fiscal 2001. Product revenue declines were primarily from reduced capital spending by our customers as a result of a significant reduction in the demand for semiconductors over the last two years. In fiscal 2003, international product revenue increased slightly to 71% of revenue, from 69% in fiscal 2002, due to higher demand in Taiwan. In fiscal 2002, international product revenue increased slightly to 69% of revenue, from 67% in the prior year, due to higher demand in Japan and Western Europe, partially offset by lower demand in Taiwan.

Service revenue is generated from maintenance service contracts, as well as time and material billable service calls made to our customers after the expiration of the warranty period. Service revenues were $263 million, $209 million, and $196 million in fiscal 2003, 2002 and 2001 respectively. Service revenue continued to increase throughout the 3-year-period as our installed base of equipment at our customers' sites continued to grow. The amount of service revenue generated is generally a function of the number of post-warranty systems installed at our customers' sites and the degree of utilization of those systems.

Gross margins as a percentage of revenues were 49%, 50% and 55% in fiscal 2003, 2002 and 2001, respectively. The decrease in fiscal 2003 compared to fiscal 2002 and fiscal 2002 compared to fiscal 2001 were primarily due to reduced capacity utilization, resulting from lower business volume and an increased percentage of revenue in the lower margin service business. Although gross margins fell below the 50% level in fiscal 2003, we have implemented plans for continued expense reductions aimed at bringing margins back above the 50% range even if industry conditions remain weak. Our plans for expense reduction include streamlining manufacturing costs through the use of common platforms, leveraging manufacturing procurement through consolidation of vendors and further expanding on outsourcing initiatives.

Engineering, Research and Development

Net engineering, research and development expenses were $268 million, $287 million, and $356 million, or 20%, 18% and 17% of revenues in fiscal 2003, 2002, and 2001, respectively. The absolute dollars decreased in fiscal 2003, compared to fiscal 2002, due to engineering programs reaching certain milestones that resulted in reductions in labor and material expense, additional external funding and cost saving measures such as company mandated time-off and reduction in discretionary spending implemented over the last several quarters in response to the industry slow down. The dollars decreased in fiscal 2002, compared to fiscal 2001, primarily due to temporary shutdowns, management pay cuts, reductions in temporary labor and discretionary spending as well as other cost saving measures implemented over the last year. We expect our net engineering, research and development expenses to be flat to slightly up in absolute dollars as we make investments in critical programs focusing on new technologies and existing product enhancements.

Net engineering, research and development expenses were partially offset by $18 million, $14 million and $8 million in external funding received under certain strategic development programs conducted with several of our customers and government grants in fiscal 2003, 2002 and 2001, respectively.

Our future operating results will depend significantly on our ability to produce products and provide services that have a competitive advantage in our marketplace. To do this, we believe that we must continue to make substantial investments in our research and development efforts. We remain committed to product development in new and emerging technologies as we address the further shrinking of device feature sizes, the transition to copper and other new materials, and the transition to new 300-millimeter fabs. Our investments in new technology and existing product enhancements are intended to enable our customers to achieve a higher return on their capital investments and higher productivity through cost-effective, leading edge technology solutions.

Selling, General and Administrative

Selling, general and administrative expenses were $254 million, $291 million and $354 million, or 19%, 18% and 17% of revenues, in fiscal 2003, 2002, and 2001, respectively. The absolute dollars for selling, general and administrative expenses decreased primarily due to company mandated time-off, reductions in labor and discretionary spending as well as other cost saving measures implemented over the last several quarters in response to the industry slowdown and the ongoing global economic weakness. We expect our selling, general and administrative expenses to be flat to slightly down in absolute dollars as we continue to realize the benefits from these cost saving measures.

Non-Recurring Acquisition, Restructuring and Other Charges

The following is a summary of non-recurring acquisition, restructuring and other charges for the three fiscal years ending June 30:

(in thousands)	2003	2002	2001
Acquired in-process research and development expense	$ -	$ -	$ 700
Facilities	4,623	-	4,713
Severance	1,127	-	1,595
Non-recurring income from iSupport sale	(15,152)	-	(10,029)
Others	-	-	1,018
	$ (9,402)	$ -	$ (2,003)

Restructuring and Other Charges

In fiscal 2003, we structured certain of our operations to realign costs with planned business levels in light of the industry downturn. We classified restructuring costs into two main categories: facilities and other charges of $4.6 million and severance and benefits of $1.1 million. As part of the facilities consolidation, we exited several of our leased buildings and have included the remaining net book value of the related leasehold improvements as well as the future lease payments, net of anticipated sublease revenue, in the charge. Severance and benefit charges were related to the involuntary termination of approximately 70 personnel from manufacturing, engineering, sales, marketing, and administration in the United States, Japan and Europe. The restructuring actions taken in fiscal 2003 are proceeding as planned, with the termination of employees having been completed and the facilities related lease payments scheduled to be completed by the end of fiscal 2004. In addition, during the first fiscal quarter of 2003, we received $15.2 million as a second and final installment on the sale of software and intellectual property associated with our *iSupport*™ on-line customer support technology, which was netted against the above non-recurring charges, resulting in a reported net gain of $9.4 million

In addition to the restructuring action, we also recorded severance charges totaling $10.9 million in operating expenses, throughout fiscal 2003, relating to a series of employee involuntary terminations. We believe that both these actions will result in annual reductions in costs of goods sold and operating expenses of approximately $60 million.

In fiscal 2002, there were no restructuring charges. We recorded severance charges of $8.5 million in operating expenses relating to a series of employee involuntary terminations throughout fiscal 2002. This resulted in annual cost reductions in costs of goods sold and operating expenses of approximately $44 million. In fiscal 2001, in response to the downturn in the semiconductor industry, we implemented a restructuring plan to reduce spending. Charges related to the restructuring plan included: facilities of $4.7 million, severance and benefits of $1.6 million, and other costs of $1.0 million. Facilities related charges were associated with two of our leased office buildings that were vacated and included the remaining net book value of the related leasehold improvements as well as the future lease payments, net of anticipated sublease revenue in the charge. During fiscal 2001, we reduced our workforce by approximately 5%, primarily in the manufacturing areas and recorded severance charges related to these terminations. The restructuring actions taken in fiscal 2001 were substantially completed at the end of fiscal 2002. These restructuring actions resulted in annual reductions in cost of goods sold and operation expenses of approximately $18 million. In addition, during the fourth fiscal quarter of 2001, we sold software and intellectual property associated with its *iSupport*™ on-line customer support technology and recorded $10.0 million pretax, non-recurring income, which was netted with the other non-recurring charges.

The following table shows the details of the facilities, severance and other restructuring costs accrual for the fiscal year ended June 30, 2003:

(in thousands)	Balance at June 30, 2002	Amounts Expensed	Amounts Utilized	Balance at June 30, 2003
Facilities and other	$ 405	$ 4,623	$ (1,835)	$ 3,193
Severance and benefits	--	1,127	(1,080)	47
Total	$ 405	$ 5,750	$ (2,915)	$ 3,240

The semiconductor equipment industry that we operate in is a highly cyclical industry. This cyclical nature affects our ability to accurately predict future revenue and, thus, future expense levels. We are currently in a down cycle, and if this current down cycle continues to linger or worsens, we may need to take appropriate actions to scale down operating expenses to even lower business levels.

Acquisitions

During fiscal years 2002 and 2001, we completed certain purchase acquisitions. The Consolidated Financial Statements include the operating results of each business from the date of acquisition. Pro forma results of operations have not been presented because the effects of these acquisitions were not material on either an individual or aggregate basis. For a period of up to twelve months from the acquisition date, we may change the original purchase price allocation for pre-acquisition uncertainties. After twelve months, we record the fair value of such reasonably estimable contingencies.

The amounts allocated to in-process research and development ("in-process R&D") were determined through established valuation techniques in the high-technology equipment industry and were expensed upon acquisition because technology feasibility had not been established and no future alternative uses existed. Amounts allocated to goodwill and purchased intangible assets are amortized on a straight-line basis over periods not exceeding five years.

A summary of purchase transactions is outlined as follows (in thousands):

Acquisition year	Acquired Company/Assets	Consideration Including Assumed Liabilities	Acquisition Cost	Goodwill and Purchased Intangible Assets	In-Process R&D Expenses
Fiscal 2002	QC Optics(1)	$ 4,000	$ -	$4,000	$ -
Fiscal 2001	Phase Metrics(2)	$18,000	$1,300	$5,400	$700

(1) With the acquisition of QC Optics, we received certain intellectual property in laser-based inspection systems for the semiconductor, flat panel and computer hard disk manufacturing industries.
(2) KLA-Tencor acquired certain assets and technology of Phase Metrics, the leading supplier of inspection/certification products in the data storage industry.

The difference between the purchase price and the goodwill, intangibles and in-process R&D represents amount allocated to the net tangible assets acquired. There was no deferred stock-based compensation for any of the acquisitions.

Interest Income and Other, Net

Interest income and other, net was $42 million, $43 million and $54 million in fiscal 2003, 2002, and 2001, respectively. Interest income and other, net is comprised primarily of interest income earned on the investment and cash portfolio, gains realized on sales of marketable securities and income recognized upon settlement of certain foreign currency contracts. The decrease in fiscal 2003 as compared to fiscal 2002 was primarily due to decreased interest income resulting from declining interest rates and an increase in foreign currency losses resulting from increased volatility in foreign exchange markets partially offset by an increase in realized gains on investments resulting from investment decisions which impacted the timing of realizing gains and losses for these investments. The decrease in fiscal 2002 as compared to fiscal 2001 was primarily due to decreased interest income resulting from declining interest rates.

Provision for Income Taxes

KLA-Tencor's effective income tax rate was 24%, 25% and 27% in fiscal 2003, 2002 and 2001, respectively. In general, our effective income tax rate differs from the statutory rate of 35% largely as a function of benefits realized from our Extraterritorial Income ("ETI") exclusion, research and development tax credits and income derived from tax exempt interest.

The overall reduction in our effective income tax rate from fiscal 2002 to fiscal 2003 of 1% is primarily the result of more R&D credit, more tax-exempt interest and less nondeductible losses relative to these same items as a percentage of pre-tax income in the prior fiscal year. These reductions were partially offset by more relative foreign tax expense. The overall reduction in our effective income tax rate from fiscal 2001 to fiscal 2002 of 2%, was the result of a combination of factors, most important of which, were more export sales benefits, more tax-exempt interest income and less state tax expense relative to these same items as a percentage of pre-tax income in fiscal 2001. These reductions were partially offset by more relative foreign tax expense.

Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, non tax deductible expenses incurred in connection with acquisitions, amounts of tax-exempt interest income and research and development credits as a percentage of aggregate pre-tax income, and the effectiveness of our tax planning strategies. There currently is pending legislation to repeal the existing export incentive provided by the United States Internal Revenue Code. If the legislation were enacted it would likely increase our effective rate in future periods.

Liquidity and Capital Resources

Working capital was $1.16 billion as of June 30, 2003, compared to $932 million as of June 30, 2002. Cash, cash equivalents and short-term marketable securities at June 30, 2003 increased to $957 million from $673 million at June 30, 2002. In addition, we maintained $531 million and $660 million in marketable securities classified as long-term as of June 30, 2003 and 2002, respectively.

KLA-Tencor has historically financed its operations through cash generated from operations. Cash provided by operating activities was $246 million, $270 million, and $408 million in fiscal 2003, 2002 and 2001, respectively. The decrease in cash provided by operating activities in fiscal 2003 compared to fiscal 2002 was primarily due to a decline in net income, increase in gains from sale of investments and other long-term assets partially offset by lower accounts receivable and inventory balances. Net income decreased in fiscal 2003 compared to fiscal 2002 primarily due to declining shipments, revenues and gross margins partially offset by decreased engineering, selling, general and administrative expenses associated with cost saving measures in response to the industry slowdown. Gains from the sale of investments increased due to investment decision regarding the timing of realizing gains and losses on these investments. Accounts receivable declined primarily due to strong collection efforts, as well as lower shipments. The reduction in inventory primarily occurred in production inventory, where stringent processes have been put in place for managing material procurement. The decrease in cash provided by operating activities in fiscal 2002 compared to fiscal 2001 was primarily due to decreased income before the cumulative effect of accounting change and lower accounts payable, partially offset by lower accounts receivable and inventory balances. Income before cumulative effect of accounting change decreased in fiscal 2002, compared to fiscal 2001, primarily due to declining shipments, revenues and gross margins partially offset by decreased engineering, selling, general and administrative expenses associated with cost saving measures in response to the industry slowdown. Accounts payable shrank due to decreased expenditures and lower incoming invoices. Accounts receivable declined primarily due to strong collection efforts, as well as lower shipments. The reduction in inventory was driven primarily in production inventory, where stringent processes have been put in place for managing material procurement.

We have agreements with two Japanese institutions to sell without recourse certain of our trade receivables and promissory notes. During fiscal 2003 we sold $99 million and during 2002 we sold $98 million of trade notes and accounts receivable from Japanese customers, under these arrangements. At June 30, 2003 and 2002, $27 million and $48 million, respectively, of these receivables and notes were outstanding, which have not been included in our consolidated balance sheet as the criteria for sale treatment established by SFAS 140 have been met. Under SFAS 140, after a transfer of financial assets, an entity derecognizes financial assets when control has been surrendered, and derecognizes liabilities when extinguished. The total amount available under the facilities is the Japanese yen equivalent of $92 million based upon exchange rates as of June 30, 2003. We do not believe we are materially at risk for any losses as a result of these agreements.

Cash used in investing activities was $99 million, $362 million and $295 million in fiscal 2003, 2002 and 2001, respectively. Investing activities typically consist of purchases and sales or maturities of marketable securities, purchases of capital assets to support long-term growth and acquisitions of technology or other companies to allow access to new market segments or emerging technologies. Additions of capital assets during fiscal 2003 consisted mainly of the purchase of certain of our leased buildings in November 2002 compared to fiscal 2002 additions that consisted mainly of the planned completion of our Livermore facilities.

We generated $27 million of cash from financing activities in fiscal 2003 compared with $9 million and $58 million of cash used in financing activities in fiscal 2002 and 2001, respectively. Financing activities typically include sales and repurchases of our common stock, as well as borrowings and repayments of debt. Issuance of common stock, net of repurchases, provided $27 million in fiscal 2003. Repurchases of common stock, net of issuance, used $8 million and $60 million in fiscal 2002 and fiscal 2001, respectively.

We have adopted a plan for the systematic repurchase of shares of our common stock in the open market to reduce the dilution created by our stock-based employee benefit and incentive plans. Since the inception of the repurchase program in 1997 through June 30, 2003 our Board of Directors has authorized KLA-Tencor to repurchase a total of 17.8 million shares, including 5 million shares authorized in October 2002. In fiscal 2003, we repurchased 1,972,000 shares of our common stock at an average price of $33.42 per share, for a total of $66 million. In fiscal 2002, we repurchased 3,341,000 shares of our common stock at an average price of $36.89 per share, for a total of $123 million. In fiscal 2001, we repurchased 4,580,000 shares of our common stock at an average price of $33.54 per share, for a total of $154 million. Since the inception of the repurchase program in 1997 through June 30, 2003, we have repurchased a total of 13,321,000 shares at an average price of $32.70 per share, with an additional 4.5 million shares available for repurchase under the plan. All repurchased shares remain as treasury shares.

Certain of our leased facilities qualify for operating lease accounting treatment under SFAS 13, “Accounting for Leases,” and, as such, the facilities are not included on our Consolidated Balance Sheet. The lease agreement for certain Milpitas and San Jose, California facilities had a term of five years ending in November 2002, with an option to extend up to two more years. Under the terms of the lease, we, at our option, could acquire the properties at their original cost or arrange for the properties to be acquired. In November 2002, we purchased these facilities at the end of the lease term. The purchase transaction increased land and property by approximately $120 million and decreased cash by the same amount.

At June 30, 2003, our principal sources of liquidity consisted of $1.49 billion of cash, cash equivalents, and investments. Our liquidity is affected by many factors, some of which are based on the normal ongoing operations of the business, and others of which relate to the uncertainties of global economies and the semiconductor and the semiconductor equipment industries. Although cash requirements will fluctuate based on the timing and extent of these factors, our management believes that cash generated from operations, together with the liquidity provided by existing cash balances, will be sufficient to satisfy our liquidity requirements for the next twelve months.

The following is a schedule summarizing our significant operating lease commitments as of June 30, 2003 (in millions):

	Payments Due by Fiscal Year						
	Total	2004	2005	2006	2007	2008	Thereafter
Operating leases	$ 21.8	$ 7.3	$4.9	$2.8	$ 1.6	$ 1.2	$ 4.0

Additionally, we maintain certain open inventory purchase commitments with our suppliers to ensure a smooth and continuous supply chain for key components. Our liability in these purchase commitments is generally restricted to a forecasted time-horizon as mutually agreed upon between the parties. This forecast time-horizon can vary amongst different suppliers. As such, it is difficult to accurately report our true open commitments at any particular point in time. However, we estimate our open inventory purchase commitment as of June 30, 2003 to be no more than $42 million.

FACTORS AFFECTING RESULTS, INCLUDING RISKS AND UNCERTAINTIES

Fluctuations in Operating Results and Stock Price

Our operating results have varied widely in the past, and our future operating results will continue to be subject to quarterly variations based upon numerous factors, including those listed in this section and throughout this Annual Report on Form 10-K. In addition, future operating results may not follow any past trends. We believe the factors that could make our results fluctuate and difficult to predict include:

- global economic uncertainty;
- the cyclical nature of the semiconductor industry;
- changing international economic conditions;
- competitive pressure;
- our ability to develop and implement new technologies and introduce new products;
- our ability to manage our manufacturing requirements;
- our ability to protect our intellectual property;
- our ability to attract, retain, and replace key employees;
- worldwide political instability; and
- earthquake and other uninsured risks.

Operating results also could be affected by sudden changes in customer requirements, currency exchange rate fluctuations and other economic conditions affecting customer demand and the cost of operations in one or more of the global markets in which we do business. As a result of these or other factors, we could fail to achieve our expectations as to future revenue, gross profit and income from operations. Our failure to meet the performance expectations set and published by external sources could result in a sudden and significant drop in the price of our stock, particularly on a short-term basis, and could negatively affect the value of any investment in our stock.

Global Economic Uncertainty

Our business is ultimately driven by the global demand for electronic devices by consumers and businesses. This end-user demand has been significantly depressed over the last few quarters and there has been very limited visibility as to the timing of turnaround in demand growth and from which sector this growth will come. A protracted global economic slowdown will continue to exacerbate this issue and may adversely affect our business and results of operation.

Semiconductor Equipment Industry Volatility

The semiconductor equipment industry is highly cyclical. The purchasing decisions of our customers are highly dependent on the economies of both the local markets in which they are located and the semiconductor industry worldwide. The timing, length and severity of the up-and-down cycles in the semiconductor equipment industry are difficult to predict. This cyclical nature of the industry in which we operate affects our ability to accurately predict future revenue and, thus, future expense levels. When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be in a position to adjust our cost and expense structure to prevailing market conditions and to continue to motivate and retain our key employees. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand. We can provide no assurance that these objectives can be met in a timely manner in response to industry cycles. If we fail to respond to industry cycles, our business could be seriously harmed.

We are currently in an industry down cycle. We are not able to predict when the semiconductor industry will recover. During a down cycle, the semiconductor industry typically experiences excess production capacity that causes semiconductor manufacturers to decrease capital spending. We generally do not have long-term volume production contracts with our customers, and we do not control the timing or volume of orders placed by our customers. Whether and to what extent our customers place orders for any specific products, as well as the mix and quantities of products included in those orders, are factors beyond our control. Insufficient orders, especially in our down cycles, will result in under-utilization of our manufacturing facilities and infrastructure and will negatively affect our operating results and financial condition.

International Trade and Economic Conditions

We serve an increasingly global market. A majority of our annual revenue is derived from outside the United States, and we expect that international revenue will continue to represent a substantial percentage of our revenue. Our international revenue and operations are affected by economic conditions specific to each country and region. Because of our significant dependence on international revenue, a decline in the economies of any of the countries or regions in which we do business could negatively affect our operating results.

Managing global operations and sites located throughout the world presents challenges associated with, among other things, cultural diversity and organizational alignment. Moreover, each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period. Periodic local or international economic downturns, trade balance issues, political instability in regions where we have operations, such as Israel, and fluctuations in interest and currency exchange rates could negatively affect our business and results of operations. Although we attempt to manage near-term currency risks through the use of hedging instruments, there can be no assurance that such efforts will be adequate. In addition, our ability to address normal business transaction issues in Asia is at risk due to the Severe Acute Respiratory Syndrome outbreak in Asia, which has resulted in management’s decision to limit travel to Asia in accordance with the World Health Organization’s recommendations.

Competition

Our industry includes large manufacturers with substantial resources to support customers worldwide. Our future performance depends, in part, upon our ability to continue to compete successfully worldwide. Some of our competitors are diversified companies with greater financial resources and more extensive research, engineering, manufacturing, marketing and customer service and support capabilities than we can provide. We face competition from companies whose strategy is to provide a broad array of products and services, some of which compete with the products and service that we offer. These competitors may bundle their products in a manner that may discourage customers from purchasing our products. In addition, we face competition from smaller emerging semiconductor equipment companies whose strategy is to provide a portion of the products and services, which we offer, using innovative technology to sell products into specialized markets. Loss of competitive position could negatively affect our prices, customer orders, revenue, gross margin, and market share, any of which would negatively affect our operating results and financial condition. Our failure to compete successfully with these other companies would seriously harm our business.

Technological Change and Customer Requirements

Success in the semiconductor equipment industry depends, in part, on continual improvement of existing technologies and rapid innovation of new solutions. For example, the semiconductor industry continues to shrink the size of semiconductor devices, transition to copper and other new materials, and transition to new 300-millimeter fabs. While we expect these trends will increase our customers’ reliance on our diagnostic products, we cannot ensure that they will directly improve our business. These and other evolving customer needs require us to respond with continued development programs and to cut back or discontinue older programs, which may no longer have industry-wide support. Technical innovations are inherently complex and require long development cycles and appropriate professional staffing. Our competitive advantage and future business success depend on our ability to accurately predict evolving industry standards, to develop and introduce new products which successfully address changing customer needs, to win market acceptance of these new products and to manufacture these new products in a timely and cost-effective manner. If we do not develop and introduce new products and technologies in a timely manner in response to changing market conditions or customer requirements, our business could be seriously harmed.

In this environment, we must continue to make significant investments in research and development in order to enhance the performance and functionality of our products, to keep pace with competitive products and to satisfy customer demands for improved performance, features and functionality. There can be no assurance that revenue from future products or product enhancements will be sufficient to recover the development costs associated with such products or enhancements or that we will be able to secure the financial resources necessary to fund future development. Substantial research and development costs typically are incurred before we confirm the technical feasibility and commercial viability of a product, and not all development activities result in commercially viable products. In addition, we cannot ensure that these products or enhancements will receive market acceptance or that we will be able to sell these products at prices that are favorable to us. Our business will be seriously harmed if we are unable to sell our products at favorable prices or if the market in which we operate does not accept our products.

Key Suppliers

We use a wide range of materials in the production of our products, including custom electronic and mechanical components, and we use numerous suppliers to supply these materials. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of customers' orders, we do not maintain an extensive inventory of materials for manufacturing. We seek to minimize the risk of production and service interruptions and/or shortages of key parts by selecting and qualifying alternative suppliers for key parts, monitoring the financial stability of key suppliers and maintaining appropriate inventories of key parts. Although we make reasonable efforts to ensure that parts are available from multiple suppliers, key parts may be available only from a single supplier or a limited group of suppliers. Our business would be harmed if we do not receive sufficient parts to meet our production requirements in a timely and cost-effective manner.

Manufacturing Disruption

Most of our manufacturing facilities are located in the United States, with a small operation located in Israel. Operations at our manufacturing facilities and our assembly subcontractors are subject to disruption for a variety of reasons, including work stoppages, acts of war, terrorism, fire, earthquake, energy shortages, flooding or other natural disasters. Such disruption could cause delays in shipments of products to our customers. We cannot ensure that alternate production capacity would be available if a major disruption were to occur or that, if it were available, it could be obtained on favorable terms. Such disruption could result in cancellation of orders or loss of customers and could seriously harm our business.

Intellectual Property Obsolescence and Infringement

Our success is dependent in part on our technology and other proprietary rights. We own various United States and international patents and have additional pending patent applications relating to some of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us. Other companies and individuals, including our larger competitors, may develop technologies and obtain patents relating to our technology that are similar or superior to our technology or may design around the patents we own, adversely affecting our business.

We also maintain trademarks on certain of our products and services and claim copyright protection for certain proprietary software and documentation. However, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

While patent, copyright and trademark protection for our intellectual property is important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through confidentiality and other agreements with our customers, suppliers, employees and consultants and through other security measures. We also maintain exclusive and non-exclusive licenses with third parties for strategic technology used in certain products. However, these employees, consultants and third parties may breach these agreements and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we develop, manufacture or sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States.

As is typical in the semiconductor equipment industry, from time to time we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which they believe cover certain of our products, processes, technologies or information. Our customary practice is to evaluate such assertions and to consider whether to seek licenses where appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur. The inability to obtain necessary licenses or other rights on reasonable terms could seriously harm our operating results and financial condition.

Key Employees

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We generally do not have employment contracts with our key employees. Further, we do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel. If we are unable to retain key personnel, or if we are not able to attract, assimilate or retain additional highly qualified employees to meet our needs in the future, our business and operations could be harmed. These factors could seriously harm our business.

Acquisitions

In addition to our efforts to develop new technologies from internal sources, we also seek to acquire new technologies from external sources. As part of this effort, we may make acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. Acquisitions involve numerous risks, including management issues and costs in connection with the integration of the operations and personnel, technologies and products of the acquired companies, the possible write-downs of impaired assets, and the potential loss of key employees of the acquired companies. The inability to manage these risks effectively could seriously harm our business.

Litigation

From time to time we are involved in litigation of various types, including litigation that alleges infringement of intellectual property rights and other claims. Litigation tends to be expensive and requires significant management time and attention and could have a negative effect on our results of operations or business if we lose or have to settle a case on significantly adverse terms. If we lose in a dispute concerning intellectual property, a court could require us to pay substantial damages and/or royalties or could issue an injunction prohibiting us from using essential technologies. For these and other reasons, this type of litigation could have a material adverse effect on our business, financial condition and results of operations. Also, although we may seek to obtain a license under a third party's intellectual property rights in order to bring an end to certain claims or actions asserted against us, we may not be able to obtain such a license on reasonable terms or at all.

Terrorism and Political Instability

The threat of terrorism targeted at the regions of the world in which we do business, including the United States, increases the uncertainty in our markets and may delay any recovery in the general economy. Any delay in the recovery of the economy and the semiconductor industry could seriously impact our business.

Increased international political instability, as demonstrated by the September 2001 terrorist attacks, disruption in air transportation and further enhanced security measures as a result of the terrorist attacks, and the continuing instability in the Middle East, may hinder our ability to do business and may increase our costs of operations. Such continuing instability could cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs, and cause international currency markets to fluctuate. This same instability could have the same effects on our suppliers and their ability to timely deliver their products. If this international political instability continues or increases, our business and results of operations could be harmed.

Earthquake and other uninsured risks

We purchase insurance to help mitigate the economic impact of certain insurable risks, however, certain other risks that are uninsurable or are insurable only at significant costs are not mitigated via insurance. An earthquake could significantly disrupt our manufacturing operations, most of which are conducted in California. It could also significantly delay our research and engineering effort on new products, most of which is also conducted in California. We take steps to minimize the damage that would be caused by an earthquake, but there is no certainty that our efforts will prove successful in the event of an earthquake. We self insure earthquake risks because we believe this is the prudent financial decision based on our large cash reserves and the high cost and limited coverage available in the earthquake insurance market. Certain other risks are also self insured either based on a similar cost benefit analysis, or based on the unavailability of insurance. If one or more of the uninsured events occur, we could suffer major financial loss.

Effects of Recent Accounting Pronouncements

We have adopted Statement No. 143, (“SFAS 143”) “Accounting for Obligations Associated with the Retirement of Long-Lived Assets” and Statement No. 144 (“SFAS 144”) “Accounting for the Impairment of Disposal of Long-Lived Assets.” SFAS 143 establishes accounting standards for the recognition and measurement of an asset retirement obligation and its associated asset retirement cost. It also provides guidance for legal obligations associated with the retirement of tangible long-lived assets. SFAS 144 establishes a single accounting model for the impairment or disposal of long-lived assets, including discontinued operations. Adoption of these pronouncements did not have a significant effect on our consolidated financial statements.

In June 2002, the FASB issued Statement No. 146 (“SFAS 146”), “Accounting for Costs Associated with Exit or Disposal Activities.” SFAS 146 addresses financial accounting and reporting for costs associated with exit or disposal activities, and nullifies Emerging Issues Task Force (“EITF”) Issue No. 94-3, Liabilities Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). This Statement requires that a liability for costs associated with an exit or disposal activity be recognized and measured initially at fair value only when the liability is incurred. SFAS 146 will be effective for exit or disposal activities that are initiated after March 31, 2003. The standard will in certain circumstances change the timing of recognition of restructuring costs.

In November 2002, EITF reached a consensus on Issue No. 00-21, “Accounting for Revenue Arrangements with Multiple Deliverables.” This issue addresses determination of whether an arrangement involving more than one deliverable contains more than one unit of accounting and how arrangement consideration should be measured and allocated to the separate units of accounting. EITF Issue No. 00-21 will be effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003 or we may elect to report the change in accounting as a cumulative-effect adjustment. We are reviewing EITF Issue No. 00-21 and have not yet determined the impact this issue will have on our consolidated operating results and financial position.

In December 2002, FASB issued SFAS 148, an Amendment of SFAS 123. This Statement amends SFAS 123, to provide alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity’s accounting policy decisions with respect to stock-based employee compensation. Finally, this Statement amends APB Opinion No. 28, Interim Financial Reporting, to require disclosure about those effects in interim financial information. Since we are continuing to account for stock- based compensation according to APB 25, our adoption of SFAS 148 requires us to provide prominent disclosures about the effects of SFAS 123 on reported income and requires us to disclose these affects in our interim consolidated financial statements as well. SFAS 148 was effective for interim fiscal periods beginning after December 15, 2002. Adoption of this standard had no material impact on our consolidated operating results and financial position.

In January 2003, the FASB issued FASB Interpretation No. 46 (“FIN 46”), “Consolidation of Variable Interest Entities,” an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after June 15, 2003. We believe that although the adoption of this standard will result in consolidation of certain entities, it will have no material impact on our consolidated financial statements.

In April 2003, the FASB issued Statement No. 149 (“SFAS No. 149”), “Amendment of Statement 133 on Derivative Instruments and Hedging Activities.” SFAS No. 149 amends and clarifies financial accounting and reporting for derivative instruments by requiring that contracts with comparable characteristics be accounted for similarly. In particular, this statement clarifies the circumstances under which a contract with an initial net investment meets the characteristics of a derivative, clarifies when a derivative contains a financing component, amends the definition of an underlying to conform it to the language used in FIN 45, “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others,” and amends certain other existing pronouncements. The provisions of SFAS No. 149, which were not already applied under an Implementation Issue, are effective for contracts entered into or modified after June 30, 2003. We believe that the adoption of this standard will not have a material impact on our consolidated balance sheet or statement of operations.

In May 2003, the FASB issued Statement No. 150 (“SFAS No. 150”), “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.” SFAS No. 150 establishes standards for classification and measurement of certain financial instruments with characteristics of both liabilities and equity. It requires financial instruments within its scope to be classified as a liability (or an asset in some circumstances). Many of those financial instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003. For financial instruments created before and still existing as of the issuance of this statement, a cumulative effect of change in accounting principle shall be reported upon implementation in the first interim period beginning after June 15, 2003. We believe that the adoption of this standard will not have a material impact on our consolidated balance sheet or statement of operations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

We are exposed to financial market risks, including changes in interest rates, foreign currency exchange rates and marketable equity security prices. To mitigate these risks, we utilize derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes. All of the potential changes noted below are based on sensitivity analyses performed on our financial position at June 30, 2003. Actual results may differ materially.

At the end of fiscal 2003, we had an investment portfolio of fixed income securities of $858 million, excluding those classified as cash and cash equivalents (detail of these securities is included in Note 4 of the Notes to Consolidated Financial Statements found under Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K). These securities, as with all fixed income instruments, are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10% from levels as of June 30, 2003, the fair value of the portfolio would have declined by $1 million.

As of June 30, 2003, we had net forward contracts to sell $56 million in foreign currency in order to hedge currency exposures (detail of these contracts is incorporated by reference from Note 1 of the Notes to the Consolidated Financial Statements under “Derivative Instruments.” If we had entered into these contracts on June 30, 2003, the U.S. dollar equivalent would be $55 million. A 10% adverse move in all currency exchange rates affecting the contracts would decrease the fair value of the contracts by $23 million. However, if this occurred, the fair value of the underlying exposures hedged by the contracts would increase by a similar amount. Accordingly, we believe that the hedging of our foreign currency exposure should have no material impact on income or cash flows.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

KLA-Tencor CorporationConsolidated Balance Sheets

June 30, *(in thousands, except per share data)*	**2003**	**2002**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 606,903	$ 429,820
Marketable securities	350,061	243,526
Accounts receivable, net	223,535	277,006
Inventories	258,799	323,016
Deferred income taxes	324,098	315,049
Other current assets	42,987	30,871
Total current assets	1,806,383	1,619,288
Land, property and equipment, net	382,729	300,560
Marketable securities	530,919	660,237
Other assets	146,566	137,633
Total assets	$2,866,597	$2,717,718
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 33,893	$ 52,988
Deferred system profit	177,486	193,852
Unearned revenue	48,203	54,886
Other current liabilities	391,474	385,764
Total current liabilities	651,056	687,490
Commitments and contingencies (Note 8)		
Shareholders' equity:		
Preferred stock, $0.001 par value, 1,000 shares authorized, none outstanding	--	--
Common stock, $0.001 par value, 500,000 shares authorized, 191,733 and 189,752 shares issued and outstanding	192	190
Capital in excess of par value	814,776	765,756

Retained earnings	1,396,886	1,259,695
Accumulated other comprehensive income	3,687	4,587
Total stockholders' equity	2,215,541	2,030,228
Total liabilities and stockholder' equity	$2,866,597	$2,717,718

See accompanying notes to consolidated financial statements.

KLA-Tencor CorporationConsolidated
Statements of Operations

Year ended June 30, (in thousands, except per share data)	**2003**	**2002**	**2001**
Revenues:			
Product	$1,060,142	$1,428,107	$1,907,364
Service	262,907	209,175	196,393
Total revenues	1,323,049	1,637,282	2,103,757
Cost and operating expenses:			
Cost of goods sold	671,505	814,393	937,152
Engineering, research and development	268,291	287,408	355,772
Selling, general and administrative	253,933	290,588	354,368
Non-recurring acquisition, restructuring and other	(9,402)	--	(2,003)
Total cost and operating expenses	1,184,327	1,392,389	1,645,289
Income from operations	138,722	244,893	458,468
Interest income and other, net	41,796	42,563	54,116
Income before income taxes and cumulative effect of change in accounting principle	180,518	287,456	512,584
Provision for income taxes	43,327	71,290	139,526
Income before cumulative effect of change in accounting principle	137,191	216,166	373,058
Cumulative effect of change in accounting principle, net of tax	--	--	(306,375)
Net income	$ 137,191	$ 216,166	$ 66,683
Net income per share:			
Basic			
Income before cumulative effect of change in accounting principle	$ 0.72	$ 1.15	$ 2.01
Cumulative effect of change in accounting principle, net of tax	$ --	--	(1.65)
Basic net income per share	$ 0.72	$ 1.15	$ 0.36
Diluted			
Income before cumulative effect of change in accounting principle	$ 0.70	$ 1.10	$ 1.93
Cumulative effect of change in accounting principle, net of tax	--	--	(1.59)
Diluted net income per share	$ 0.70	$ 1.10	$ 0.34
Weighted average number of shares:			
Basic	189,817	187,667	185,860
Diluted	194,785	196,594	193,435

See accompanying notes to consolidated financial statements.

KLA-Tencor Corporation

Consolidated Statements of Stockholders' Equity

(in thousands)	Common Stock and Capital in Excess of Par Value Shares	Amount	Retained Earnings	Accumulated Other Comprehensive Income	Total
Balance at June 30, 2000	187,465	$ 718,165	$ 976,846	$ 13,665	$1,708,676
Components of comprehensive income:					
Net income	--	--	66,683	--	66,683
Change in unrealized gain on investment	--	--	--	(2,485)	(2,485)
Currency translation adjustments	--	--	--	(12,008)	(12,008)
Deferred gains on cash flow hedging instruments	--	--	--	3,432	3,432
Total comprehensive income					55,622
Net issuance under employee stock plans	4,894	93,756	--	--	93,756
Repurchase of common stock	(4,580)	(153,632)	--	--	(153,632)
Tax benefits of stock option transactions	--	56,044	--	--	56,044
Balance at June 30, 2001	187,779	714,333	1,043,529	2,604	1,760,466
Components of comprehensive income:					
Net income	--	--	216,166	--	216,166
Change in unrealized gain on investments	--	--	--	(1,048)	(1,048)
Currency translation adjustments	--	--	--	7,455	7,455
Deferred losses on cash flow hedging instruments	--	--	--	(4,424)	(4,424)
Total comprehensive income					218,149
Net issuance under employee stock plans	5,314	115,136	--	--	115,136
Repurchase of common stock	(3,341)	(123,220)	--	--	(123,220)
Tax benefits of stock option transactions	--	59,697	--	--	59,697
Balance at June 30, 2002	189,752	765,946	1,259,695	4,587	2,030,228
Components of comprehensive income:					
Net income	--	--	137,191	--	137,191
Change in unrealized gains on investments	--	--	--	(7,281)	(7,281)
Currency translation adjustments	--	--	--	5,136	5,136
Deferred gains on cash flow hedging instruments	--	--	--	1,245	1,245
Total comprehensive income					136,291
Net issuance under employee stock plans	3,953	92,499	--	--	92,499
Repurchase of common stock	(1,972)	(65,912)	--	--	(65,912)
Tax benefits of stock option transactions	--	22,435	--	--	22,435
Balance at June 30, 2003	191,733	$ 814,968	$1,396,886	$ 3,687	$ 2,215,541

See accompanying notes to consolidated financial statements.

KLA –Tencor CorporationConsolidated Statements of Cash Flows

Year ended June 30, *(in thousands)*	2003	2002	2001
Cash flows from operating activities:			
Net income	$ 137,191	$ 216,166	$ 66,683
Adjustments to reconcile net income to net cash provided by operating activities:			
Cumulative effect of accounting change, net of tax benefit	--	--	306,375
Depreciation and amortization	71,448	69,590	55,649

Non-recurring (income) restructuring charges	(11,912)	--	(4,297)
In-process research and development	--	--	698
Net (gain) loss on sale of investments and property plant & equipment	(24,082)	(7,573)	(7,703)
Deferred income taxes	(10,629)	36,037	(56,939)
Tax benefit from employee stock options	22,435	59,697	56,044
Changes in assets and liabilities, net of assets acquired and liabilities assumed in business combinations:			
Accounts receivable	53,468	125,005	83,761
Inventories	64,215	71,430	(101,750)
Other assets	(17,183)	(4,974)	(14,522)
Accounts payable	(19,093)	(7,754)	5,723
Deferred profit	(16,366)	(228,202)	(31,835)
Other current liabilities	(3,235)	(59,238)	50,031
Net cash provided by operating activities	246,257	270,184	407,918
Cash flows from investing activities:			
Acquisitions, net of cash received	--	(4,035)	(20,818)
Purchase of property, plant and equipment	(133,766)	(68,658)	(162,195)
Proceeds from sale of property, plant and equipment	3,197	--	--
Purchase of available-for-sale securities	(1,288,151)	(2,127,460)	(913,096)
Proceeds from sale of available-for-sale securities	1,240,437	1,619,111	731,395
Proceeds from maturity of available-for-sale securities	79,769	218,706	69,606
Net cash used in investing activities	(98,514)	(362,336)	(295,108)
Cash flows from financing activities:			
Issuance of common stock	92,499	115,136	93,756
Stock repurchases	(65,912)	(123,220)	(153,632)
Net borrowings (payments) under short term debt obligations	--	--	1,670
Net cash provided by (used in) financing activities	26,587	(8,532)	(58,206)
Effect of exchange rate changes on cash and cash equivalents	2,753	830	(3,142)
Net increase (decrease) in cash and cash equivalents	177,083	(99,854)	51,462
Cash and cash equivalents at the beginning of period	429,820	529,674	478,212
Cash and cash equivalents at end of period	$ 606,903	$ 429,820	$ 529,674
Supplemental cash flow disclosures:			
Income taxes paid (refunded)	$ 7,053	$ (19,875)	$ 133,710
Interest paid	$ 352	$ 779	$ 916
Supplemental non-cash investing activities:			
Software and technology exchanged for common stock of public company	$ 15,152	$ --	$ 14,309

See accompanying notes to consolidated financial statements.

KLA-TENCOR CORPORATIONNOTES
TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Operations and Principles of Consolidation KLA-Tencor Corporation ("KLA-Tencor") is a global provider of process control and yield management solutions for the semiconductor manufacturing and related microelectronics industries. Headquartered in San Jose, California, KLA-Tencor has subsidiaries both in the United States and in key markets throughout the world.

The Consolidated Financial Statements include the accounts of KLA-Tencor and its wholly-owned subsidiaries. Partially owned, non-controlled, equity affiliates are accounted for under the equity method. All significant intercompany balances and transactions have been eliminated.

Management Estimates The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Fair Value of Financial Instruments KLA-Tencor has evaluated the estimated fair value of financial instruments using available market information and valuation methodologies as provided by the custodian. The use of different market assumptions and/or estimation methodologies could have a significant effect on the estimated fair value amounts. The fair value of KLA-Tencor's cash, cash equivalents, accounts receivable, accounts payable and other current liabilities approximate their carrying amounts due to the relatively short maturity of these items.

Cash Equivalents and Marketable Securities All highly liquid debt instruments with remaining maturities of ninety days or less are considered to be cash equivalents. Investments with remaining maturities greater than three months and that mature within one year from the balance sheet date are considered to be short-term marketable securities. Non-current marketable securities include debt securities with maturities exceeding one year from the balance sheet date. Short-term and non-current marketable securities are generally classified as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, presented as a separate component of accumulated other comprehensive income. KLA-Tencor has classified some equity securities that have readily determinable fair values in a similar manner. The fair value of marketable securities is based on quoted market prices. All realized gains and losses and unrealized losses and declines in fair value that are other than temporary are recorded in earnings in the period of occurrence. The specific identification method is used to determine the realized gains and losses on investments. Certain equity securities have been classified as trading securities. These trading securities are reported at fair value determined based on quoted market prices at the reporting date for those instruments, with unrealized gains or losses included in earnings for the applicable period. The net amount of such gains and losses for the twelve months June 30, 2003 were not material. As of June 30, 2003, the fair value of the trading securities was $10 million.

Non Marketable Equity Securities and Other Investments KLA-Tencor acquires certain equity investments for the promotion of business and strategic objectives, and to the extent these investments continue to have strategic value, the company typically does not attempt to reduce or eliminate the inherent market risks. Non-marketable equity securities and other investments are accounted for at historical cost or, if KLA-Tencor has significant influence over the investee, using the equity method of accounting. KLA-Tencor's proportionate share of income or losses from investments is accounted for under the equity method and any gain or loss is recorded in interest income and other, net. Non-marketable equity securities, equity-method investments, and other investments are included in “Other assets” on the balance sheet. Non-marketable equity securities are subject to a periodic impairment review; however, there are no open-market valuations, and the impairment analysis requires significant judgment. This analysis includes assessment of the investee's financial condition, the business outlook for its products and technology, its projected results and cash flow, the likelihood of obtaining subsequent rounds of financing and the impact of any relevant contractual equity preferences held by KLA-Tencor or others. If an investee obtains additional funding at a valuation lower than KLA-Tencor's carrying amount, it is presumed that the investment is other than temporarily impaired, unless specific facts and circumstances indicate otherwise, for example if KLA-Tencor holds contractual rights that include a preference over the rights of other investors. Impairment of non-marketable equity securities is recorded in interest income and other, net.

Inventories Inventories are stated at the lower of cost (on a first-in, first-out basis) or market. Demonstration units are stated at their manufacturing cost and reserves are recorded to state the demonstration units at their net realizable value. KLA-Tencor reviews the adequacy of its inventory reserves on a quarterly basis. Its methodology involves matching its on-hand and on-order inventory with its demand forecast. For parts that are in excess of its forecasted demand, KLA-Tencor takes appropriate reserves to reflect risk of obsolescence. If actual demand declined below its forecast, KLA-Tencor may need to take additional inventory reserves.

Property and Equipment Property and equipment are recorded at cost. Depreciation of property and equipment is based on the straight-line method over the estimated useful lives of the assets, which are thirty to thirty-five years for buildings, ten to fifteen years for leasehold improvements, five to seven years for furniture and fixtures, and three to five years for machinery and equipment. Leasehold improvements are amortized by the straight-line method over the shorter of the life of the related asset or the term of the underlying lease. Construction in process does not depreciate until the assets are placed in service.

Intangible Assets Purchased technology, patents, trademarks, favorable leases and goodwill are presented at cost, net of accumulated amortization. Effective July 1, 2001, KLA-Tencor replaced ratable amortization of goodwill with periodic testing of goodwill for impairment in accordance with the provisions of Statement of Financial Accounting Standard No. 142, “Goodwill and Intangible Assets.” Intangible assets other than goodwill are amortized over their estimated useful lives using the straight-line method.

Software Development Costs Development costs incurred in the research and development of new software products are expensed as incurred until technological feasibility of the product has been established. Software development costs incurred after technological feasibility has been established are capitalized up to the time the product is available for general release to customers. At June 30, 2003 and 2002, there were no amounts capitalized as KLA-Tencor's current development process is essentially completely concurrent with the establishment of technological feasibility.

Impairment of Long-Lived Assets KLA-Tencor evaluates the carrying value of its long-lived assets whenever events or changes in circumstances indicate that the carrying value of the asset may be impaired in accordance with the provisions of Statement of Financial Accounting Standard No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets.” An impairment loss is recognized when estimated future cash flows expected to result from the use of the asset including disposition, is less than the carrying value of the asset.

Concentration of Credit Risk Financial instruments that potentially subject KLA-Tencor to significant concentrations of credit risk consist principally of cash equivalents, short-term and non-current marketable securities, trade accounts receivable and derivative financial instruments used in hedging activities. KLA-Tencor invests in a variety of financial instruments, such as, but not limited to, certificates of deposit, corporate and municipal bonds, U.S. Treasury and agency securities, equity securities and, by policy, limits the amount of credit exposure with any one financial institution or commercial issuer. KLA-Tencor has not experienced any material credit losses on its investments.

A majority of KLA-Tencor's trade receivables are derived from sales to large multinational semiconductor manufacturers located throughout the world. Concentration of credit risk with respect to trade receivables is considered to be limited due to its customer base and the diversity of its geographic sales areas. KLA-Tencor performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral to secure accounts receivable. KLA-Tencor maintains a provision for potential credit losses based upon expected collectibility of all accounts receivable. In addition, KLA-Tencor may utilize letters of credit or non-recourse factoring to mitigate credit risk when considered appropriate.

KLA-Tencor is exposed to credit loss in the event of nonperformance by counterparties on the foreign exchange contracts used in hedging activities. These counterparties are large international financial institutions and to date, no such counterparty has failed to meet its financial obligations to us. KLA-Tencor does not anticipate nonperformance by these counterparties.

Foreign Currency The functional currencies of KLA-Tencor's significant foreign subsidiaries are generally the local currencies. Accordingly, all assets and liabilities of the foreign operations are translated to U.S. dollars at current period end exchange rates, and revenues and expenses are translated to U.S. dollars using average exchange rates in effect during the period. The gains and losses from foreign currency translation of these subsidiaries' financial statements are recorded directly into a separate component of stockholders' equity under the caption “Accumulated other comprehensive income.”

KLA-Tencor's subsidiaries in Israel use the U.S. dollar as their functional currency. Accordingly, assets and liabilities of these subsidiaries are translated using exchange rates in effect at the end of the period, except for non-monetary assets, such as inventories and property, plant and equipment that are translated using historical exchange rates. Revenues and costs are translated using average exchange rates for the period, except for costs related to those balance sheet items that are translated using historical exchange rates. The resulting translation gains and losses are included in the Consolidated Statements of Operations as incurred.

Derivative Financial Instruments KLA-Tencor uses financial instruments, such as forward exchange contracts, to hedge a portion of, but not all, existing and anticipated foreign currency denominated transactions expected to occur within 12 months. The purpose of KLA-Tencor's foreign currency program is to manage the effect of exchange rate fluctuations on certain foreign currency denominated revenues, costs and eventual cash flows. The effect of exchange rate changes on forward exchange contracts is expected to offset the effect of exchange rate changes on the underlying hedged items. KLA-Tencor believes these financial instruments do not subject it to speculative risk that would otherwise result from changes in currency exchange rates. KLA-Tencor does not use derivative financial instruments for speculative or trading purposes.

All of KLA-Tencor's derivative financial instruments are recorded at fair value based upon quoted market prices for comparable instruments. For derivative instruments designated and qualifying as cash flow hedges of anticipated foreign currency denominated transactions, the effective portion of the gain or loss on these hedges is reported as a component of accumulated other comprehensive income in stockholders' equity, and is reclassified into earnings when the hedged transaction affects earnings. If the transaction being hedged fails to occur, or if a portion of any derivative is ineffective, the gain or loss on the associated financial instrument is recorded immediately in earnings. For derivative instruments used to hedge existing foreign currency denominated assets or liabilities, the gain or loss on these hedges is recorded immediately in earnings to offset the changes in the fair value of the assets or liabilities being hedged.

At June 30, 2003, KLA-Tencor had foreign exchange forward contracts maturing throughout fiscal 2004 to sell $215 million and purchase $159 million, in foreign currency, primarily Japanese yen. At June 30, 2002, KLA-Tencor had foreign exchange forward contracts maturing throughout fiscal 2003 to sell $155 million and purchase $40 million, in foreign currency, primarily Japanese yen. All foreign exchange forward contracts are carried on the consolidated balance sheets at fair market value. See Note 8 for further information related to derivatives and hedging activities.

Warranty KLA-Tencor provides standard warranty coverage on its systems for twelve months, providing labor and parts necessary to repair the systems during the warranty period. KLA-Tencor accounts for the estimated warranty cost as a charge to cost of sales when revenue is recognized. The estimated warranty cost is based on historical product performance and field expenses. Utilizing actual service records, KLA-Tencor calculates the average service hours and parts expense per system and applies the actual labor and overhead rates to determine the estimated warranty charge. KLA-Tencor updates these estimated charges every quarter. The actual product performance and/or field expense profiles may differ, and in those cases KLA-Tencor adjusts warranty accruals accordingly (see Note 8 "Commitments and Contingencies").

Revenue Recognition In December 1999, the SEC issued Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements." The SEC Staff addressed several issues in SAB 101, including the timing of revenue recognition for sales that involve contractual customer acceptance provisions and installation of the product if these events occur after shipment and transfer of title. KLA-Tencor implemented the provisions of SAB 101 in the fourth fiscal quarter of 2001, retroactive to July 1, 2000. Prior to adoption of SAB 101, KLA-Tencor's general policy was to recognize revenue on shipment.

KLA-Tencor derives revenue from four sources – system sales, spare part sales, service contracts and software license fees. System sales include hardware and software that is incidental to the product. Prior to the implementation of SAB 101, system revenue was generally recognized upon shipment. Effective July 1, 2000, KLA-Tencor changed its method of accounting for system sales to generally recognize revenue upon a positive affirmation by the customer that the system has been installed and is operating according to predetermined specifications. In certain limited cases, KLA-Tencor may deviate from the need for a written acceptance by the customer, as follows:

o When system sales to independent distributors have no installation, contain no acceptance agreement, and 100% payment is due upon shipment, revenue is recognized on shipment;

o When the system requires no integration and installation is inconsequential, revenue is recognized on shipment. In these cases KLA-Tencor is required to perform the installation but KLA-Tencor considers installation not essential to the functionality of the equipment, and there are no additional tests required to be performed on-site. In addition, third party distributors and customers regularly complete the installation of these tools;

o When the customer fab has already accepted the same tool, with the same specifications on the same process, for the same application, and it can be objectively demonstrated that it meets all of the required acceptance criteria upon shipment, a portion of revenue can be recognized at the time of shipment. Revenue recognized upon shipment is exclusive of the amount allocable to the installation element. Revenue attributable to the installation element is the higher of the payment amount due upon acceptance or the fair value of installation;

o When the system is performing in production and meets all published and contractually agreed specifications, but the customer withholds signature on our acceptance document due to warranty or other issues unrelated to product performance;

o When the system is damaged during transit, revenue is recognized upon receipt of cash payment from the customer.

Total revenue recognized under conditions where KLA-Tencor deviates from the need for a written acceptance by the customer were approximately 3.1% of total revenue for fiscal year 2003 and 2.5% of total revenue for fiscal years 2002 and 2001. Shipping charges billed to customers are included in system revenue and the related shipping costs are included in cost of sales.

In accordance with SAB 101, KLA-Tencor also allows for multiple element revenue arrangement in cases where certain elements of a sales contract are not delivered and accepted at the same time. In such cases, KLA-Tencor defers the fair value of the unaccepted element until that element is delivered to and accepted by the customer. To be considered a separate element, the product or service in question must represent a separate earnings process, and is not essential to the functionality of the delivered and accepted portion of the same sales contract. If the unaccepted element is essential to the functionality of the delivered and accepted portion, the whole amount of the sales contract is deferred until all elements are accepted.

Spare parts revenue is recognized when the product has been shipped, risk of loss has passed to the customer and collection of the resulting receivable is probable.

Service and maintenance revenue is recognized ratably over the term of the maintenance contract. If maintenance is included in an arrangement, which includes a software license agreement, amounts related to maintenance are allocated based on vendor specific objective evidence. Non-standard warranty includes services incremental to the standard 40-hour per week coverage for twelve months. Non-standard warranty is deferred as unearned revenue and is recognized ratably as revenue when the applicable warranty term period commences. Consulting and training revenue is recognized when the related services are performed.

Revenue from software license fees is typically recognized upon shipment if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate a portion of the total fee to any undelivered elements of the arrangement. Such undelivered elements in these arrangements typically consist of services and/or upgrades. If vendor-specific objective evidence does not exist for the undelivered elements of the arrangement, all revenue is deferred until such evidence does exist, or until all elements are delivered, whichever is earlier. In instances where an arrangement to deliver software requires significant modification or customization, license fees are recognized under the percentage of completion method of contract accounting. Allowances are established for potential product returns and credit losses. To date, revenue from license fees have been less than 10% of total revenue.

As a result of implementing SAB 101, KLA-Tencor changed its method of accounting for revenue recognition. This change resulted in cumulative deferred revenue of $660.9 million as of July 1, 2000, which was recorded as a non-cash charge of $306.4 million (after reduction for product and warranty costs of $207 million and income taxes of $147.5 million). The deferred profit balance as of June 30, 2003 and 2002 was $177 million and 194 million, respectively and equals the amount of system revenue that was invoiced and due on shipment but deferred under SAB 101 less applicable product and warranty costs. KLA-Tencor also defers the fair value of non-standard warranty bundled with equipment sales as unearned revenue. The unearned revenue balance as of June 30, 2003 and 2002 was $48 million and $55 million, respectively.

Advertising Expenses KLA-Tencor expenses advertising costs as incurred. Advertising expenses for fiscal 2003, 2002 and 2001 were approximately $4 million, $3 million and $6 million respectively.

Strategic Development Agreements Net engineering, research and development expenses were partially offset by $18 million, $14 million and $8 million in external funding received under certain strategic development programs conducted with several of KLA-Tencor's customers and government grants in fiscal 2003, 2002 and 2001, respectively.

Income Taxes KLA-Tencor accounts for income taxes under an asset and liability approach. Deferred tax liabilities are recognized for future taxable amounts and deferred tax assets are recognized for future deductions.

Earnings Per Share Basic earnings per share ("EPS") is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated by using the weighted average number of common shares outstanding during the period and gives effect to all dilutive potential common shares outstanding during the period. The reconciling difference between the computation of basic and diluted earnings per share for all periods presented is the inclusion of the dilutive effect of stock options issued to employees under employee stock option plans.

Options to purchase 5,270,681, 282,746 and 4,459,862 shares of KLA-Tencor's common stock were outstanding at June 30, 2003, 2002 and 2001 respectively, but not included in the computation of diluted EPS because the exercise price was greater than the average market price of common shares in each respective year. The exercise price ranges of these options were $39.35 to $68.00, $52.75 to $68.00 and $44.69 to $68.00 at June 30, 2003, 2002 and 2001, respectively.

Accounting for Stock-Based Compensation Plans KLA-Tencor accounts for its employee stock option and employee stock purchase plans under the recognition and measurement principles of APB Opinion No. 25, Accounting for Stock Issued to Employees, and related Interpretations. No stock-based employee compensation is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. In December 2002, FASB issued Statement of Financial Accounting Standards No. 148 (SFAS 148), "Accounting for Stock-Based Compensation Transition and Disclosure." This Statement amends SFAS 123, to provide alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. Finally, this Statement amends APB Opinion No. 28, Interim Financial Reporting, to require disclosure about those effects in interim financial information. Since KLA-Tencor continues to account for stock-based compensation according to APB 25, its adoption of SFAS No. 148 required the Company to provide prominent disclosures about the effects of SFAS 123 on reported income and required the Company to disclose these affects in the financial statements as well.

Pro forma information regarding net income and net income per share is required by SFAS 123, and has been determined as if KLA-Tencor had accounted for its employee stock purchase plan and employee stock options granted subsequent to June 30, 1995, under the fair value method of SFAS 123. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option valuation model and the single option approach with the following weighted-average assumptions:

June 30,	2003	2002	2001
Stock option plan:			
Expected stock price volatility	70.0%	80.0%	80.0%
Risk free interest rate	2.8%	4.4%	5.5%
Expected life of options (in years)	5.4	5.4	5.4
Stock purchase plan:			
Expected stock price volatility	75.0%	80.0%	80.0%
Risk free interest rate	2.2%	2.2%	4.3%
Expected life of options (in years)	1-2	1-2	1-2

SFAS No. 123 requires the use of option pricing models that were not developed for use in valuing employee stock options. The Black-Scholes option-pricing model was developed for use in estimating the fair value of short-lived exchange traded options that have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. Because the company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in the opinion of management, the existing models do not necessarily provide a reliable single measure of the fair value of employee stock options.

For purposes of pro forma disclosures required by SFAS 123, the estimated fair value of the options is amortized to expense over the options' vesting periods using straight-line method. KLA-Tencor's pro forma information is as follows:

Year ended June 30, (in thousands, except per share data)	2003	2002	2001
Income before cumulative effect of change in accounting principle	137,191	216,166	373,058
Cumulative effect of change in accounting principle, net of tax	--	--	(306,375)
Net income, as reported	$137,191	$ 216,166	$ 66,683
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(90,880)	(123,802)	(93,696)
Pro forma net income	$ 46,311	$ 92,364	$ 27,013
Earnings per share:			
Income before cumulative effect of change in accounting principle			
Basic	$ 0.72	$ 1.15	$ 2.01
Diluted	$ 0.70	$ 1.10	$ 1.93
Net income as reported			
Basic	$ 0.72	$ 1.15	$ 0.36
Diluted	$ 0.70	$ 1.10	$ 0.34
Pro forma income before cumlative effect of change in accounting principle			
Basic	$ 0.24	$ 0.49	$ 1.50
Diluted	$ 0.24	$ 0.47	$ 1.44
Pro forma net income			
Basic	$ 0.24	$ 0.49	$ (0.15)
Diluted	$ 0.24	$ 0.47	$ (0.15)

Reclassifications Certain prior year balances have been reclassified to conform to the current financial statement presentation. These reclassifications had no impact on previously reported results of operations or stockholders' equity.

Recent Accounting Pronouncements In July 2002, KLA-Tencor adopted Statement No. 143 ("SFAS 143"), "Accounting for Obligations Associated with the Retirement of Long-Lived Assets." SFAS 143 establishes accounting standards for the recognition and measurement of an asset retirement obligation and its associated asset retirement cost. It also provides guidance for legal obligations associated with the retirement of tangible long-lived assets. Adoption of SFAS 143 did not have a material impact on the Company's consolidated financial statements

In November 2002, the EITF reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." This issue addresses determination of whether an arrangement involving more than one deliverable contains more than one unit of accounting and how arrangement consideration should be measured and allocated to the separate units of accounting. EITF Issue No. 00-21 will be effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003 or the Company may elect to report the change in accounting as a cumulative-effect adjustment. The Company believes that the adoption of this standard will have no material impact on its consolidated financial statements.

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities," an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied for the first interim or annual period beginning after June 15, 2003. The Company believes that although the adoption of this standard will result in consolidation of certain entities, it will have no material impact on the consolidated financial statements.

In April 2003, the FASB issued Statement No. 149 ("SFAS No. 149"), "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS No. 149 amends and clarifies financial accounting and reporting for derivative instruments by requiring that contracts with comparable characteristics be accounted for similarly. In particular, this statement clarifies the circumstances under which a contract with an initial net investment meets the characteristics of a derivative, clarifies when a derivative contains a financing component, amends the definition of an underlying to conform it to the language used in FIN 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," and amends certain other existing pronouncements. The provisions of SFAS No. 149, which were not already applied under an Implementation Issue, are effective for contracts entered into or modified after June 30, 2003. The Company believes that the adoption of this standard will not have a material impact on our consolidated balance sheet or statement of operations.

In May 2003, the FASB issued Statement No. 150 ("SFAS No. 150"), "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 establishes standards for classification and measurement of certain financial instruments with characteristics of both liabilities and equity. It requires financial instruments within its scope be classified as a liability (or an asset in some circumstances). Many of those financial instruments were previously classified as equity. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003. For financial instruments created before and still existing as of the issuance of this statement, a cumulative effect of change in accounting principle shall be reported upon implementation in the first interim period beginning after June 15, 2003. The Company believes that the adoption of this standard will not have a material impact on our consolidated balance sheet or statement of operations.

NOTE 2 – FINANCIAL STATEMENT COMPONENTS

Balance Sheets

June 30, *(in thousands)*	**2003**	**2002**
Accounts receivable, net		
Accounts receivable, gross	$236,152	$290,397
Allowance for doubtful accounts	(12,617)	(13,391)
	$223,535	$277,006
Inventories:		
Customer service parts	$107,709	$123,074
Raw materials	30,558	76,238
Work-in-process	57,819	54,143
Demonstration equipment	40,732	48,564
Finished goods	21,981	20,997
	$258,799	$323,016

June 30, *(in thousands)*	**2003**	**2002**
Property and equipment:		
Land	$ 78,364	$ 28,103
Buildings and improvements	127,970	48,683
Machinery and equipment	222,267	218,977
Office furniture and fixtures	39,486	36,951
Leasehold improvements	132,908	116,787
Construction in process	43,437	74,843
	644,432	524,344
Less: accumulated depreciation and amortization	(261,703)	(223,784)
	$ 382,729	$ 300,560

June 30, *(in thousands)*	**2003**	**2002**
Other assets:		
Goodwill & other intangibles	$ 20,278	$ 23,401
Other long-term-investments	75,463	67,071
Deferred tax assets-long-term	43,032	36,469
Other	7,794	10,692
	$146,566	$137,633

June 30, *(in thousands)*	**2003**	**2002**
Other current liabilities:		
Warranty, installation and retrofit	$ 36,827	$ 54,441
Compensation and benefits	168,499	175,282
Income taxes payable	111,778	84,024
Restructuring accrual	3,240	405
Other accrued expenses	71,130	71,612
	$391,474	$385,764

June 30, *(in thousands)*	**2003**	**2002**
Accumulated other comprehensive income:		
Currency translation adjustments	$(2,563)	$ (7,699)
Gains (losses) on cash flow hedging instruments	253	(992)
Unrealized gains on investments, net of taxes of $3,786 in 2003 and $8,383 in 2002	5,997	13,278

	$ 3,687	$ 4,587

Statements of Operations

Year ended June 30, (in thousands)	2003	2002	2001
Interest income and other, net			
Interest income	$ 24,466	$ 32,680	$ 39,652
Interest expense	(386)	(594)	(1,057)
Foreign exchange gain (loss)	(3,058)	3,897	8,478
Realized gains (losses) on sale of investments	21,780	7,573	7,703
Other	(1,006)	(993)	(660)
	$ 41,796	$ 42,563	$ 54,116

NOTE 3 - NON-RECURRING ACQUISITION, RESTRUCTURING AND OTHER CHARGES

The following is summary of non-recurring acquisition, restructuring and other charges for the three fiscal years ended June 30, 2003.

(in thousands)	2003	2002	2001
Acquired in-process research and development expense	$ --	$ --	$ 700
Facilities	4,623	--	4,713
Severance	1,127	--	1,595
Non-recurring income from iSupport sale	(15,152)	--	(10,029)
Others		--	1,018
	$ (9,402)	$ --	$ (2,003)

Restructuring and Other Charges

In fiscal 2003, KLA-Tencor restructured certain of its operations to realign costs with planned business levels in light of the industry downturn. Restructuring costs were classified into two main categories: facilities and other charges of $4.6 million and severance and benefits of $1.1 million. As part of the facilities consolidation, KLA-Tencor exited several of its leased buildings and has included the remaining net book value of the related leasehold improvements as well as the future lease payments, net of anticipated sublease revenue, in the charge. Severance and benefit charges were related to the involuntary termination of approximately 70 personnel from manufacturing, engineering, sales, marketing, and administration in the United States, Japan and Europe. The restructuring actions taken in fiscal 2003 are proceeding as planned, with the termination of employees having been completed and the facilities related lease payments scheduled to be completed by the end of fiscal 2004. In addition, during the first fiscal quarter of 2003, KLA-Tencor received $15.2 million as a second and final installment on the sale of software and intellectual property associated with its iSupport(TM)on-line customer support technology, which was netted against the above non-recurring charges, resulting in a reported net gain of $9.4 million. In addition to the restructuring action, KLA-Tencor also recorded severance charges totaling $10.9 million in operating expenses, throughout fiscal 2003, relating to a series of employee involuntary terminations.

In fiscal 2002, there were no restructuring charges. KLA-Tencor recorded severance charges of $8.5 million in operating expenses relating to a series of employee involuntary terminations throughout fiscal 2002. In fiscal 2001, in response to the downturn in the semiconductor industry, KLA-Tencor implemented a restructuring plan to reduce spending. Charges related to its restructuring plan included: facilities of $4.7 million, severance and benefits of $1.6 million, and other costs of $1.0 million. Facilities related charges were associated with two leased office buildings that were vacated and included the remaining net book value of the related leasehold improvements as well as the future lease payments, net of anticipated sublease revenue in the charge. During fiscal 2001, KLA-Tencor reduced its workforce by approximately 5%, primarily in the manufacturing areas and recorded severance charges related to these terminations. The restructuring actions taken in fiscal 2001 were substantially completed at the end of fiscal 2002. In addition, during the fourth fiscal quarter of 2001, KLA-Tencor sold software and intellectual property associated with its *iSupport*™ on-line customer support technology and recorded $10.0 million pretax, non-recurring income, which was netted with the other non-recurring charges.

The following table shows the details of the facilities, severance and other restructuring costs accrual for the fiscal year ended June 30, 2003:

(in thousands)	Balance at June 30, 2002	Amounts Expensed	Amounts Utilized	Balance at June 30, 2003
Facilities and other	$ 405	$ 4,623	$ (1,835)	$ 3,193
Severance and benefits	--	1,127	(1,080)	47
Total	$ 405	$ 5,750	$ (2,915)	$ 3,240

Acquisitions

During fiscal years 2002 and 2001, KLA-Tencor completed certain purchase acquisitions. The Consolidated Financial Statements include the operating results of each business from the date of acquisition. Pro forma results of operations have not been presented because the effects of these acquisitions were not material on either an individual or aggregate basis. For a period of up to twelve months from the acquisition date, KLA-Tencor may change its original purchase price allocation for pre-acquisition uncertainties. After twelve months, KLA-Tencor records the fair value of such reasonably estimable contingencies.

The amounts allocated to in-process research and development ("in-process R&D") were determined through established valuation techniques in the high-technology equipment industry and were expensed upon acquisition because technology feasibility had not been established and no future alternative uses existed. Amounts allocated to purchased intangible assets are amortized on a straight-line basis over periods not exceeding five years.

A summary of purchase transactions is outlined as follows (in thousands):

Acquisition year	Acquired Company/Assets	Consideration Including Assumed Liabilities	Acquisition Cost	Goodwill and Purchased Intangible Assets	In-Process R&D Expenses
Fiscal 2002	QC Optics[(1)]	$ 4,000	$ -	$4,000	$ -
Fiscal 2001	Phase Metrics[(2)]	$18,000	$1,300	$5,400	$700

(1) With the acquisition of QC Optics, we received certain intellectual property in laser-based inspection systems for the semiconductor, flat panel and computer hard disk manufacturing industries.
(2) KLA-Tencor acquired certain assets and technology of Phase Metrics, the leading supplier of inspection/certification productsin the data storage industry.

The difference between the purchase price and the goodwill, intangibles and in-process R&D represents amount allocated to the net tangible assets acquired. No deferred stock-based compensation was recorded for any of the acquisitions.

NOTE 4 – MARKETABLE SECURITIES

The amortized costs and estimated fair value of securities available-for-sale as of June 30, 2003 and 2002 are as follows:

June 30, 2003 *(in thousands)*	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasuries	$ 5,113	$ 26	$ --	$ 5,139
Mortgage-backed securities	21,982	283	(2)	22,263
Municipal bonds	1,100,074	6,473	(695)	1,105,852
Corporate debt securities	15,078	99	--	15,177
Corporate equity securities	19,368	3,662	(63)	22,967
Money market bank deposits and other	218,717	--	--	218,717
	1,380,332	10,543	(760)	1,390,115
Less: Cash equivalents	509,193	12	(70)	509,135
Short-term marketable securities	345,386	4,733	(58)	350,061
Long-term marketable securities	$ 525,753	$ 5,798	$ (632)	$ 530,919

June 30, 2002 *(in thousands)*	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasuries	$ 56,996	$ 406	$ (18)	$ 57,384
Mortgage-backed securities	46,862	406	(8)	47,260
Municipal bonds	860,326	6,813	(55)	867,084
Corporate debt securities	40,548	214	(5)	40,757
Corporate equity securities	6,784	15,307	(1,399)	20,692
Money market bank deposits and other	190,234	--	--	190,234
	1,201,750	23,146	(1,485)	1,223,411
Less: Cash equivalents	319,505	143	--	319,648
Short-term marketable securities	228,859	16,079	1,412	243,526
Long-term marketable securities	$ 653,386	$ 6,924	$ (73)	$ 660,237

The contractual maturities of debt securities classified as available-for-sale as of June 30, 2003, regardless of the consolidated balance sheet classification, are as follows:

June 30, 2003 *(in thousands)*	Cost	Estimated Fair Value
Due within one year	$ 795,103	$ 838,682
Due after one year through three years	460,708	460,708
Due after three years	67,758	67,758

	$ 1,323,569	$ 1,367,148

Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Net realized gains and losses for the year ended June 30, 2003 were approximately $22 million. Net realized gains and losses for the years ended June 30, 2002 and 2001 were not material to KLA-Tencor's financial position or results of operations.

NOTE 5 - INCOME TAXES

The components of income before income taxes are as follows:

Year ended June 30, (in thousands)	2003	2002	2001
Domestic income before income taxes	$ 151,229	$ 256,926	$ 437,329
Foreign income before income taxes	29,289	30,530	75,255
Total net income before taxes	$180,518	$287,456	$512,584

The provision (benefit) for income taxes are comprised of the following:

Year ended June 30, (in thousands)	2003	2002	2001
Current:			
Federal	$ 33,665	$ (1,252)	$162,491
State	3,157	19,374	15,129
Foreign	17,207	17,131	17,578
	54,029	35,253	195,198
Deferred:			
Federal	(2,726)	60,076	(51,782)
State	(4,602)	(20,576)	(4,549)
Foreign	(3,374)	(3,463)	659
	(10,702)	36,037	(55,672)
Provision for income taxes	$ 43,327	$ 71,290	$139,526

Actual current tax liabilities are lower than reflected above for fiscal years 2003, 2002 and 2001 by $22 million, $60 million and $56 million, respectively, due to the stock option deduction benefits recorded as credits to capital in excess of par value.

The significant components of deferred income tax assets (liabilities) are as follows:

June 30, *(in thousands)*	2003	2002
Deferred tax assets:		
Federal and state loss and credit carryforwards	$129,217	$ 70,794
Employee benefits accrual	43,446	42,137
Non-deductible reserves and other	140,862	166,365
Deferred profit	77,337	106,959
	390,862	386,255
Deferred tax liabilities:		
Depreciation	3,109	(718)
Unremitted earnings of foreign subsidiaries not permanently reinvested	(12,148)	(11,850)
Unrealized gain on investments	(3,786)	(8,383)
Other	(13,772)	(16,338)
	(26,597)	(37,289)
Total net deferred tax assets	$364,265	$348,966

The reconciliation of the United States federal statutory income tax rate to KLA-Tencor's effective income tax rate is as follows:

Year ended June 30,	2003	2002

Federal statutory rate	35.0 %	35.0 %
State income taxes, net of federal benefit	(0.5)	(0.3)
Effect of foreign operations taxed at various rates	1.9	0.3
Export sales benefit	(5.2)	(5.3)
Research and development tax credit	(3.3)	(2.8)
Tax exempt interest	(3.8)	(2.9)
Other	(0.1)	0.8
Provision for Income Taxes	24.0 %	24.8 %

United States federal income taxes have not been provided for the undistributed earnings of two of KLA-Tencor's foreign subsidiaries. These undistributed earnings aggregated $31 million at June 30, 2003, and it is the Company's intention that such undistributed earnings be permanently reinvested. The Company has tax credits at June 30, 2003 totaling $129 million, of which $4 million will begin to expire in 2008 and $38 million will begin to expire in 2021. The Company enjoys tax holidays in Israel where it manufactures certain of its products. These tax holidays are scheduled to expire at varying times within the next ten years. During the last three fiscal years, the effect of these tax holidays has not had a material impact on the Company's net income and net income per share.

NOTE 6 - STOCKHOLDERS' EQUITY

Stockholders' Rights Plan In March 1989, KLA-Tencor implemented a plan to protect stockholders' rights in the event of a proposed takeover of KLA-Tencor. Each stockholder under the plan is entitled to one right per common stock owned. The Plan was amended in April 1996. The Plan provides that if any person or group acquires 15% or more of KLA-Tencor's common stock, each right not owned by such person or group will entitle its holder to purchase, at the then-current exercise price, KLA-Tencor's common stock at a value of twice that exercise price. As amended to date, under the Plan, the rights are redeemable at KLA-Tencor's option for $0.01 per right and expire in April 2006.

Stock Repurchase Program In July 1997, the Board of Directors authorized KLA-Tencor to systematically repurchase shares of its common stock in the open market. This plan was entered into to reduce the dilution from KLA-Tencor's employee benefit and incentive plans such as the stock option and employee stock purchase plans. Since the inception of the repurchase program in 1997 through June 30, 2003 the Board of Directors had authorized KLA-Tencor to repurchase a total of 17.8 million shares, including 5 million shares authorized in October 2002. In fiscal years 2003, 2002 and 2001, KLA-Tencor repurchased 1,972,000, 3,341,000 and 4,580,000 shares at an average price of $33.42, $36.89 and $33.54 per share, respectively. Since the inception of the repurchase program in 1997 through June 30, 2002, KLA-Tencor has repurchased a total of 13,321,000 shares at an average price of $32.70 per share, with an additional 4.5 million available for repurchase under the plan . All such shares remain as treasury shares.

Employee Stock Purchase Plan KLA-Tencor's employee stock purchase plan provides that eligible employees may contribute up to 10% of their eligible earnings toward the semi-annual purchase of KLA-Tencor's common stock. The employee's purchase price is derived from a formula based on the fair market value of the common stock at the time of enrollment into the Offering period versus the fair market value on the date of purchase. Offering periods are generally two years in length. As the plan is non-compensatory under APB 25, no compensation expense is recorded in connection with the plan. In fiscal years 2003, 2002 and 2001 employees purchased 1,071,571, 1,155,213 and 1,275,837 of shares issued at a weighted average fair value of $30.26, $29.72 and $28.59 respectively. The plan shares are replenished annually on the first day of each fiscal year by virtue of an evergreen provision. The provision allows for share replenishment equal to the lesser of 2,000,000 shares or the number of shares which the Company estimates will be required to issue under the plan during the forthcoming fiscal year. At June 30, 2003, a total of 930,769 shares were reserved and available for issuance under this plan.

Stock Option and Incentive Plans KLA-Tencor's stock option program is a broad-based, long-term retention program that is intended to attract and retain qualified management and technical employees ("knowledge employees"), and align stockholder and employee interests. Under KLA-Tencor's stock option plans, options generally have a vesting period of five years, are exercisable for a period not to exceed ten years from the date of issuance and are granted at prices not less than the fair market value of KLA-Tencor's common stock at the grant date. This program consists of three plans: one under which non-employee directors may be granted options to purchase shares of our stock, another in which officers, key employees, consultants and all other employees may be granted options and a third in which consultants and all employees other than directors and officers may be granted options to purchase shares of our stock. Substantially all of our employees that meet established performance goals and that qualify as knowledge employees participate in one of our stock option plans. Options granted to officers and employees from fiscal year 2000 through June 30, 2003 are summarized as follows (in thousands):

	2003	2002	2001	2000
Weighted average shares outstanding	189,817	187,667	185,860	182,177
Total options granted during the period	4,922	9,760	10,274)	8,166
Less options forfeited	(2,416)	(1,786)	(2,418)	(1,484)
Net options granted	2,506	7,974	7,856	6,682
Net grants during the period as % of weighted average shares outstanding	1.3%	4.2%	4.2%	3.6%
Grants to top 5 officers during the period as a % of weighted average shares outstanding	0.2%	0.3%	0.2%	0.2%
Grants to top 5 officers during the period as a % of total options granted	6.0%	6.0%	4.0%	5.0%

During fiscal 2003, the Company granted options to purchase approximately 4.9 million shares of stock to employees. After deducting options forfeited the net grant of options was 2.5 million shares. The net options granted after forfeiture represented 1.3% of weighted average outstanding shares of approximately 189.8 million as of June 30, 2003.

Options granted to the top five officers, who represent the chief executive officer and each of the four other most highly compensated executive officers whose salary plus bonus exceeded $100,000 for the fiscal year ended June 30, 2003, as a percentage of the total options granted to all employees vary from year to year. In 2003, there were 270,000 options granted to the top five officers. In fiscal 2002, options granted to the top five officers were a higher percentage of the total grants than in the other years shown because the Board of Directors approved additional grants to the CEO in recognition of his future potential to lead the corporation. The additional grants to the CEO totaled 227,400 options with vesting on said grants extended for up to an eight-year period.

All stock option grants to officers are approved by the Compensation Committee of the Board of Directors. All members of the Compensation Committee are independent directors, as defined in the applicable rules for issuers traded on the NASDAQ Stock Market.

The following table summarizes KLA-Tencor's stock option plans as of June 30, 2003:

	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under stock option plan
Stock option plan approved by stockholders	20,930,487	$ 27.70	12,925,303 (1)
Stock option plan not approved by stockholders (2)	8,803,471	35.53	3,994,415
Total	29,733,958	$ 29.94	16,919,718

(1) In July 2003, an additional 5,750,290 securities were reserved for issuance in accordance with the stock option plan's evergreen feature.
(2) Officers and directors are not eligible to receive options granted under this plan.

In order to retain the incentive value for many new employees who had stock option grants with exercise prices that were far out of the money, in December 2000, 569 employees of KLA-Tencor were offered the opportunity to participate in a surrender program. This program applied to less than 9 percent of total employees and less than 5 percent of total options outstanding. The program allowed participating employees to exchange their stock options with exercise prices over $55.00 per share and all subsequently issued options for a promise to issue new options no sooner than six months and two days after the cancellation of the forfeited options. Employees who elected to participate in the exchange program were required to exchange all options issued during the period six months prior to December 2000 as well forgo any grant of new options during the six months subsequent to December 2000. The new options were granted on July 10, 2001 at the NASDAQ market closing price of $46.67. The terms of the new option replicated the surrendered option. Only 49 percent of eligible employees elected to participate in this program. A total of 278 employees surrendered an aggregate of 722,814 options with exercise prices ranging from $26.25 to $68.00 per share or an average exercise price of $45.46 per share.

The activity under the option plans, combined, was as follows:

	Available For Grant	Options Outstanding	Weighted-Average Price
Balances at June 30, 2000	5,146,702	22,355,712	$ 20.23
Additional shares reserved	11,216,391	--	--
Options granted	(10,273,504)	10,273,504	37.09
Options canceled/expired	2,418,485	(2,418,485)	36.15
Options exercised	--	(3,921,145)	14.71
Balances at June 30, 2001	8,508,074	26,289,586	$ 26.18
Additional shares reserved	5,610,752	--	--
Options granted	(9,760,303)	9,760,303	31.83
Options canceled/expired	1,786,295	(1,786,295)	32.55
Options exercised	--	(4,173,887)	19.36
Balances at June 30, 2002	6,144,818	30,089,707	$ 28.60
Additional shares reserved	13,280,928	--	--
Options granted	(4,922,001)	4,922,001	35.26
Options canceled/expired	2,415,973	(2,415,973)	35.16
Options exercised	--	(2,861,777)	20.94
Balances at June 30, 2003	16,919,718	29,733,958	$ 29.94

(1) In addition in August 2003, KLA-Tencor granted 1.4 million stock options (1.3 million to non -executive employees and 0.1 million to executive employees) as part of the fiscal year 2002 annual performance cycle review of KLA-Tencor.

The options outstanding at June 30, 2003 have been segregated into ranges for additional disclosure as follows:

	Options Outstanding			Options Vested and Exercisable	
Range of Exercise Prices	Number of Shares Outstanding at June 30, 2003	Weighted- Average Remaining Contract Life (in years)	Weighted-Average Exercise Price at June 30, 2003	Number Vested and Exercisable	Weighted-Average Exercise Price at June 30, 2003
$ 2.41-$ 9.31	683,639	1.48	$ 8.98	683,639	$ 8.98
$ 9.53-$10.63	3,748,549	5.11	$10.60	3,748,357	$10.60
$ 10.81-$29.26	3,610,498	5.94	$21.30	2,730,540	$19.64
$ 29.31-$29.31	6,908,808	8.26	$29.31	2,096,228	$29.31
$ 29.96-$33.75	5,454,853	6.95	$33.11	3,781,673	$33.44
$ 34.67-$37.05	4,337,306	9.46	$35.51	119,883	$36.52
$ 39.35-$46.67	4,068,342	7.34	$44.83	2,840,311	$44.99
$ 47.23-$68.00	921,963	7.82	$51.86	525,954	$52.35
$ 2.41-$68.00	29,733,958	7.22	$29.94	16,526,585	$27.05

The weighted average fair value of options granted in fiscal years 2003, 2002 and 2001 was $21.93, $21.87 and $25.93 respectively. Options exercisable were 16,526,585, 13,436,155 and 9,807,250 as of June 30, 2003, 2002 and 2001, respectively.

NOTE 7 EMPLOYEE BENEFIT PLANS

KLA-Tencor has a profit sharing program for eligible employees, which distributes on a quarterly basis, a percentage of pretax profits. In addition, KLA-Tencor has an employee savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Starting fiscal year 2000, KLA-Tencor has matched up to a maximum of $1,000 or 50% of the first $2,000 of an eligible employee's contribution, with $500 of the amount funded from the profit sharing program. The total charge to operations under the profit sharing and 401(k) programs aggregated $10 million, $3 million and $57 million in fiscal years 2003, 2002 and 2001, respectively. KLA-Tencor has no defined benefit plans in the United States. In addition to the profit sharing plan and the U.S. employee saving plan, several of KLA-Tencor's foreign subsidiaries have retirement plans for their full time employees, several of which are defined benefit plans.

Net periodic pension cost for defined benefit pension plans is determined in accordance with FAS 87*Employers' Accounting for Pensions*, and is made up of several components that reflect different aspects of the Company's pension-related financial arrangements and the cost of benefits earned by participating employees. These components are determined using certain actuarial assumptions. Summary data relating to the Company's foreign defined benefit pension plans, including key weighted average assumptions used is provided in the following tables:

June 30, *(in thousands)*	2003	2002
Change in projected benefit obligation		
Projected benefit obligation at beginning of fiscal year	$ 8,632	$ 6,166
Service cost, including plan participant contributions	2,041	1,609
Interest cost	321	245
Actuarial (gain) loss	674	378
Benefit payments	(96)	(72)
Foreign currency changes	(42)	306
Projected benefit obligation at the end of the fiscal year	$ 11,530	$ 8,632
Change in fair value of plan assets and funded status		
Fair value of plan assets at beginning of fiscal year	$ 1,218	$ 673
Actual return on plan assets	22	27
Employer contributions	522	481
Benefit and expense payments	(20)	--
Foreign currency changes	(58)	36
Fair value of plan assets at end of fiscal year	1,684	1,217
Projected benefit obligation at the end of the fiscal year	11,530	8,632
Projected benefit obligation in excess of fair value of plan assets	(9,846)	(7,415)
Unamortized net obligation (asset)	984	1,234
Intangible asset	(206)	--
Unrecognized net actuarial loss	1,834	1,142
(Accrued) prepaid benefit cost at end of fiscal year	$ (7,234)	$ (5,039)

June 30,	2003	2002

Weighted -average assumptions			
Discount rate	3.5 % - 3.75 %	$	3.5% - 4.5 %
Expected return on assets	3.75 %		4.5 %
Rate of compensation increases	0% - 3.0 %		3.0 %

The components of KLA-Tencor's net periodic cost relating to its foreign subsidiaries defined pension plans are as follow:

June 30, (in thousands)	2003	2002	2001
Components of net periodic pension cost			
Service cost, net of plan participant contributions	$ 2,041	$ 1,609	$ 1,337
Interest cost	321	245	203
Return on plan assets	(64)	(55)	(17)
Amortization of net transitional obligation	237	227	247
Amortization of net gain (loss)	17	14	22
Net periodic pension cost	$ 2,552	$ 2,040	$ 1,792

KLA-Tencor has a non-qualified deferred compensation plan whereby certain executives may defer a portion of their salary and bonus. Participants are credited with returns based on their allocation of their account balances among mutual funds. The Company controls the investment of these funds and the participants remain general creditors of the Company. Distributions from the plan commence the quarter following a participant's retirement or termination of employment. At June 30, 2003, KLA-Tencor had a deferred compensation liability under the plan of $78 million included as a component of other current liabilities on the consolidated balance sheet.

NOTE 8 - COMMITMENTS AND CONTINGENCIES

Factoring KLA-Tencor has agreements with two Japanese banking institutions to sell certain of its trade receivables and promissory notes without recourse. During fiscal 2003 and 2002, approximately $99 million and $98 million of receivables were sold under these arrangements, respectively. As of June 30, 2003 and 2002, approximately $27 million and $48 million were outstanding, respectively. The total amount available under the facility is the Japanese yen equivalent of $92 million based upon exchange rates as of June 30, 2003. KLA-Tencor does not believe it is materially at risk for any losses as a result of these agreements.

Facilities KLA-Tencor leases certain of its facilities under operating leases, which qualify for operating lease accounting treatment under SFAS 13, "Accounting for Leases," and, as such, these facilities are not included on its Condensed Consolidated Balance Sheet. Rent expense was approximately $16.2 million, $20.3 million and $21.8 million for the years ended June 30, 2003, 2002 and 2001, respectively.

The following is a schedule of operating leases payments (in thousands):

Fiscal year ended June 30,	Amount
2004	$ 7,303
2005	4,911
2006	2,838
2007	1,554
2008	1,213
Thereafter	3,969
Total minimum lease payments	$ 21,788

The lease agreement for certain Milpitas and San Jose, California facilities had a term of five years ending in November 2002, with an option to extend up to two more years. Under the terms of the lease, KLA-Tencor, at its option, could acquire the properties at their original cost or arrange for the properties to be acquired. In November 2002, the Company purchased these facilities at the end of the lease term. The purchase transaction increased land and property by approximately $120 million and decreased cash by the same amount.

Purchase Commitments KLA-Tencor maintains certain open inventory purchase commitments with its suppliers to ensure a smooth and continuous supply chain for key components. KLA-Tencor's liability in these purchase commitments is generally restricted to a forecasted time-horizon as mutually agreed upon between the parties. This forecast time-horizon can vary amongst different suppliers. The Company's open inventory purchase commitments were less than $42 million as of June 30, 2003.

Guarantees During the quarter ended December 31, 2002 KLA-Tencor adopted Financial Accounting Standards Board Interpretation No. 45 ("FIN 45"), " Guarantor's Requirements for Guarantees, including Indirect Indebtedness of Others." FIN 45 requires disclosures concerning KLA-Tencor's obligations under certain guarantees.

The following table provides the changes in the product warranty accrual, as required by FIN 45 for the fiscal year ended June 30, 2003:

(in thousands)	Amount of Liability Debit/(Credit)
Balance at June 30, 2002	$ (49,047)
Accruals for warranties issued during the period	(48,539)
Changes in liability related to pre-existing warranties	17,765

Settlements made during the period	46,595
Balance at June 30, 2003	$ (33,226)

In connection with certain business combinations and purchased technology transactions, KLA-Tencor was subject to certain contingent consideration arrangements at June 30, 2003. These arrangements are based upon sales volume or the occurrence of other events subsequent to the acquisition and lapse in fiscal years 2004 to 2005. The payment of the contingency would result in an increase to goodwill or operating expenses. Amounts paid under these arrangements have not been and are not expected to have a material effect on KLA-Tencor's financial condition or results of operations and could range, in aggregate from $2.2 million to $3.6 million.

Subject to certain limitations, KLA-Tencor indemnifies its current and former officers and directors for certain events or occurrences. Although the maximum potential amount of future payments KLA-Tencor could be required to make under these agreements is theoretically unlimited, based on prior experience, we believe the fair value of this liability is de minimis and no liability has been recorded.

Legal Matters KLA-Tencor is named from time to time as a party to lawsuits in the normal course of our business. Litigation, in general, and intellectual property and securities litigation in particular, can be expensive and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. KLA-Tencor believes that it has defenses in each of the cases set forth below and is vigorously contesting each of these matters.

ADE Corporation

On October 11, 2000, ADE Corporation ("ADE"), a competitor, filed a patent infringement lawsuit against KLA-Tencor in the U.S. District Court in Delaware. ADE claimed damages and sought an injunction under U.S. Patent No. 6,118,525 ("'525 patent"). KLA-Tencor filed a counterclaim in the same court alleging that ADE has infringed four of our patents. KLA-Tencor is seeking damages and a permanent injunction against ADE. In addition, KLA-Tencor is seeking a declaration from the District Court that ADE's patent is invalid and not infringed by KLA-Tencor. On October 22, 2001, KLA-Tencor filed a separate action for declaratory judgment against ADE in the Northern District of California requesting a declaration that U.S. Patent No. 6,292,259 ("'259 patent") is invalid and not infringed. That action has now been consolidated with the prior action in the Delaware proceeding, and ADE has amended its complaint in that proceeding to allege that KLA-Tencor is infringing the '259 patent. On August 8, 2002, the magistrate presiding over the action issued a recommendation that the court enter summary judgment in favor of KLA-Tencor on the issue of non-infringement under ADE's '525 patent. On the same day, the magistrate issued recommendations that the court enter summary judgment in favor of ADE on the issue of non-infringement of two of KLA-Tencor's patents. The district court judge subsequently substantially adopted the recommendations of the magistrate regarding claims construction.

Tokyo Seimitsu Co. Ltd.

On June 27, 2001, KLA-Tencor sued Tokyo Seimitsu Co. Ltd. and TSK America Inc. ("TSK"), a competitor, in the U.S. District Court in the Northern District of California alleging that TSK infringes on one of the Company's patents. The suit seeks damages and an injunction under U.S. Patent No. 4,805,123 ("`123 patent"). TSK filed a counterclaim in the same court seeking a declaration that the `123 patent is invalid, unenforceable and not infringed, and also alleged violations of the antitrust and unfair competition laws. The district court judge has entered a ruling that calls into question the validity of the patent in suit. KLA-Tencor is examining remedies in connection with that determination.

NOTE 9 – DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

Under its foreign-currency risk management strategy, KLA-Tencor utilizes derivative instruments to protect its interests from unanticipated fluctuations in earnings and cash flows caused by volatility in currency exchange rates. This financial exposure is monitored and managed by KLA-Tencor as an integral part of its overall risk management program which focuses on the unpredictability of financial markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results. KLA-Tencor continues its policy of hedging its current and anticipated foreign currency exposures with hedging instruments having tenors of up to twelve months.

On July 1, 2001, KLA-Tencor adopted SFAS 133, "Accounting for Derivative Instruments and Hedging Activities" (SFAS 133). SFAS 133 requires that all derivatives be recorded on the balance sheet at fair value. Changes in the fair value of derivatives which do not qualify, or are not effective as hedges must be recognized currently in earnings. Upon adoption KLA-Tencor recognized the fair value of foreign currency forward contracts, previously held off balance sheet, and reflected their fair value on the balance sheet. These were principally offset by recording on the balance sheet the change in value of the hedged item, generally forecasted shipments. KLA-Tencor did not separately report a cumulative transition adjustment to earnings upon adoption of the standard as the impact was immaterial. All derivatives were reflected at fair value on the balance sheet at that date.

Cashflow Hedges

KLA-Tencor's international sales are primarily denominated in U.S. dollars. For foreign currency denominated sales, however, the volatility of the foreign currency markets represents risk to KLA-Tencor's margins. KLA-Tencor defines its exposure as the risk of changes in the functional-currency-equivalent cash flows (generally U.S. dollar) attributable to changes in the related foreign currency exchange rates. Upon forecasting the exposure, KLA-Tencor hedges with forward sales contracts whose critical terms are designed to match those of the underlying exposure. These hedges are evaluated for effectiveness at least quarterly using regression analysis. Ineffectiveness is measured by comparing the change in value of the forward contracts to the change in value of the underlying transaction, with the effective portion of the hedge accumulated in Other Comprehensive Income (OCI). Any measured ineffectiveness is included immediately in "Interest income and other, net" in the Consolidated Statements of Operations. Deferred hedge gains and losses and OCI associated with hedges of foreign currency sales are reclassified to revenue upon recognition in income of the underlying hedged exposure. All amounts reported in OCI at June 30, 2003 are anticipated to be reclassified to revenue within twelve months. At June 30, 2003, KLA-Tencor had cash flow hedge contracts, maturing throughout fiscal year 2004 to sell $66 million and purchase $7 million, in foreign currency, primarily in Japanese yen. The following table summarizes hedging activity in the OCI account during the years ended June 30, (in thousands):

	2003	2002
Beginning Balance	$ (992)	$ 3,432
Effective portion of cash flow hedging instruments	3,069	(2,045)

Reclassified to revenue upon revenue recognition	(1,824)	(2,379)
Ending Balance	$ 253	$ (992)

Other Foreign Currency Hedges

KLA-Tencor hedges its monetary non-functional assets and liabilities, and those of its subsidiaries. SFAS 52 requires that such monetary assets and liabilities be remeasured periodically for changes in the rate of exchange against the entities' functional currency. Changes in value of these assets and liabilities are recorded in "Interest income and other, net" in the Consolidated Statements of Operations. The volatility of the non-functional currencies together with the requirement to remeasure non-functional assets and liabilities may result in some volatility to KLA-Tencor's Consolidated Statements of Operations if left unhedged. In order to mitigate these effects, KLA-Tencor enters into remeasurement hedges which are forward contracts used to offset the foreign currency positions represented by non-functional monetary assets and liabilities. Remeasurement hedges are not SFAS 133 designated hedges, thus changes in value of the remeasurement hedges are recorded currently in earnings. Changes in the values of underlying monetary non-functional assets and liabilities are also recorded currently in earnings and should offset the change in value of the hedges. At June 30, 2003, KLA-Tencor had other foreign currency hedge contracts maturing throughout fiscal 2004 to sell $149 million and purchase $152 million, in foreign currency, primarily in Japanese yen.

NOTE 10 – GOODWILL AND OTHER INTANGIBLE ASSETS

Effective July 1, 2001, KLA-Tencor adopted Statement of Financial Accounting Standards No. 141, "Business Combinations," and No. 142, "Goodwill and Other Intangible Assets." Under these accounting standards, KLA-Tencor ceased amortization of goodwill recorded for business combinations consummated prior to July 1, 2001, and reclassified amounts attributed to workforce in acquisitions made prior to July 1, 2001 that did not meet the criteria for separate recognition as other intangible assets under SFAS 141 to goodwill. The net carrying value of goodwill recorded through acquisitions is $16.2 million as of June 30, 2003. In accordance with SFAS 142, KLA-Tencor in fiscal 2003 evaluated the goodwill for impairment and concluded there was no impairment of goodwill.

The following table reflects the components of other intangible assets as of June 30, 2003 (in thousands):

	Gross Carrying Amount	Accumulated Amortization	Net Amount
Existing technology	$ 6,062	$ 5,352	$ 710
Patents	4,761	1,759	3,002
Trademark	625	292	333
Favorable leases and other	270	270	--
Subtotal	$ 11,718	$ 7,673	$ 4,045

Other intangible assets are amortized on a straight-line basis over their estimated useful lives. During the fiscal year ended June 30, 2003, as a result of the discontinuation of a product, management evaluated certain intangible assets for impairment. Using a fair-value approach based on discounted future cash flows, management determined that these assets were impaired. For the fiscal year ended June 30, 2003 amortization expense for other intangible assets was $4.2 million, including an impairment charge of $2.0 million. For the years ended June 30, 2002 and 2001, amortization expense for other intangible assets was $2.1 million and $1.0 million, respectively. KLA-Tencor will continue to review the carrying value of the other intangible assets in relation to the fair value of the discounted cash flows. Based on intangibles assets recorded at June 30, 2003, and assuming no subsequent impairment of the underlying assets, the annual estimated amortization expense is expected to be as follows (in thousands):

Fiscal year ended June 30,	**Amount**
2004	$ 1,438
2005	1,434
2006	689
2007 and thereafter	484
Subtotal	$ 4,045

NOTE 11 – SEGMENT REPORTING AND GEOGRAPHIC INFORMATION

In fiscal 1999, KLA-Tencor adopted SFAS 131, "Disclosures about Segments of an Enterprise and Related Information." SFAS 131 establishes standards for reporting information about operating segments in annual financial statements and requires that certain selected information about operating segments be reported in interim financial reports. It also establishes standards for related disclosures about products and services, and geographic areas. Operating segments are defined as components of an enterprise about which separate financial information is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. KLA-Tencor's chief operating decision makers are the Chief Executive Officer and the President/Chief Operating Officer.

KLA-Tencor is engaged primarily in designing, manufacturing, and marketing yield management and process monitoring systems for the semiconductor industry. All operating units have been aggregated due to their inter-dependencies, commonality of long-term economic characteristics, products and services, the production processes, class of customer and distribution processes. Since KLA-Tencor operates in one segment, all financial segment information required by SFAS 131 can be found in the Consolidated Financial Statements.

KLA-Tencor's significant operations outside the United States include a manufacturing facility in Israel and sales, marketing and service offices in Western Europe, Japan, and the Asia Pacific region. For geographical reporting, revenues are attributed to the geographic location in which the customer is located. Long-lived assets consist of net property and equipment, goodwill, capitalized software and other intangibles, and other long-term assets, excluding long-term deferred tax assets and are attributed to the geographic location in which they are located. The following is a summary of operations by entities located within the indicated geographic areas for fiscal years 2003, 2002 and 2001.

Year ended June 30, (in thousands)	2003	2002	2001
Revenues:			
United States	$ 407,225	$ 539,952	$ 714,517
Europe & Israel	193,264	238,897	257,560
Japan	276,321	350,668	401,764
Taiwan	253,218	268,492	402,440
Asia Pacific	193,021	239,273	327,476
Total	$ 1,323,049	$ 1,637,282	$ 2,103,757

Year ended June 30, (in thousands)	2003	2002	2001
Long-lived assets:			
United States	$ 468,171	$ 375,600	$ 344,444
Europe & Israel	6,416	8,079	9,257
Japan	4,757	8,878	8,874
Taiwan	2,528	5,435	2,596
Asia Pacific	4,383	3,732	5,551
Total	$ 486,255	$ 401,724	$ 370,722

The following is a summary of revenues by major products for fiscal years 2003, 2002 and 2001 (as a percentage of total revenue).

	2003	2002	2001
Defect Inspection	59%	66%	65%
Metrology	15%	15%	21%
Service	20%	13%	9%
Software and other	6%	6%	5%
	100%	100%	100%

For the fiscal period ended June 30, 2003, one customer accounted for 11% of revenues and two customers accounted for 13% and 11% of accounts receivable. No single customer accounted for 10% or more of net revenues or accounts receivable for the fiscal periods ended June 30, 2002 and 2001.

NOTE 12 - QUARTERLY CONSOLIDATED RESULTS OF OPERATIONS (UNAUDITED)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended June 30, 2003. In management’s opinion, this information has been prepared on the same basis as the audited Consolidated Financial Statements appearing elsewhere in this Form 10-K and includes all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the unaudited quarterly results of operations set forth herein.

(In thousands, except per share data)	September 30	December 31	March 31	June 30
Fiscal 2003:				
Revenues	$ 375,520	$ 334,918	$304,298	$308,313
Gross profit	189,176	163,780	147,567	151,021
Income from operations	57,284	26,756	25,600	29,082
Net income	51,265	29,228	27,339	29,359
Net income per share:				
Basic	$ 0.27	$ 0.15	$ 0.14	$ 0.15
Diluted	$ 0.26	$ 0.15	$ 0.14	$ 0.15
Fiscal 2002				
Revenues	$ 502,832	$ 404,148	$357,108	$373,194
Gross profit	258,464	202,337	175,006	187,082
Income from operations	104,293	56,280	37,097	47,223
Net income	86,465	49,048	34,149	46,504
Net income per share:				

Basic	$ 0.46	$ 0.26	$ 0.18	$ 0.25
Diluted	$ 0.44	$ 0.25	$ 0.17	$ 0.23

Report of Independent Auditors

To the Board of Directors and Shareholders of KLA-Tencor Corporation:

In our opinion, the consolidated financial statements listed in the index appearing under Item 8 present fairly, in all material respects, the financial position of KLA-Tencor Corporation and its subsidiaries at June 30, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 2003 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
San Jose, California
July 22, 2003

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH AUDITORS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

For the information required by this Item, see “Information About Executive Officers” in the Proxy Statement, which is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

For the information required by this Item, see “Executive Compensation” in the Proxy Statement, which is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

For the information required by this Item, see “Security Ownership - Principal Stockholders and Security Ownership of Management” in the Proxy Statement, which is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

For the information required by this Item, see “Certain Transactions” in the Proxy Statement, which is incorporated herein by reference.

PART IV

ITEM 14. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

Changes in internal controls

There was no change in our internal controls over financial reporting that occurred during the fourth fiscal quarter of fiscal 2003 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements:

The following financial statements and schedules of the Registrant are contained in Item 8 of this Annual Report on Form 10-K:

- Consolidated Balance Sheets at June 30, 2003 and 2002
- Consolidated Statements of Operations for each of the three years in the period ended June 30, 2003
- Consolidated Statements of Stockholders' Equity for each of the three years in the period ended June 30, 2003
- Consolidated Statements of Cash Flows for each of the three years in the period ended June 30, 2003
- Notes to Consolidated Financial Statements
- Report of Independent Auditors

2. Financial Statement Schedules:

The following financial statement schedule of the Registrant is filed as part of this Annual Report on Form 10-K and should be read in conjunction with the financial statements:

- Schedule II - Valuation and Qualifying Accounts

All other schedules are omitted because they are either not applicable or the required information is shown in the Consolidated Financial Statements or notes thereto.

3. Exhibits

Exhibit No.	Description
3.1	3.1 Amended and Restated Certificate of Incorporation (1)
3.2	3.2 Certificate of Amendment of Amended and Restated Certificate of Incorporation (2)
3.3	Bylaws, as amended November 17, 1998 (3)
4.1	Amended and Restated Rights Agreement dated as of August 25, 1996 between the Company and First National Bank of Boston, as Rights Agent. The Agreement includes the Form of Right Certificate as Exhibit A and the Summary of Terms of Rights as Exhibit B (4)
10.1	1998 Outside Director Option Plan (5)*
10.2	1997 Employee Stock Purchase Plan (6)*
10.3	Tencor Instruments Amended and Restated 1993 Equity Incentive Plan (7)
10.4	Restated 1982 Stock Option Plan, as amended November 18, 1996 (8)*
10.5	Excess Profit Stock Plan (9)*
10.6	Form of KLA-Tencor Corporation Corporate Officers Retention Plan (10)*
10.7	Form of Indemnification Agreement (11)*
10.8	Livermore Land Purchase and Sale Agreement (12)
10.9	Amended Retention and Non-Competition Agreement dated as of April 29, 1998 by and between the Company and Kenneth Levy.*
10.10	Amended Retention and Non-Competition Agreement dated as of April 29, 1998 by and between the Company and Kenneth L. Schroeder.*
10.11	Addendum to Amended Retention and Non-Competition Agreement dated as of November 15, 2001 by and between the Company and Kenneth L. Schroeder.*
10.12	Management Retention Agreement dated as of November 26, 2001 by and between the Company and Gary E. Dickerson.*
10.13	Management Retention Agreement dated as of November 19, 2001 by and between the Company and John H. Kispert.*
21.1	List of Subsidiaries
23.1	Consent of Independent Auditors
31	Certifications Pursuant to Rule 13a-14 under the Securities Exchange Act of 1934
32	Certifications Pursuant to 18 U.S.C. Section 1350
*	Denotes a management contract or compensatory plan or arrangement.

Notes	
(1)	Filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 1997
(2)	Filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2000
(3)	Filed as Exhibit 3.2 to the Company's Registration Statement on Form S-8 filed December 4, 1998, SEC File No. 333-68415.
(4)	Filed as Exhibit 1 to the Company's report on form 8-A/A, Amendment No. 2 to the Registration Statement on Form 8-A filed September 24, 1996, SEC File No. 0-9992.
(5)	Filed as Exhibit 10.1 to the Company's Registration Statement on Form S-8 filed December 4, 1998, SEC File No. 333-68423.
(6)	Filed as Exhibit 10.2 to the Company's Registration Statement on Form S-8 filed January 30, 1998, SEC File No. 333-45271.
(7)	Filed as Exhibit 10.2 to the Company's Registration Statement on Form S-8 filed May 8, 1997, SEC File No. 333-26681.
(8)	Filed as Exhibit 10.74 to the Company's Registration Statement on Form S-8 filed March 7, 1997, SEC File No. 333-22941.
(9)	Filed as Exhibit 10.15 to the Company's Registration Statement on Form S-8 filed August 7, 1998, SEC File No. 333-60887.
(10)	Filed as Exhibit 10.2 to the Company's Registration Statement on Form S-4 filed March 11, 1997, SEC File No. 333-23075.
(11)	Filed as Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended June 30, 1997.
(12)	Filed as Exhibit 10.16 to the Company's Annual Report on Form 10-K for the year ended June 30, 2000.

(b) Reports on Form 8-K

On July 24, 2003, KLA-Tencor furnished a report on Form 8-K relating to its financial information for the quarter and fiscal year ended June 30, 2003, as presented in a press release of July 24, 2003.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on September 15, 2003.

KLA-Tencor Corporation

By: /s/ KENNETH LEVY

Kenneth Levy
Chairman of the Board

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ KENNETH LEVY Kenneth Levy	Chairman of the Board and Director	September 15, 2003
/s/ KENNETH L. SCHROEDER Kenneth L. Schroeder	Chief Executive Officer and Director (Principal Executive Officer)	September 15, 2003
/s/ JOHN H. KISPERT John H. Kispert	Executive Vice President and Chief Financial Officer (Principal Accounting Officer)	September 15, 2003
/s/ EDWARD W. BARNHOLT Edward W. Barnholt	Director	September 15, 2003
/s/ H. RAYMOND BINGHAM H. Raymond Bingham	Director	September 15, 2003
/s/ ROBERT T. BOND Robert T. Bond	Director	September 15, 2003
/s/ RICHARD J. ELKUS, Jr. Richard J. Elkus, Jr.	Director	September 15, 2003

/s/ STEPHEN P. KAUFMAN Stephen P. Kaufman	Director	September 15, 2003
/s/ JON D. TOMPKINS Jon D. Tompkins	Director	September 15, 2003
/s/ LIDA URBANEK Lida Urbanek	Director	September 15, 2003

SCHEDULE II

Valuation and Qualifying Accounts

(in thousands)	Balance at Beginning of Period	Charged to Expense	Deductions	Balance At Endof Period
Year Ended June 30, 2001:				
Allowance for Doubtful Accounts	$ 14,789	$ 1,962	$ (1,739)	$ 15,012
Year Ended June 30, 2002:				
Allowance for Doubtful Accounts	$ 15,012	$ 1,464	$ (3,085)	$ 13,391
Year Ended June 30, 2003:				
Allowance for Doubtful Accounts	$ 13,391	$ 192	$ (966)	$ 12,617

EXHIBIT

As required under Item 15, “Exhibits, Financial Statement Schedules and Reports on Form 8-K,” the exhibits filed as part of this report are provided in this separate section. The exhibits included in this section are as follows:

Exhibit No.	Description
3.1	3.1 Amended and Restated Certificate of Incorporation (1)
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3.3	Bylaws, as amended November 17, 1998 (3)
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(10)	Filed as Exhibit 10.2 to the Company's Registration Statement on Form S-4 filed March 11, 1997, SEC File No. 333-23075.
(11)	Filed as Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended June 30, 1997.
(12)	Filed as Exhibit 10.16 to the Company's Annual Report on Form 10-K for the year ended June 30, 2000.

Exhibit 10. 09

AMENDED RETENTION AND NON-COMPETITION AGREEMENT

This Amended Retention and Non-Competition Agreement (the "Amended Agreement") is entered into by and between KLA-Tencor Corporation (the "Company") and Kenneth Levy ("Executive") effective as of April 29, 1998 (the "Effective Date").

Recitals:

A. The Company desires to continue to retain the services of Executive as set forth in this Amended Retention and Non-Competition Agreement and Executive desires to continue to provide services to the Company upon the terms and conditions set forth herein.

B. The Company desires to ensure that Executive does not compete with and is available to continue to provide services to the Company as set forth herein.

Agreement:
In consideration of the covenants and agreements contained herein, the parties agree as follows:

1. Effectiveness of Amended Agreement.This Amended Agreement shall become effective upon the Effective Date and amends that Retention and Non-Competition Agreement dated April 30, 1997 contemplated by the Agreement and Plan of Reorganization (the "Merger Agreement") by and among Tencor Instruments ("Tencor"), Tiger Acquisition Corp. and KLA Instruments Corporation ("KLA"). The Company and Executive agree that this Amended Agreement shall govern the terms and conditions of Executive's provision of services to the Company from and after the Effective Date.

2. Term. This Amended Agreement shall commence on the Effective Date and shall end on the date that all obligations hereunder have been fully discharged.

3. Duties.

a. Responsibilities. From and after the Effective Date until the commencement of any Part-Time Employment Term (as defined in Section 7 of this Amended Agreement) (the "Full-Time Employment Period"), the Company shall employ the Executive with such duties and responsibilities as determined from time to time by the Board of Directors (the "Board") of the Company. It is understood and agreed that Executive will be considered an employee of the Company for tax withholding purposes for the duration of both the Full-Time Employment Period and the Part-Time Employment Term. Executive acknowledges that as a part-time Employee he shall not have the power to bind the Company.

b. Board Membership. If Executive is serving as a member of the Board on the date of termination of the Full-Time Employment Period, he shall tender to the Board his resignation from the Board effective as of such date. The Board shall not be obligated to accept such resignation.

4. Obligations. Executive agrees, during the Full-Time Employment Period, not to actively engage in any other employment, occupation or consulting activity for any direct or indirect remuneration without the prior approval of the Board; provided, however, that Executive may serve in any capacity with any civic, educational or charitable organization, or as a member of corporate Boards of Directors or committees thereof without the approval of the Board.

5. Employee Benefits. During the Full-Time Employment Period, Executive shall be eligible to participate in (i) all employee benefit plans currently and hereafter maintained by the Company for senior management according to their terms, and (ii) such other employee benefits as are set forth in this Amended Agreement. During any Part-Time Employment Term, Executive shall only be eligible to participate in the Company's group health, vision and dental plans and shall not be eligible to participate in the Company's other employee benefit plans and arrangements.

6. Full-Time Employment Period Compensation.

a. Base Salary. During the Full-Time Employment Period, and during certain Part-Time Employment Terms as specified in Section 7 hereof, the Company shall pay the Executive as compensation for his services a base salary at an initial annualized rate (which initial rate shall in no event be less than the Executive's current base salary with KLA or Tencor) recommended by the Compensation Committee of the Board and approved by the Board, as adjusted from time to time by the Board or its Compensation Committee (the "Base Salary"). The Base Salary shall be paid periodically in accordance with normal Company payroll practices and subject to the usual, required withholding. Base Salary shall mean the last full time salary as of the beginning of the Part-Time Employment Period. During the Full-Time Employment Period, Executive's Base Salary shall be reviewed annually for possible adjustments in light of Executive's performance of his duties, as determined by the Board or its Compensation Committee.

b. Bonus. During the Full-Time Employment Period and during certain Part-Time Employment Terms as specified in Section 7 hereof, Executive shall be eligible to receive bonuses as determined by the Board or its Compensation Committee. The Company shall have the obligation to pay any and all bonuses referred to in this Amended Agreement only at the same time as bonuses are normally paid to senior management of the Company and contingent in each case upon the Company's payment of bonuses to the senior officers of the Company in such fiscal year.

7. Termination of Employment; Transition to Part-Time Employment.

a. Part-Time Employment Term Definition; Obligations. The periods of part-time employment specified in this Section 7 shall be defined as the "Part-Time Employment Term" for the purposes of this Amended Agreement. During any Part-Time Employment Term, Executive shall be required to devote such time in rendering services to the Company as shall be mutually agreed upon and acceptable to the Executive and the Company. During the Part-Time Employment Term, Executive shall be free to serve as a director, employee, consultant or advisor to any other corporation or other business enterprise without the prior written consent of the Company so long as such activities do not interfere with his duties and obligations under this Amended Agreement, including, without limitation, Executive's obligations under Section 10 hereof. In consideration of Executive's not working for a Non-Competing Company or a Competing Company and being available to provide the mutually agreed upon services required hereunder during the Part-Time Employment Term, the Executive shall receive the compensation specified in this Section 7. At the end of such Part-Time Employment Term, the Executive's employment with the Company shall terminate.

b. Termination of Full-Time Employment for Cause. The Company may at any time terminate Executive's full-time employment hereunder for "Cause." For the purposes of this Amended Agreement "Cause" shall mean (i) Executive's gross negligence or willful misconduct in connection with the performance of his duties, (ii) Executive's conviction of or plea of nolo contendere to, any felony in a court of competent jurisdiction, or (iii) Executive's embezzlement or misappropriation of Company property. If the Executive's full-time employment is terminated by the Company for Cause, then, subject to Executive entering into a release of claims agreement with the Company in a form reasonably approved by the Company (the "Release"), the Executive will receive a lump-sum payment equal to 25% of Base Salary and Executive shall not be entitled to any other benefits hereunder.

c. Voluntary Termination of Full-Time Employment by Executive Other than for Good Reason. If the Executive desires to voluntarily terminate his full-time employment with the Company, then Executive shall provide the Company with written notice of such termination. Subject to Executive entering into the Release, the Executive shall remain employed by the Company as a part-time employee on the terms described herein. If such notice is given (or deemed given) to the Company on or after April 30, 1998, the Part-Time Employment Term shall be 36 months. During such 36-month period, Executive shall be paid (A) Base Salary for the first 24 months, paid in accordance with the Company's normal payroll practices, (B) a mutually agreeable level of compensation per month (determined based on the level of services expected to be rendered) for the final 12 months, paid monthly, (C) an annual bonus equal to the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) for the Company's fiscal year in which Executive's transition to part-time employment occurs (the "Target Bonus"), (D) for the Company's fiscal year ending in the period between the first anniversary of the date of termination of Executive's full-time employment and the second anniversary of the date of termination of Executive's full-time employment with the Company, an amount equal to the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) under the Company's bonus plan for such fiscal year (the "Second Year Bonus"), and (E) a pro-rated bonus for the Company's fiscal year in which Executive's part-time employment terminates (the "Part-Time Employment Termination Fiscal Year") determined by multiplying the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) for the Part-Time Employment Termination Fiscal Year by a fraction, the numerator of which is the number of days in the Part-Time Employment Termination Fiscal Year covered by the Part-Time Employment Term and the denominator of which is three hundred and sixty-five (the "Pro-Rated Bonus").

d. Termination of Full-Time Employment by Company Other than for Cause. If the Company desires to terminate Executive's full-time employment with the Company other than for Cause, then the Company shall provide Executive with written notice of such termination. If the Executive's full-time employment is terminated by the Company other than for Cause, then, subject to Executive entering into a Release, the Executive shall receive the same benefits as set forth in (c) above.

e. Reduction of Part-Time Employment Term Compensation and Benefits if Executive Becomes Employed by a Non-Competing Company. If during the Part-Time Employment Term, Executive becomes employed by an entity that is not a "Competing Company" (as defined in Section 10 hereof), Executive (i) shall have his Base Salary reduced to a mutually agreeable amount per month (determined based on the level of services expected to be rendered) in exchange for Executive providing mutually agreed upon services to the Company, (ii) shall not be eligible to receive any Target Bonus, Second Year Bonus or Pro-Rated Bonus to the extent not already earned by Executive, and (iii) shall not be eligible to participate or receive benefits under any other employee benefit plans, policies, practices or arrangements of the Company or its predecessors. For the purposes of the foregoing, the Target Bonus and Second Year Bonus shall be deemed earned, to the extent otherwise payable, if Executive is a part-time Employee of the Company and is not employed by a non-Competing Company through the last day of the fiscal year to which such bonuses relate, and the Pro-Rated Bonus shall be deemed earned, to the extent otherwise payable, on the last day of the Part-Time Employment Term if Executive is not employed by a non-Competing Company through the last day of the Part-Time Employment Term.

f. Stock Option Vesting During Part-Time Employment Term. During any Part-Time Employment Term provided for in this Amended Agreement, stock options that were granted to Executive more than 12 months prior to the Executive's full time employment termination date ("Old Options") shall continue to vest in accordance with the terms and conditions of the original option agreements relating to such Old Options, but any stock options granted to Executive within the 12 months prior to the Executive's full time employment termination date ("New Options") shall not vest during the Part-Time Employment Term. The term "stock option" as used herein does not include any right to participate in the employee stock purchase plans of the Company or the Prior Companies, which right shall terminate immediately upon the commencement of any Part-Time Employment Period.

8. Termination of Employment Relationship. Executive's part-time employment relationship with the Company may not be terminated by the Company prior to the end of the Part-Time Employment Term, except (i) upon the death or permanent disability of Executive, (ii) by written agreement between both of the parties hereto; provided, however, that Executive's employment with the Company, whether full-time or part-time, shall immediately and automatically terminate upon Executive's breach of Section 10 hereof. No additional benefits or payments will become payable to Executive hereunder upon a termination of Executive's Part-Time Employment Term.

9. Death or Disability. In the event of Executive's death or permanent disability, this Amended Agreement shall terminate, unless otherwise decided by the Board.

10. Covenant Not to Compete.

a. Covenant Not to Compete. During the Full-Time Employment Period and the Part-Time Employment Term, Executive will not render services as an employee, consultant, director, partner, owner to, or participate as more than a two percent shareholder in, any Competing Company in a Restricted Territory, as such terms are defined immediately below.

b. Competing Company. "Competing Company" shall mean another semiconductor capital equipment company, partnership, limited liability corporation or other entity any portion of whose business, including, without limitation, development, manufacturing, marketing, sales or technical or sales support, competes with the Company's business at that time.

c. Restricted Territory. "Restricted Territory" means any county in the State of California, each state in the United States and each country in the world.

11. Limitation on Payments. If the benefits provided for in this Amended Agreement or otherwise payable to the Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and (ii) but for this Section 11, would be subject to the excise tax imposed by Section 4999 of the Code, then the Executive's benefits hereunder shall be either (i) delivered in full, or (ii) delivered as to such lesser extent which, or at such later time as, would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such benefits may (or might otherwise) be taxable under Section 4999 of the Code. Unless the Company and the Executive otherwise agree in writing, any determination required under this Section 11 shall be made in writing by the Company's independent public accountants (the "Accountants"), whose determination shall be conclusive and binding upon the Executive and the Company for all purposes; provided that if benefits are reduced or deferred, the Executive shall choose the order in which such benefits are reduced or deferred. For purposes of making the calculations required by this Section 11, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations

concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 11.

12. Assignment. Executive's rights and obligations under this Amended Agreement shall not be assignable by Executive. The Company's rights and obligations under this Amended Agreement shall not be assignable by the Company except as incident to the transfer, by merger, liquidation, or otherwise, of all or substantially all of the business of the Company.

13. Notices. Any notice required or permitted under this Amended Agreement shall be given in writing and shall be deemed to have been effectively made or given if personally delivered, or if sent by facsimile, or mailed or sent via Federal Express to the other party at its address set forth below in this Section 13, or at such other address as such party may designate by written notice to the other party hereto. Any effective notice hereunder shall be deemed given on the date personally delivered or on the date sent by facsimile or deposited in the United States mail (sent by certified mail, return receipt requested), as the case may be, at the following addresses:

If to the Company: KLA-Tencor Corporation
160 Rio Robles
San Jose, CA 95134
Attn: General Counsel

If to Executive: Kenneth Levy
19800 Glen Una Drive
Saratoga, CA 95070

14. Arbitration. The parties hereto agree that any dispute or controversy arising out of, relating to, or in connection with this Amended Agreement, or the interpretation, validity, construction, performance, breach, or termination thereof, shall be finally settled by binding arbitration to be held in Santa Clara County, California under the Employment Dispute Resolution Rules of the American Arbitration Association as then in effect (the "Rules"). The arbitrator(s) may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator(s) shall be final, conclusive and binding on the parties to the arbitration, and judgment may be entered on the decision of the arbitrator(s) in any court having jurisdiction.

The arbitrator(s) shall apply California law to the merits of any dispute or claim, without reference to rules of conflicts of law, and the arbitration proceedings shall be governed by federal arbitration law and by the Rules, without reference to state arbitration law.

The parties shall each pay one-half of the costs and expenses of such arbitration, and each party shall pay its own counsel fees and expenses.

EXECUTIVE HAS READ AND UNDERSTANDS THIS SECTION 14, WHICH DISCUSSES ARBITRATION. EXECUTIVE UNDERSTANDS THAT BY SIGNING THIS AMENDED AGREEMENT, EXECUTIVE AGREES TO SUBMIT ANY CLAIMS ARISING OUT OF, RELATING TO, OR IN CONNECTION WITH THIS AMENDED AGREEMENT, OR THE INTERPRETATION, VALIDITY, CONSTRUCTION, PERFORMANCE, BREACH OR TERMINATION THEREOF TO BINDING ARBITRATION, AND THAT THIS ARBITRATION CLAUSE CONSTITUTES A WAIVER OF EXECUTIVE'S RIGHT TO A JURY TRIAL AND RELATES TO THE RESOLUTION OF ALL DISPUTES RELATING TO EXECUTIVE'S RELATIONSHIP WITH THE COMPANY.

15. Withholding. The Company shall be entitled to withhold, or cause to be withheld, from payment any amount of withholding taxes required by law with respect to payments made to Executive in connection with his employment hereunder.

16. Severability. If any term or provision of this Amended Agreement shall to any extent be declared illegal or unenforceable by arbitrator(s) or by a duly authorized court of competent jurisdiction, then the remainder of this Amended Agreement or the application of such term or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, each term and provision of this Amended Agreement shall be valid and enforceable to the fullest extent permitted by law and the illegal or unenforceable. term or provision shall be deemed replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term of provision.

17. Entire Agreement. This Amended Agreement and the agreements relating to the New Options and Old Options represent the entire agreement of the parties with respect to the matters set forth herein, and to the extent inconsistent with other prior contracts, arrangements or understandings between the parties, supersedes all such previous contracts, arrangements or understandings between the Company and Executive. The Amended Agreement may be amended at any time only by mutual written agreement signed by the parties hereto.

18. Governing Law. This Amended Agreement shall be construed, interpreted, and governed in accordance with the laws of the State of California without reference to rules relating to conflict of law (other than any such rules directing application of California law).

19. Headings. The headings of sections herein are included solely for convenience of reference and shall not control the meaning or interpretation of any of the provisions of this Amended Agreement.

20. Counterparts. This Amended Agreement may be executed by either of the parties hereto in counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

EXECUTIVE	KLA-TENCOR CORPORATION
/s/ KENNETH LEVY	/s/ ARTHUR P, SCHNITZER
Kenneth Levy	Arthur P. Schnitzer Executive Vice President, Human Resources

Date: April 29, 1998

Exhibit 10.10

AMENDED RETENTION AND NON-COMPETITION AGREEMENT

This Amended Retention and Non-Competition Agreement (the "Amended Agreement") is entered into by and between KLA-Tencor Corporation (the "Company") and Kenneth L. Schroeder ("Executive") effective as of April 29, 1998 (the "Effective Date").

Recitals:

A. The Company desires to continue to retain the services of Executive as set forth in this Amended Retention and Non-Competition Agreement and Executive desires to continue to provide services to the Company upon the terms and conditions set forth herein.

B. The Company desires to ensure that Executive does not compete with and is available to continue to provide services to the Company as set forth herein.
Agreement:

In consideration of the covenants and agreements contained herein, the parties agree as follows:

1. Effectiveness of Amended Agreement.This Amended Agreement shall become effective upon the Effective Date and amends that Retention and Non-Competition Agreement dated April 30, 1997 contemplated by the Agreement and Plan of Reorganization (the "Merger Agreement") by and among Tencor Instruments ("Tencor"), Tiger Acquisition Corp. and KLA Instruments Corporation ("KLA"). The Company and Executive agree that this Amended Agreement shall govern the terms and conditions of Executive's provision of services to the Company from and after the Effective Date.

2. Term. This Amended Agreement shall commence on the Effective Date and shall end on the date that all obligations hereunder have been fully discharged.

3. Duties.

a. Responsibilities. From and after the Effective Date until the commencement of any Part-Time Employment Term (as defined in Section 7 of this Amended Agreement) (the "Full-Time Employment Period"), the Company shall employ the Executive with such duties and responsibilities as determined from time to time by the Board of Directors (the "Board") of the Company. It is understood and agreed that Executive will be considered an employee of the Company for tax withholding purposes for the duration of both the Full-Time Employment Period and the Part-Time Employment Term. Executive acknowledges that as a part-time Employee he shall not have the power to bind the Company.

b. Board Membership. If Executive is serving as a member of the Board on the date of termination of the Full-Time Employment Period, he shall tender to the Board his resignation from the Board effective as of such date. The Board shall not be obligated to accept such resignation.

4. Obligations. Executive agrees, during the Full-Time Employment Period, not to actively engage in any other employment, occupation or consulting activity for any direct or indirect remuneration without the prior approval of the Board; provided, however, that Executive may serve in any capacity with any civic, educational or charitable organization, or as a member of corporate Boards of Directors or committees thereof without the approval of the Board.

5. Employee Benefits. During the Full-Time Employment Period, Executive shall be eligible to participate in (i) all employee benefit plans currently and hereafter maintained by the Company for senior management according to their terms, and (ii) such other employee benefits as are set forth in this Amended Agreement. During any Part-Time Employment Term, Executive shall only be eligible to participate in the Company's group health, vision and dental plans and shall not be eligible to participate in the Company's other employee benefit plans and arrangements.

6. Full-Time Employment Period Compensation.

a. Base Salary. During the Full-Time Employment Period, and during certain Part-Time Employment Terms as specified in Section 7 hereof, the Company shall pay the Executive as compensation for his services a base salary at an initial annualized rate (which initial rate shall in no event be less than the Executive's current base salary with KLA or Tencor) recommended by the Compensation Committee of the Board and approved by the Board, as adjusted from time to time by the Board or its Compensation Committee (the "Base Salary"). The Base Salary shall be paid periodically in accordance with normal Company payroll practices and subject to the usual, required withholding. Base Salary shall mean the last full time salary as of the beginning of the Part-Time Employment Period. During the Full-Time Employment Period, Executive's Base Salary shall be reviewed annually for possible adjustments in light of Executive's performance of his duties, as determined by the Board or its Compensation Committee.

b. Bonus. During the Full-Time Employment Period and during certain Part-Time Employment Terms as specified in Section 7 hereof, Executive shall be eligible to receive bonuses as determined by the Board or its Compensation Committee. The Company shall have the obligation to pay any and all bonuses referred to in this Amended Agreement only at the same time as bonuses are normally paid to senior management of the Company and contingent in each case upon the Company's payment of bonuses to the senior officers of the Company in such fiscal year.

7. Termination of Employment; Transition to Part-Time Employment.

a. Part-Time Employment Term Definition; Obligations. The periods of part-time employment specified in this Section 7 shall be defined as the "Part-Time Employment Term" for the purposes of this Amended Agreement. During any Part-Time Employment Term, Executive shall be required to devote such time in rendering services to the Company as shall be mutually agreed upon and acceptable to the Executive and the Company. During the Part-Time Employment Term, Executive shall be free to serve as a director, employee, consultant or advisor to any other corporation or other business enterprise without the prior written consent of the Company so long as such activities do not interfere with his duties and obligations under this Amended Agreement, including, without limitation, Executive's obligations under Section 10 hereof. In consideration of Executive's not working for a Non-Competing Company or a Competing Company and being available to provide the mutually agreed upon services required hereunder during the Part-Time Employment Term, the Executive shall receive the compensation specified in this Section 7. At the end of such Part-Time Employment Term, the Executive's employment with the Company shall terminate.

b. Termination of Full-Time Employment for Cause. The Company may at any time terminate Executive's full-time employment hereunder for "Cause." For the purposes of this Amended Agreement "Cause" shall mean (i) Executive's gross negligence or willful misconduct in connection with the performance of his duties, (ii) Executive's conviction of or plea of nolo contendere to, any felony in a court of competent jurisdiction, or (iii) Executive's embezzlement or misappropriation of Company property. If the Executive's full-time employment is terminated by the Company for Cause, then, subject to Executive entering into a release of claims agreement with the Company in a form reasonably approved by the Company (the "Release"), the Executive will receive a lump-sum payment equal to 25% of Base Salary and Executive shall not be entitled to any other benefits hereunder.

c. Voluntary Termination of Full-Time Employment by Executive Other than for Good Reason. If the Executive desires to voluntarily terminate his full-time employment with the Company, then Executive shall provide the Company with written notice of such termination. Subject to Executive entering into the Release, the Executive shall remain employed by the Company as a part-time employee on the terms described herein. If such notice is given (or deemed given) to the Company on or after April 30, 1998, the Part-Time Employment Term shall be 36 months. During such 36-month period, Executive shall be paid

(A) Base Salary for the first 24 months, paid in accordance with the Company's normal payroll practices,

(B) a mutually agreeable level of compensation per month (determined based on the level of services expected to be rendered) for the final 12 months, paid monthly,

(C) an annual bonus equal to the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) for the Company's fiscal year in which Executive's transition to part-time employment occurs (the "Target Bonus"),

(D) for the Company's fiscal year ending in the period between the first anniversary of the date of termination of Executive's full-time employment and the second anniversary of the date of termination of Executive's full-time employment with the Company, an amount equal to the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) under the Company's bonus plan for such fiscal year (the "Second Year Bonus"), and

(E) a pro-rated bonus for the Company's fiscal year in which Executive's part-time employment terminates (the "Part-Time Employment Termination Fiscal Year") determined by multiplying the amount that would otherwise have been payable to Executive upon Executive's achievement of 100% of his individual bonus objectives (in distinction to Company bonus objectives, which shall be based upon actual Company performance for such fiscal year) for the Part-Time Employment Termination Fiscal Year by a fraction, the numerator of which is the number of days in the Part-Time Employment Termination Fiscal Year covered by the Part-Time Employment Term and the denominator of which is three hundred and sixty-five (the "Pro-Rated Bonus").

d. Termination of Full-Time Employment by Company Other than for Cause. If the Company desires to terminate Executive's full-time employment with the Company other than for Cause, then the Company shall provide Executive with written notice of such termination. If the Executive's full-time employment is terminated by the Company other than for Cause, then, subject to Executive entering into a Release, the Executive shall receive the same benefits as set forth in (c) above.

e. Reduction of Part-Time Employment Term Compensation and Benefits if Executive Becomes Employed by a Non-Competing Company. If during the Part-Time Employment Term, Executive becomes employed by an entity that is not a "Competing Company" (as defined in Section 10 hereof), Executive (i) shall have his Base Salary reduced to a mutually agreeable amount per month (determined based on the level of services expected to be rendered) in exchange for Executive providing mutually agreed upon services to the Company, (ii) shall not be eligible to receive any Target Bonus, Second Year Bonus or Pro-Rated Bonus to the extent not already earned by Executive, and (iii) shall not be eligible to participate or receive benefits under any other employee benefit plans, policies, practices or arrangements of the Company or its predecessors. For the purposes of the foregoing, the Target Bonus and Second Year Bonus shall be deemed earned, to the extent otherwise payable, if Executive is a part-time Employee of the Company and is not employed by a non-Competing Company through the last day of the fiscal year to which such bonuses relate, and the Pro-Rated Bonus shall be deemed earned, to the extent otherwise payable, on the last day of the Part-Time Employment Term if Executive is not employed by a non-Competing Company through the last day of the Part-Time Employment Term.

f. Stock Option Vesting During Part-Time Employment Term. During any Part-Time Employment Term provided for in this Amended Agreement, stock options that were granted to Executive more than 12 months prior to the Executive's full time employment termination date ("Old Options") shall continue to vest in accordance with the terms and conditions of the original option agreements relating to such Old Options, but any stock options granted to Executive within the 12 months prior to the Executive's full time employment termination date ("New Options") shall not vest during the Part-Time Employment Term. The term "stock option" as used herein does not include any right to participate in the employee stock purchase plans of the Company or the Prior Companies, which right shall terminate immediately upon the commencement of any Part-Time Employment Period.

8. Termination of Employment Relationship. Executive's part-time employment relationship with the Company may not be terminated by the Company prior to the end of the Part-Time Employment Term, except (i) upon the death or permanent disability of Executive, (ii) by written agreement between both of the parties hereto; provided, however, that Executive's employment with the Company, whether full-time or part-time, shall immediately and automatically terminate upon Executive's breach of Section 10 hereof. No additional benefits or payments will become payable to Executive hereunder upon a termination of Executive's Part-Time Employment Term.

9. Death or Disability. In the event of Executive's death or permanent disability, this Amended Agreement shall terminate, unless otherwise decided by the Board.

10. Covenant Not to Compete.

a. Covenant Not to Compete. During the Full-Time Employment Period and the Part-Time Employment Term, Executive will not render services as an employee, consultant, director, partner, owner to, or participate as more than a two percent shareholder in, any Competing Company in a Restricted Territory, as such terms are defined immediately below.

b. Competing Company. "Competing Company" shall mean another semiconductor capital equipment company, partnership, limited liability corporation or other entity any portion of whose business, including, without limitation, development, manufacturing, marketing, sales or technical or sales support, competes with the Company's business at that time.

c. Restricted Territory. "Restricted Territory" means any county in the State of California, each state in the United States and each country in the world.

11. Limitation on Payments. If the benefits provided for in this Amended Agreement or otherwise payable to the Executive

(i) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and (ii) but for this Section 11, would be subject to the excise tax imposed by Section 4999 of the Code, then the Executive's benefits hereunder shall be either (i) delivered in full, or

(ii) delivered as to such lesser extent which, or at such later time as, would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such benefits may (or might otherwise) be taxable under Section

4999 of the Code. Unless the Company and the Executive otherwise agree in writing, any determination required under this Section 11 shall be made in writing by the Company's independent public accountants (the "Accountants"), whose determination shall be conclusive and binding upon the Executive and the Company for all purposes; provided that if benefits are reduced or deferred, the Executive shall choose the order in which such benefits are reduced or deferred. For purposes of making the calculations required by this Section 11, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 11.

12. Assignment. Executive's rights and obligations under this Amended Agreement shall not be assignable by Executive. The Company's rights and obligations under this Amended Agreement shall not be assignable by the Company except as incident to the transfer, by merger, liquidation, or otherwise, of all or substantially all of the business of the Company.

13. Notices. Any notice required or permitted under this Amended Agreement shall be given in writing and shall be deemed to have been effectively made or given if personally delivered, or if sent by facsimile, or mailed or sent via Federal Express to the other party at its address set forth below in this Section 13, or at such other address as such party may designate by written notice to the other party hereto. Any effective notice hereunder shall be deemed given on the date personally delivered or on the date sent by facsimile or deposited in the United States mail (sent by certified mail, return receipt requested), as the case may be, at the following addresses:

If to the Company:	KLA-Tencor Corporation 160 Rio Robles San Jose, CA 95134 Attn: General Counsel
If to Executive:	Kenneth L. Schroeder 14545 Manuella Road Los Altos, CA 94022

14. Arbitration. The parties hereto agree that any dispute or controversy arising out of, relating to, or in connection with this Amended Agreement, or the interpretation, validity, construction, performance, breach, or termination thereof, shall be finally settled by binding arbitration to be held in Santa Clara County, California under the Employment Dispute Resolution Rules of the American Arbitration Association as then in effect (the "Rules"). The arbitrator(s) may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator(s) shall be final, conclusive and binding on the parties to the arbitration, and judgment may be entered on the decision of the arbitrator(s) in any court having jurisdiction.

The arbitrator(s) shall apply California law to the merits of any dispute or claim, without reference to rules of conflicts of law, and the arbitration proceedings shall be governed by federal arbitration law and by the Rules, without reference to state arbitration law.

The parties shall each pay one-half of the costs and expenses of such arbitration, and each party shall pay its own counsel fees and expenses.

EXECUTIVE HAS READ AND UNDERSTANDS THIS SECTION 14, WHICH DISCUSSES ARBITRATION. EXECUTIVE UNDERSTANDS THAT BY SIGNING THIS AMENDED AGREEMENT, EXECUTIVE AGREES TO SUBMIT ANY CLAIMS ARISING OUT OF, RELATING TO, OR IN CONNECTION WITH THIS AMENDED AGREEMENT, OR THE INTERPRETATION, VALIDITY, CONSTRUCTION, PERFORMANCE, BREACH OR TERMINATION THEREOF TO BINDING ARBITRATION, AND THAT THIS ARBITRATION CLAUSE CONSTITUTES A WAIVER OF EXECUTIVE'S RIGHT TO A JURY TRIAL AND RELATES TO THE RESOLUTION OF ALL DISPUTES RELATING TO EXECUTIVE'S RELATIONSHIP WITH THE COMPANY.

15. Withholding. The Company shall be entitled to withhold, or cause to be withheld, from payment any amount of withholding taxes required by law with respect to payments made to Executive in connection with his employment hereunder.

16. Severability. If any term or provision of this Amended Agreement shall to any extent be declared illegal or unenforceable by arbitrator(s) or by a duly authorized court of competent jurisdiction, then the remainder of this Amended Agreement or the application of such term or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, each term and provision of this Amended Agreement shall be valid and enforceable to the fullest extent permitted by law and the illegal or unenforceable. term or provision shall be deemed replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term of provision.

17. Entire Agreement. This Amended Agreement and the agreements relating to the New Options and Old Options represent the entire agreement of the parties with respect to the matters set forth herein, and to the extent inconsistent with other prior contracts, arrangements or understandings between the parties, supersedes all such previous contracts, arrangements or understandings between the Company and Executive. The Amended Agreement may be amended at any time only by mutual written agreement signed by the parties hereto.

18. Governing Law. This Amended Agreement shall be construed, interpreted, and governed in accordance with the laws of the State of California without reference to rules relating to conflict of law (other than any such rules directing application of California law).

19. Headings. The headings of sections herein are included solely for convenience of reference and shall not control the meaning or interpretation of any of the provisions of this Amended Agreement.

20. Counterparts. This Amended Agreement may be executed by either of the parties hereto in counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

EXECUTIVE	KLA-TENCOR CORPORATION
/s/ KENNETH L. SCHROEDER	/s/ ARTHUR P. SCHNITZER
Kenneth L. Schroeder	Arthur P. Schnitzer Executive Vice President Human Resources

Date:April 29, 1998

KLA-TENCOR CORPORATION

ADDENDUM TO KENNETH SCHROEDER AMENDED RETENTION AND NON-COMPETITION AGREEMENT

This Addendum (the "Addendum") is made this 15th day of November, 2001, by and between Kenneth L. Schroeder (the "Executive") and KLA-Tencor Corporation (the "Company").

WHEREAS, the Company and Executive have previously entered into an Amended Retention and Non-Competition Agreement (the "Retention and Non-Competition Agreement");
WHEREAS, the parties hereto desire to amend the Retention and Non-Competition Agreement to (i) provide Executive with 100% vesting acceleration in the event of a "double-trigger," and (ii) to modify the golden parachute excise tax provisions of the Retention and Non-Competition Agreement by incorporating a $50,000 "hurdle" to provide greater protection for the Company;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Executive and the Company agree that the Retention and Non-Competition Agreement is hereby amended as follows:

1. Double-Trigger Option Vesting Acceleration. A new Section 21 is added to the Retention and Non-Competition Agreement, providing:

"21. Double-Trigger Option Vesting Acceleration. If, on or after a Change of Control (as defined herein), Executive's employment with the Company terminates due to (i) a voluntary termination for "Good Reason" (as defined herein), or (ii) an involuntary termination by the Company other than for "Cause" (as defined in Section 7(b) hereof), then, subject to Executive executing and not revoking a Release and not breaching the terms of Section 10 hereof, all of Executive's Company stock options shall immediately accelerate vesting as to 100% of the then unvested shares.

For purposes of this Agreement, "Good Reason" means, without Executive's express consent,

(i) a material reduction of Executive's duties, title, authority or responsibilities, relative to Executive's duties, title, authority or responsibilities as in effect immediately prior to such reduction, or the assignment to Executive of such reduced duties, title, authority or responsibilities,

(ii) a reduction by the Company in the Base Salary of Executive as in effect immediately prior to such reduction;

(iii) a material reduction by the Company in the aggregate level of employee benefits, or overall compensation, including Target Bonuses, to which Executive was entitled immediately prior to such reduction with the result that Executive's aggregate benefits package is materially reduced (other than a reduction that generally applies to Company employees);

(iv) the relocation of Executive to a facility or a location more than thirty-five (35) miles from Executive's then present location; or (vi) any act or set of facts or circumstances which would, under California case law or statute constitute a constructive termination of Executive.

For purposes of this Agreement, "Change of Control" shall mean the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all the Company's assets; or

(iii) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or

(iv) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are directors of the Company as of the date upon which this Agreement was entered into, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those directors whose election or nomination was not in connection with any transaction described in subsections (i), (ii), or (iii) above, or in connection with an actual or threatened proxy contest relating to the election of directors to the Company."

2. Golden Parachute Excise Taxes. Section 11 of the Retention and Non-Competition Agreement is hereby amended and replaced in its entirety with the following provision:

"11. Golden Parachute Excise Taxes.

(a) Parachute Payments of Less than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Executive (a) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is less than the product obtained by multiplying three by Executive's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then such benefits shall be reduced to the extent necessary (but only to that extent) so that no portion of such benefits will be subject to excise tax under Section 4999 of the Code.

(b) Parachute Payments Equal to or Greater than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Executive (a) constitute "parachute payments" within the meaning of Section 280G of the Code, (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is equal to or greater than the product obtained by multiplying three by Executive's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then the benefits shall be delivered in full.

(c) 280G Determinations. Unless the Company and the Executive otherwise agree in writing, the determination of Executive's excise tax liability and the amount required to be paid or reduced under this Section 11 shall be made in writing by the Company's independent auditors who are primarily used by the Company immediately prior to the Change of Control (the "Accountants"). For purposes of making the calculations required by this Section 11, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 11."

3. Retention and Non-Competition Agreement. To the extent not expressly amended hereby, the Retention and Non-Competition Agreement remains in full force and effect.

4. Entire Agreement. This Addendum, taken together with the Retention and Non-Competition Agreement, represents the entire agreement of the parties and shall supersede any and all previous contracts, arrangements or understandings between the parties with respect to the subject matter hereof. This Addendum may be amended at any time only by mutual written agreement of the parties hereto.

IN WITNESS WHEREOF, this Addendum has been entered into as of the date first set forth above.

KLA-TENCOR CORPORATION	EXECUTIVE
By: /s/ KENNETH LEVY	/s/ KENNETH L. SCHROEDER

Date:November 15, 2001

Exhibit 10.12

KLA-TENCOR CORPORATION

GARY E. DICKERSON MANAGEMENT RETENTION AGREEMENT

This Agreement is made by and between KLA-Tencor Corporation (the "Company") and Gary E. Dickerson ("Executive").

1. Duties and Scope of Employment.

(a) Position; Agreement Commencement Date; Duties. Executive's coverage under this Agreement shall commence upon the date this Agreement has been signed by both parties hereto (the "Agreement Commencement Date"). Following the Agreement Commencement Date, Executive shall continue to serve as Chief Operating Officer of the Company, reporting to the Chief Executive Officer. The period of Executive's employment hereunder is referred to herein as the "Employment Term." During the Employment Term, Executive shall render such business and professional services in the performance of his duties, consistent with Executive's position within the Company, as shall reasonably be assigned to him by the Chief Executive Officer.

(b) Obligations. During the Employment Term, Executive shall devote his full business efforts and time to the Company. Executive agrees, during the Employment Term, not to actively engage in any other employment, occupation or consulting activity for any direct or indirect remuneration without the prior approval of the Board of Directors of the Company (the "Board"); provided, however, that Executive may serve in any capacity with any civic, educational or charitable organization, or as a member of corporate Boards of Directors or committees thereof, without the approval of the Board, unless such service involves a conflict of interest with the Company's business.

(c) Employee Benefits. During the Employment Term, Executive shall be eligible to participate in the employee benefit plans maintained by the Company that are applicable to other senior management to the full extent provided for under those plans.

2. At-Will Employment. Executive and the Company understand and acknowledge that Executive's employment with the Company constitutes "at-will" employment. Subject to the Company's obligation to provide severance benefits as specified herein, Executive and the Company acknowledge that this employment relationship may be terminated at any time, upon written notice to the other party, with or without good cause or for any or no cause, at the option either of the Company or Executive.

3. Compensation.

(a) Base Salary. While employed by the Company, the Company shall pay the Executive as compensation for his services a base salary at the annualized rate of $454,922, subject to temporary revision under the Company's Policy No. 30.01 (the "Base Salary"). Such salary shall be paid periodically in accordance with normal Company payroll practices and subject to the usual, required withholding. Executive's Base Salary shall be reviewed annually by the Compensation Committee of the Board for possible adjustments in light of Executive's performance, market conditions and competitive data.

(b) Bonuses. Executive shall be eligible to earn a target bonus under the Company's 1996 Senior Executive Bonus Plan as specified annually by the Compensation Committee of the Board (the "Target Bonus").

(c) Severance on or Within Two Years Following a Change of Control. If, on or within two years after a Change of Control (as defined herein), Executive's employment with the Company terminates due to (i) a voluntary termination for "Good Reason" (as defined herein), or (ii) an involuntary termination by the Company other than for "Cause" (as defined herein), then, subject to Executive executing and not revoking a standard form of mutual release of claims with the Company and not breaching the terms of Section 11 hereof, (i) all of Executive's Company stock options shall immediately accelerate vesting as to 100% of the then unvested shares, (ii) Executive shall receive continued payments over two years of Executive's Base Salary plus 100% of his Target Bonus, less applicable withholding, in accordance with the Company's standard payroll practices; i.e., the total payout over the two-year period shall be 200% of Base Salary and 200% of Target Bonus (the "Severance Payment"), and (iii) the Company shall pay the group health, dental and vision plan continuation coverage premiums for Executive and his covered dependents under Title X of the Consolidated Budget Reconciliation Act of 1985, as amended ("COBRA"), or shall provide comparable coverage, if COBRA is not available, for the lesser of (A) twenty-four (24) months from the date of Executive's termination of employment, or (B) the date upon which Executive and his covered dependents are covered by similar plans of Executive's new employer (the "COBRA Coverage").

For purposes of this Agreement, "Cause" shall mean

(i) an act of personal dishonesty taken by Executive in connection with his responsibilities as an employee and intended to result in substantial personal enrichment of Executive,

(ii) Executive being convicted of, or plea of nolo contendere to, a felony,

(iii) a willful act by Executive which constitutes gross misconduct and which is injurious to the Company, (iv) following delivery to Executive of a written demand for performance from the Company which describes the basis for the Company's reasonable belief that Executive has not substantially performed his duties, continued violations by Executive of Executive's obligations to the Company which are demonstrably willful and deliberate on Executive's part.

For purposes of this Agreement, "Good Reason" means, without Executive's express consent,

(i) a material reduction of Executive's duties, title, authority or responsibilities, relative to Executive's duties, title, authority or responsibilities as in effect immediately prior to such reduction, or the assignment to Employee of such reduced duties, title, authority or responsibilities

(ii) a reduction by the Company in the Base Salary of Executive as in effect immediately prior to such reduction;

(iii) a material reduction by the Company in the aggregate level of employee benefits or overall compensation, including Target Bonuses, to which Executive was entitled immediately prior to such reduction with the result that Executive's aggregate benefits package is materially reduced (other than a reduction that generally applies to Company employees);

(iv) the relocation of Executive to a facility or a location more than thirty-five (35) miles from Executive's then present location; or (v) any act or set of facts or circumstances which would, under California case law or statute constitute a constructive termination of Executive.

For purposes of this Agreement, "Change of Control" shall mean the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all the Company's assets; or

(iii) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or

(iv) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are directors of the Company as of the date upon which this Agreement was entered into, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those directors whose election or nomination was not in connection with any transaction described in subsections (i), (ii), or (iii) above, or in connection with an actual or threatened proxy contest relating to the election of directors to the Company.

The Executive shall not be required to mitigate the value of any severance benefits contemplated by this Agreement, nor shall any such benefits be reduced by any earnings or benefits that the Executive may receive from any other source; provided, however, that Executive if Executive receives severance benefits hereunder, he expressly waives the right to receive severance benefits under any other severance plan or policy of the Company.

(d) Voluntary Termination Other than for Good Reason; Involuntary Termination for Cause Following a Change of Control; Employment Termination Prior to a Change of Control. In the event, (i) following a Change of Control, that Executive terminates his employment voluntarily other than for Good Reason or is involuntarily terminated by the Company for Cause, or (ii) Executive's employment terminates for any or no reason prior to a Change of Control, then all vesting of Executive's stock options and restricted stock shall terminate immediately and all payments of compensation by the Company to Executive hereunder shall immediately terminate (except as to amounts already earned).

4. Death or Total Disability of Executive. Upon Executive's death or becoming permanently and totally disabled (as defined in accordance with Internal Revenue Code Section 22(e)(3) or its successor provision) while Executive is an employee or consultant of the Company, then (i) employment hereunder shall automatically terminate and all payments of compensation by the Company to Executive hereunder shall immediately terminate (except as to amounts already earned), and all

vesting of Executive's stock options and restricted stock shall terminate immediately.

5. Golden Parachute Excise Taxes.

(a) Parachute Payments of Less than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Employee (a) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is less than the product obtained by multiplying three by Employee's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then such benefits shall be reduced to the extent necessary (but only to that extent) so that no portion of such benefits will be subject to excise tax under Section 4999 of the Code.

(b) Parachute Payments Equal to or Greater than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Employee (a) constitute "parachute payments" within the meaning of Section 280G of the Code, (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is equal to or greater than the product obtained by multiplying three by Employee's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then the benefits shall be delivered in full.

(c) 280G Determinations. Unless the Company and the Employee otherwise agree in writing, the determination of Employee's excise tax liability and the amount required to be paid or reduced under this Section 5 shall be made in writing by the Company's independent auditors who are primarily used by the Company immediately prior to the Change of Control (the "Accountants"). For purposes of making the calculations required by this Section 5, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Employee shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 5.

6. Assignment. This Agreement shall be binding upon and inure to the benefit of

(a) the heirs, beneficiaries, executors and legal representatives of Executive upon Executive's death and

(b) any successor of the Company. Any such successor of the Company shall be deemed substituted for the Company under the terms of this Agreement for all purposes. As used herein, "successor" shall include any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. None of the rights of Executive to receive any form of compensation payable pursuant to this Agreement shall be assignable or transferable except through a testamentary disposition or by the laws of descent and distribution upon the death of Executive. Any attempted assignment, transfer, conveyance or other disposition (other than as aforesaid) of any interest in the rights of Executive to receive any form of compensation hereunder shall be null and void.

7. Notices. All notices, requests, demands and other communications called for hereunder shall be in writing and shall be deemed given if (i) delivered personally or by facsimile, (ii) one (1) day after being sent by Federal Express or a similar commercial overnight service, or (iii) three (3) days after being mailed by registered or certified mail, return receipt requested, prepaid and addressed to the parties or their successors in interest at the following addresses, or at such other addresses as the parties may designate by written notice in the manner aforesaid:

If to the Company:	KLA-Tencor Corporation 160 Rio Robles San Jose, CA 95134 Attn: General Counsel
If to Executive:	Gary E. Dickerson at the last residential address known by the Company.

8. Severability. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision.

9. Entire Agreement. This Agreement, the Employee Proprietary Information and Inventions Agreement previously entered into by and between the Company and Executive and the indemnification agreement previously entered into by and between the Company and Executive represent the entire agreement and understanding between the Company and Executive concerning Executive's employment relationship with the Company, and supersede and replace any and all prior agreements and understandings concerning Executive's employment relationship with the Company.

10. Dispute Resolution.

(a) The parties shall first meet to settle any dispute through good faith negotiation or non-binding mediation. If not settled by good faith negotiation or non-binding mediation between the parties within 30 days from the date one party requests in writing to meet the other party, then to the extent permitted by law, any dispute or controversy arising out of, relating to, or in connection with this Agreement, or the interpretation, validity, construction, performance, breach, or termination thereof shall be finally settled by binding arbitration to be held in Santa Clara County, California, in accordance with the National Rules for the Resolution of Employment Disputes then in effect of the American Arbitration Association (the "Rules"). The arbitrator may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator shall be confidential, final, conclusive and binding on the parties to the arbitration. Judgment may be entered under a protective order on the arbitrator's decision in any court having jurisdiction. The Company shall pay all costs of any mediation or arbitration; provided, however, that each party shall pay its own attorney and advisor fees.

(b) The arbitrator shall apply California law to the merits of any dispute or claim, without reference to rules of conflict of law. The arbitration proceedings shall be governed by federal arbitration law and by the Rules, without reference to state arbitration law. Executive hereby expressly consents to the personal jurisdiction of the state and federal courts located in California for any action or proceeding arising from or relating to this Agreement and/or relating to any arbitration in which the parties are participants.

(c) Executive understands that nothing in Section 10 modifies Executive's at-will status. Either the Company or Executive can terminate the employment relationship at any time, with or without cause.

(d) EXECUTIVE HAS READ AND UNDERSTANDS SECTION 10, WHICH DISCUSSES ARBITRATION. EXECUTIVE UNDERSTANDS THAT BY SIGNING THIS AGREEMENT, EXECUTIVE AGREES, TO THE EXTENT PERMITTED BY LAW, TO SUBMIT ANY FUTURE CLAIMS ARISING OUT OF, RELATING TO, OR IN CONNECTION WITH THIS AGREEMENT, OR THE INTERPRETATION, VALIDITY, CONSTRUCTION, PERFORMANCE, BREACH, OR TERMINATION THEREOF TO BINDING ARBITRATION, AND THAT THIS ARBITRATION CLAUSE CONSTITUTES A WAIVER OF EXECUTIVE'S RIGHT TO A JURY TRIAL AND RELATES TO THE RESOLUTION OF ALL DISPUTES RELATING TO ALL ASPECTS OF THE EMPLOYER/EMPLOYEE RELATIONSHIP.

11. Covenants Not to Compete and Not to Solicit.

(a) Covenant Not to Compete. Executive agrees that, if he is receiving severance benefits pursuant to Section 3(c) hereof, then until the end of the twenty four month period following the date of his termination of employment with the Company for any reason or no reason, Executive will not directly engage in (whether as an employee, consultant, proprietor, partner, director or otherwise), or have any ownership interest in, or participate in the financing, operation, management or control of, any person, firm, corporation or business that engages or participates anywhere in the world in providing goods and services similar to those provided by the Company upon the date of Executive's termination of employment. Ownership of less than 3% of the outstanding voting stock of a corporation or other entity will not constitute a violation of this provision. The Company agrees not to unreasonably withhold consent from Executive to engage in any activity that is not competitive with the Company.

(b) Covenant Not to Solicit. Executive agrees that, if he is receiving severance benefits pursuant to Section 3(c) hereof, he will not, at any time during the twelve month period following his termination date, directly or indirectly solicit any individuals to leave the Company's employ for any reason or interfere in any other manner with the employment relationships at the time existing between the Company and its current or prospective employees.

(c) Representations. The parties intend that the covenants contained in Section 11(a) and (b) shall be construed as a series of separate covenants, one for each county, city and state (or analogous entity) and country of the world. If, in any judicial proceeding, a court shall refuse to enforce any of the separate covenants, or any part thereof, then such unenforceable covenant, or such part thereof, shall be deemed eliminated from this Agreement for the purpose of those proceedings to the extent necessary to permit the remaining separate covenants, or portions thereof, to be enforced.

(d) Reformation. In the event that the provisions of this Section 11 should ever be deemed to exceed the time or geographic limitations, or scope of this covenant, permitted by applicable law, then such provisions shall be reformed to the maximum time or geographic limitations, as the case may be, permitted by applicable laws.

(e) Reasonableness of Covenants. Employee represents that he (i) is familiar with the covenants not to compete and solicit, and (ii) is fully aware of his obligations hereunder, including, without limitation, the reasonableness of the length of time, scope and geographic coverage of these covenants.

12. No Oral Modification, Cancellation or Discharge. This Agreement may only be amended, canceled or discharged in writing signed by Executive and the Chairman of the Board.

13. Withholding. The Company shall be entitled to withhold, or cause to be withheld, from payment any amount of withholding taxes required by law with respect to payments made to Executive in connection with his employment hereunder.

14. Governing Law. This Agreement shall be governed by the laws of the State of California.

15. Effective Date. This Agreement is effective upon the date it has been executed by both parties.

16. Acknowledgment. Executive acknowledges that he has had the opportunity to discuss this matter with and obtain advice from his private attorney, has had sufficient time to, and has carefully read and fully understands all the provisions of this Agreement, and is knowingly and voluntarily entering into this Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Agreement:

KLA-TENCOR CORPORATION

/s/ KENNETH L. SCHROEDER

- ---------------------------

Kenneth L. Schroeder

EXECUTIVE

/s/ GARY E. DICKERSON

- -----------------------

Gary E. Dickerson

Date: November 26, 2001

Exhibit 10.13

KLA-TENCOR CORPORATION

JOHN KISPERT MANAGEMENT RETENTION AGREEMENT

This Agreement is made by and between KLA-Tencor Corporation ("the "Company") and John Kispert ("Executive").

1. Duties and Scope of Employment.

(a) Position; Agreement Commencement Date; Duties. Executive's coverage under this Agreement shall commence upon the date this Agreement has been signed by both parties hereto (the "Agreement Commencement Date"). Following the Agreement Commencement Date, Executive shall continue to serve as Chief Financial Officer of the Company, reporting to the Chief Executive Officer. The period of Executive's employment hereunder is referred to herein as the "Employment Term." During the Employment Term, Executive shall render such business and professional services in the performance of his duties, consistent with Executive's position within the Company, as shall reasonably be assigned to him by the Chief Executive Officer.

(b) Obligations. During the Employment Term, Executive shall devote his full business efforts and time to the Company. Executive agrees, during the Employment Term, not to actively engage in any other employment, occupation or consulting activity for any direct or indirect remuneration without the prior approval of the Board of Directors of the Company (the "Board"); provided, however, that Executive may serve in any capacity with any civic, educational or charitable organization, or as a member of corporate Boards of Directors or committees thereof, without the approval of the Board, unless such service involves a conflict of interest with the Company's business.

(c) Employee Benefits. During the Employment Term, Executive shall be eligible to participate in the employee benefit plans maintained by the Company that are applicable to other senior management to the full extent provided for under those plans.

2. At-Will Employment. Executive and the Company understand and acknowledge that Executive's employment with the Company constitutes "at-will" employment. Subject to the Company's obligation to provide severance benefits as specified herein, Executive and the Company acknowledge that this employment relationship may be terminated at any time, upon written notice to the other party, with or without good cause or for any or no cause, at the option either of the Company or Executive.

3. Compensation.

(a) Base Salary. While employed by the Company, the Company shall pay the Executive as compensation for his services a base salary at the annualized rate of $300,300, subject to temporary revision under the Company's Policy No. 30.01 (the "Base Salary"). Such salary shall be paid periodically in accordance with normal Company payroll practices and subject to the usual, required withholding. Executive's Base Salary shall be reviewed annually by the Compensation Committee of the Board for possible adjustments in light of Executive's performance, market conditions and competitive data.

(b) Bonuses. Executive shall be eligible to earn a target bonus under all applicable bonus programs, including the Company's Executive Performance Bonus Plan and "Outstanding" Corporate Performance Bonus Plan, as specified annually by the Compensation Committee of the Board (the "Target Bonus").

(c) Severance on or Within Two Years Following a Change of Control. If, on or within two years after a Change of Control (as defined herein), Executive's employment with the Company terminates due to (i) a voluntary termination for "Good Reason" (as defined herein), or (ii) an involuntary termination by the Company other than for "Cause" (as defined herein), then, subject to Executive executing and not revoking a standard form of mutual release of claims with the Company and not breaching the terms of Section 11 hereof, (i) all of Executive's Company stock options shall immediately accelerate vesting as to 100% of the then unvested shares, (ii) Executive shall receive continued payments over two years of Executive's Base Salary plus 100% of his Target Bonus, less applicable withholding, in accordance with the Company's standard payroll practices; i.e., the total payout over the two-year period shall be 200% of Base Salary and 200% of Target Bonus (the "Severance Payment"), and (iii) the Company shall pay the group health, dental and vision plan continuation coverage premiums for Executive and his covered dependents under Title X of the Consolidated Budget Reconciliation Act of 1985, as amended ("COBRA"), or shall provide comparable coverage, if COBRA is not available, for the lesser of (A) twenty-four (24) months from the date of Executive's termination of employment, or (B) the date upon which Executive and his covered dependents are covered by similar plans of Executive's new employer (the "COBRA Coverage").

For purposes of this Agreement, "Cause" shall mean (i) an act of personal dishonesty taken by Executive in connection with his responsibilities as an employee and intended to result in substantial personal enrichment of Executive,

(ii) Executive being convicted of, or plea of nolo contendere to, a felony, (iii) a willful act by Executive which constitutes gross misconduct and which is injurious to the Company, (iv) following delivery to Executive of a written demand for performance from the Company which describes the basis for the Company's reasonable belief that Executive has not substantially performed his duties, continued violations by Executive of Executive's obligations to the Company which are demonstrably willful and deliberate on Executive's part.

For purposes of this Agreement, "Good Reason" means, without Executive's express consent,
(i) a material reduction of Executive's duties, title, authority or responsibilities, relative to Executive's duties, title, authority or responsibilities as in effect immediately prior to such reduction, or the assignment to Employee of such reduced duties, title, authority or responsibilities

(ii) a reduction by the Company in the Base Salary of Executive as in effect immediately prior to such reduction;

(iii) a material reduction by the Company in the aggregate level of employee benefits, or overall compensation, including Target Bonuses, to which Executive was entitled immediately prior to such reduction with the result that Executive's aggregate benefits package is materially reduced (other than a reduction that generally applies to Company employees);

(iv) the relocation of Executive to a facility or a location more than thirty-five (35) miles from Executive's then present location; or

(v) any act or set of facts or circumstances which would, under California case law or statute constitute a constructive termination of Executive.

For purposes of this Agreement, "Change of Control" shall mean the occurrence of any of the following events:

(i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) becomes the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all the Company's assets; or

(iii) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or

(iv) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are directors of the Company as of the date upon which this Agreement was entered into, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of those directors whose election or nomination was not in connection with any transaction described in subsections (i), (ii), or (iii) above, or in connection with an actual or threatened proxy contest relating to the election of directors to the Company.

The Executive shall not be required to mitigate the value of any severance benefits contemplated by this Agreement, nor shall any such benefits be reduced by any earnings or benefits that the Executive may receive from any other source; provided, however, that Executive if Executive receives severance benefits hereunder, he expressly waives the right to receive severance benefits under any other severance plan or policy of the Company.

(d) Voluntary Termination Other than for Good Reason; Involuntary Termination for Cause Following a Change of Control; Employment Termination Prior to a Change of Control. In the event, (i) following a Change of Control, that Executive terminates his employment voluntarily other than for Good Reason or is involuntarily terminated by the Company for Cause, or (ii) Executive's employment terminates for any or no reason prior to a Change of Control, then all vesting of Executive's stock options and restricted stock shall terminate immediately and all payments of compensation by the Company to Executive hereunder shall immediately terminate (except as to amounts already earned).

4. Death or Total Disability of Executive.

Upon Executive's death or becoming permanently and totally disabled (as defined in accordance with Internal Revenue Code Section 22(e)(3) or its successor provision) while Executive is an employee or consultant of the Company, then (i) employment hereunder shall automatically terminate and all payments of compensation by the Company to Executive hereunder shall immediately terminate (except as to amounts already earned), and all vesting of Executive's stock options and restricted stock shall terminate immediately.

5. Golden Parachute Excise Taxes.

(a) Parachute Payments of Less than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Employee (a) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is less than the product obtained by multiplying three by Employee's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then such benefits shall be reduced to the extent necessary (but only to that extent) so that no portion of such benefits will be subject to excise tax under Section 4999 of the Code.

(b) Parachute Payments Equal to or Greater than 3x Base Amount Plus Fifty Thousand Dollars. In the event that the benefits provided for in this agreement or otherwise payable to Employee (a) constitute "parachute payments" within the meaning of Section 280G of the Code, (b) would be subject to the excise tax imposed by Section 4999 of the Code, and (c) the aggregate value of such parachute payments, as determined in accordance with Section 280G of the Code and the proposed Treasury Regulations thereunder (or the final Treasury Regulations, if they have then been adopted) is equal to or greater than the product obtained by multiplying three by Employee's "base amount" within the meaning of Code Section 280G(b)(3) and adding to such product fifty thousand dollars, then the benefits shall be delivered in full.

(c) 280G Determinations. Unless the Company and the Employee otherwise agree in writing, the determination of Employee's excise tax liability and the amount required to be paid or reduced under this Section 5 shall be made in writing by the Company's independent auditors who are primarily used by the Company immediately prior to the Change of Control (the "Accountants"). For purposes of making the calculations required by this Section 5, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Employee shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 5.

6. Assignment. This Agreement shall be binding upon and inure to the benefit of (a) the heirs, beneficiaries, executors and legal representatives of Executive upon Executive's death and (b) any successor of the Company. Any such successor of the Company shall be deemed substituted for the Company under the terms of this Agreement for all purposes. As used herein, "successor" shall include any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. None of the rights of Executive to receive any form of compensation payable pursuant to this Agreement shall be assignable or transferable except through a testamentary disposition or by the laws of descent and distribution upon the death of Executive. Any attempted assignment, transfer, conveyance or other disposition (other than as aforesaid) of any interest in the rights of Executive to receive any form of compensation hereunder shall be null and void.

7. Notices. All notices, requests, demands and other communications called for hereunder shall be in writing and shall be deemed given if (i) delivered personally or by facsimile, (ii) one (1) day after being sent by Federal Express or a similar commercial overnight service, or (iii) three (3) days after being mailed by registered or certified mail, return receipt requested, prepaid and addressed to the parties or their successors in interest at the following addresses, or at such other addresses as the parties may designate by written notice in the manner aforesaid:

If to the Company:	KLA-Tencor Corporation 160 Rio Robles San Jose, CA 95134 Attn: General Counsel
If to Executive:	John Kispert at the last residential address known by the Company.

8. Severability. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision.

9. Entire Agreement. This Agreement, the Employee Proprietary Information and

Inventions Agreement previously entered into by and between the Company and Executive and the indemnification agreement previously entered into by and between the Company and Executive represent the entire agreement and understanding between the Company and Executive concerning Executive's employment relationship with the Company, and supersede and replace any and all prior agreements and understandings concerning Executive's employment relationship with the Company.

10. Dispute Resolution.

(a) The parties shall first meet to settle any dispute through good faith negotiation or non-binding mediation. If not settled by good faith negotiation or non-binding mediation between the parties within 30 days from the date one party requests in writing to meet the other party, then to the extent permitted by law, any dispute or controversy arising out of, relating to, or in connection with this Agreement, or the interpretation, validity, construction, performance, breach, or termination thereof shall be finally settled by binding arbitration to be held in Santa Clara County, California, in accordance with the National Rules for the Resolution of Employment Disputes then in effect of the American Arbitration Association (the "Rules"). The arbitrator may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator shall be confidential, final, conclusive and binding on the parties to the arbitration. Judgment may be entered under a protective order on the arbitrator's decision in any court having jurisdiction. The Company shall pay all costs of any mediation or arbitration; provided, however, that each party shall pay its own attorney and advisor fees.

(b) The arbitrator shall apply California law to the merits of any dispute or claim, without reference to rules of conflict of law. The arbitration proceedings shall be governed by federal arbitration law and by the Rules, without reference to state arbitration law. Executive hereby expressly consents to the personal jurisdiction of the state and federal courts located in California for any action or proceeding arising from or relating to this Agreement and/or relating to any arbitration in which the parties are participants.

(c) Executive understands that nothing in Section 10 modifies Executive's at-will status. Either the Company or Executive can terminate the employment relationship at any time, with or without cause.

(d) EXECUTIVE HAS READ AND UNDERSTANDS SECTION 10, WHICH DISCUSSES ARBITRATION. EXECUTIVE UNDERSTANDS THAT BY SIGNING THIS AGREEMENT, EXECUTIVE AGREES, TO THE EXTENT PERMITTED BY LAW, TO SUBMIT ANY FUTURE CLAIMS ARISING OUT OF, RELATING TO, OR IN CONNECTION WITH THIS AGREEMENT, OR THE INTERPRETATION, VALIDITY, CONSTRUCTION, PERFORMANCE, BREACH, OR TERMINATION THEREOF TO BINDING ARBITRATION, AND THAT THIS ARBITRATION CLAUSE CONSTITUTES A WAIVER OF EXECUTIVE'S RIGHT TO A JURY TRIAL AND RELATES TO THE RESOLUTION OF ALL DISPUTES RELATING TO ALL ASPECTS OF THE EMPLOYER/EMPLOYEE RELATIONSHIP.

11. Covenants Not to Compete and Not to Solicit.

(a) Covenant Not to Compete. Executive agrees that, if he is receiving severance benefits pursuant to Section 3(c) hereof, then until the end of the twenty four month period following the date of his termination of employment with the Company for any reason or no reason, Executive will not directly engage in (whether as an employee, consultant, proprietor, partner, director or otherwise), or have any ownership interest in, or participate in the financing, operation, management or control of, any person, firm, corporation or business that engages or participates anywhere in the world in providing goods and services similar to those provided by the Company upon the date of Executive's termination of employment. Ownership of less than 3% of the outstanding voting stock of a corporation or other entity will not constitute a violation of this provision. The Company agrees not to unreasonably withhold consent from Executive to engage in any activity that is not competitive with the Company.

(b) Covenant Not to Solicit. Executive agrees that, if he is receiving severance benefits pursuant to Section 3(c) hereof, he will not, at any time during the twelve month period following his termination date, directly or indirectly solicit any individuals to leave the Company's employ for any reason or interfere in any other manner with the employment relationships at the time existing between the Company and its current or prospective employees.

(c) Representations. The parties intend that the covenants contained in Section 11(a) and (b) shall be construed as a series of separate covenants, one for each county, city and state (or analogous entity) and country of the world. If, in any judicial proceeding, a court shall refuse to enforce any of the separate covenants, or any part thereof, then such unenforceable covenant, or such part thereof, shall be deemed eliminated from this Agreement for the purpose of those proceedings to the extent necessary to permit the remaining separate covenants, or portions thereof, to be enforced.

(d) Reformation. In the event that the provisions of this Section 11 should ever be deemed to exceed the time or geographic limitations, or scope of this covenant, permitted by applicable law, then such provisions shall be reformed to the maximum time or geographic limitations, as the case may be, permitted by applicable laws.

(e) Reasonableness of Covenants. Employee represents that he (i) is familiar with the covenants not to compete and solicit, and (ii) is fully aware of his obligations hereunder, including, without limitation, the reasonableness of the length of time, scope and geographic coverage of these covenants. 12. No Oral Modification, Cancellation or Discharge. This Agreement may only be amended, canceled or discharged in writing signed by Executive and the Chairman of the Board.

13. Withholding. The Company shall be entitled to withhold, or cause to be withheld, from payment any amount of withholding taxes required by law with respect to payments made to Executive in connection with his employment hereunder.

14. Governing Law. This Agreement shall be governed by the laws of the State of California.

15. Effective Date. This Agreement is effective upon the date it has been executed by both parties.

16. Acknowledgment. Executive acknowledges that he has had the opportunity to discuss this matter with and obtain advice from his private attorney, has had sufficient time to, and has carefully read and fully understands all the provisions of this Agreement, and is knowingly and voluntarily entering into this Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Agreement:

KLA-TENCOR CORPORATION

/s/ KENNETH L. SCHROEDER
\- ------------------------
Kenneth L. Schroeder

EXECUTIVE

/s/ JOHN H. KISPERT
\- ----------------------
John H. Kispert

Date: November 19, 2001

Exhibit 21.1

KLA-Tencor Subsidiaries

Name	State or Other Jurisdiction of Incorporation
DOMESTIC SUBSIDIARIES	
International Sales & Business, Inc.	California
KLA-Tencor Building Corporation	California
KLA-Tencor DISC Corporation	California
KLA-Tencor International Corporation	California
KLA-Tencor Klinnik Corporation	California
KLA-Tencor Technologies Corporation	California
KLA-Tencor China Corporation	California
KLA-Tencor Asia-Pac Distribution Corporation	California
VLSI Standards, Inc.	California
INTERNATIONAL SUBSIDIARIES	
KLA-Tencor (Cayman) Limited I	Cayman Islands
KLA-Tencor (Cayman) Limited II	Cayman Islands
KLA-Tencor (Cayman) Limited III	Cayman Islands
KLA-Tencor (Cayman) Limited IV	Cayman Islands
KLA-Tencor (Israel) Corporation	Israel
KLA-Tencor Holding Corporation 1987 Limited	Israel
KLA-Tencor Corporation 1992 Limited	Israel
KLA-Tencor Integrated Metrology (Israel) (2002) Ltd.	Israel
KLA-Tencor Italy S.R.L.	Italy
KLA-Tencor Japan, Ltd.	Japan
VLSI Standards, KK	Japan
KLA-Tencor GmbH	Germany
KLA-Tencor France SARL	France
KLA-Tencor Korea, Inc.	Korea
KLA-Tencor Limited	United Kingdom
KLA-Tencor (Service) Limited	United Kingdom
KLA-Tencor (Malaysia) Sdn Bhd	Malaysia
KLA-Tencor (Singapore) PTE, Ltd.	Singapore
KLA-Tencor International Trading (Shanghai) Co. Ltd.	China
KLA-Tencor Microelectronics Equipment (Tianjin) Co., LTD	China
KLA Instruments, S.A.	Switzerland
Yield Analysis Software Technologies, Ins.	Taiwan
Lee Ta Technologies (BVI), Inc.	British Virgin Islands
KLA-Tencor (Thailand), Ltd.	Thailand

Exhibit 23.1

Consent of Independent Auditors

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-100166, No. 33-15784, No.2-71584, No. 2-75314, No. 33-26002, No. 33-42973, No. 33-42982, No. 33-42975, No. 33-55362, No. 33-88662, No. 333-03003, No.333-22939, No. 333-22941, No. 333-26681, No. 333-32537, No. 333-45271, No. 333-60887, No. 333-60883, No. 333-68423, No. 333-68415, No. 333-85121, No. 333-85123, No. 333-46598, No. 333-49766, No. 333-49828, No. 333-60864, No. 333-60866, and No. 333-75944) and in the Prospectus constituting part of the Registration Statement on Form S-3 (No. 333-52393) of KLA-Tencor Corporation of our report dated July 22, 2003 relating to the financial statements and the financial statement schedule, which appears in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
September 12, 2003

Exhibit 31

Certification of Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Kenneth L. Schroeder certify that:

1. I have reviewed this annual report on Form 10-K of KLA-Tencor Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over the financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

September 15, 2003	/s/ KENNETH L. SCHROEDER
(Date)	Kenneth L. Schroeder
	Chief Executive Officer
	(Principal Executive Officer)

Exhibit 31

Certification of Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, John H. Kispert certify that:

1. I have reviewed this annual report on Form 10-K of KLA-Tencor Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over the financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

September 15, 2003
(Date)

/s/ JOHN H. KISPERT
John H. Kispert
Executive Vice President
and Chief Financial Officer
(Principal Accounting Officer)

Exhibit 32

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Kenneth L. Schroeder, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of KLA-Tencor Corporation on Form 10-K for the fiscal year ended June 30, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of KLA-Tencor Corporation.

September 15, 2003 By: /s/ Kenneth L. Schroeder

Dated Name: Kenneth L. Schroeder
Title: Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, John H. Kispert, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of KLA-Tencor Corporation on Form 10-K for the fiscal year ended June 30, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of KLA-Tencor Corporation.

September 15, 2003 By: /s/ John H. Kispert

Dated Name: John H. Kispert
Title: Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to KLA-Tencor Corporation and will be retained by KLA-Tencor Corporation and furnished to the Securities and Exchange Commission or its staff upon request.