

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended June 30, 2005

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
(State or Other Jurisdiction of Incorporation or Organization)

04-2564110
(I.R.S. Employer Identification Number)

160 Rio Robles, San Jose, California
(Address of Principal Executive Offices)

95134
(Zip Code)

Registrant's Telephone Number, Including Area Code: (408) 875-3000

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 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.

Indicate by checkmark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate by checkmark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant based upon the closing price of the registrant's stock, as of December 31, 2004, was \$5,462,382,750. 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.

The registrant had 197,585,823 shares of Common Stock outstanding as of August 29, 2005.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the 2005 Annual Meeting of Stockholders ("Proxy Statement") to be held on November 4, 2005, and to be filed pursuant to Regulation 14A within 120 days after registrant's fiscal year ended June 30, 2005, 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 other than statements of historical fact may be 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 forecasts of the future results of our operations; the percentage of process control of our customers' spending; orders for our products and capital equipment generally; sales of semiconductors; the allocation of capital spending by our customers; growth of revenue in the semiconductor industry, the semiconductor capital equipment industry and business; technological trends in the semiconductor industry; our future product offerings and product features, as well as the success and market acceptance of new products; timing of shipment of backlog; the future of our product shipments and our product and service revenues; our future gross margins; the future of our selling, general and administrative expenses; international sales and operations; maintenance of our competitive advantage; success of our product offerings; creation and funding of programs for research and development; attraction and retention of employees; results of our investment in leading edge technologies; the effects of hedging transactions; the effect of the sale of trade receivables and promissory notes from customers; our future income tax rate; dividends; the completion of any acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; sufficiency of our existing cash balance, investments and cash generated from operations to meet our operating and working capital requirements; and the adoption of new accounting pronouncements.

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 year 2006. 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 virtually 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. Our advanced products, coupled with our unique yield technology services, allow us to deliver the 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 Corporation was formed in April 1997 through the merger of KLA Instruments Corporation 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 Corporation 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 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 the side where the circuits are made.

The manufacturing cycle of integrated circuits is grouped into three phases: design, fabrication and testing. IC design involves the architectural layout of the circuit, as well as design verification and photomask or reticle generation. The fabrication of an IC, or “chip,” is accomplished by depositing 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 500 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.

When all of the layers on the wafer have been completed, each die on the wafer is then tested for functionality. The wafer is placed on a prober that is used to attach the input/output pins of the device to a tester. When chips are tested on the wafer, it is called sort test. Sort test determines which chips are good. The wafer is then cut up, and the good die are bonded to lead frames that contain pins used to attach the chip to the outside printed circuit board. Wires are bonded from the input/output pads of the IC to the pins of the lead-frame. Then the lead frame is encapsulated in packages typically made of plastic or ceramic materials. The packaged parts are put through a final test and then shipped to customers. This entire packaging and testing process is called the “back end.”

Current Trends

Companies that anticipate future market demands by developing and refining new technologies and manufacturing processes 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 substrate and transistor materials, advanced lithography techniques and 300-mm (12-inch) wafers.

While many of these technologies have been adopted at the development and pilot production stages, significant challenges and risks associated with each technology have impacted 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 linewidth 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.

The focus of our activities has been 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 a key supplier for comprehensive yield management solutions that enable our customers to achieve 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.

Our process control and yield management equipment enables our customers to better leverage these increasingly expensive facilities and significantly improve their return on investment (“ROI”)—helping them to become low-cost producers.

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 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:

The most significant opportunities for yield and device performance improvement generally occur either when production is started at new factories or 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.

Products

We operate in one segment for the design, manufacture and marketing of process control and yield management systems for the semiconductor and related microelectronics industry. We market and sell 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—as well as 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 four groups: Defect Inspection, Metrology, Service, and Software and Other. In addition, for our customers that are manufacturing with older technologies we provide refurbished KLA-Tencor certified tools along with warranty and support.

Defect Inspection

Our defect inspection tools are used to detect, count, classify and characterize particles, pattern defects, surface anomalies and electrical failures both inline at various manufacturing process stages and offline during engineering analysis. Our portfolio includes 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 Brightfield 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. In 2004, we introduced our latest-generation ultraviolet (“UV”)-based high-

resolution imaging inspection system, the 2365, which incorporates multiple-bandwidth brightfield illumination and other enhancements to extend the performance of the 2xxx series to the 90-nm node and below. That year, we also introduced our DUV brightfield platform, the 2371, which provides the increased defect detection resolution and sensitivity for the 65-nm node. The 2371 illuminates short DUV broadband wavelengths through state-of-the-art high numerical aperture (“NA”) optics to greatly improve defect detection versus other technologies.

With the adoption of new materials, device structures and lithography techniques at the 65-nm node and beyond, IC manufacturers face a plethora of new defect types and noise sources, as well as a dramatic rise in systematic defects. The magnitude of these defect challenges mandate extremely sensitive and highly flexible inspection solutions capable of detecting the broadest range of defect types in all layers. Since different defect types, materials and device layers require different inspection wavelengths for optimal defect detection, ultra-broadband wavelength imaging inspection is now a necessity. In response to this need, KLA-Tencor unveiled its new 2800 Series ultra-broadband brightfield inspection platform earlier this year, which combines deep ultraviolet (“DUV”), UV and visible wavelength illumination in a single platform to enable the identification of critical defects across all layers. The 2800 Series delivers both high sensitivity and production-worthy performance that chipmakers need to accelerate their yield learning and fab ROI.

High-Throughput Darkfield Inspection

Our advanced inspection technology (“AIT”) wafer inspection family is designed to provide 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 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 sub-100-nm design rules.

Earlier this fiscal year, we unveiled the Puma 9000, our latest-generation darkfield inspection platform, which represents a marked departure from traditional laser-scanning-based darkfield tools. Puma 9000 combines a modular and extendible architecture with KLA-Tencor’s Streak™ imaging technology to enable the high capture of critical defects at production throughputs. Scalable for multiple technology generations, Streak combines advanced UV illumination optics with high-speed imaging to provide a range of inspection modes optimized for critical defect detection. A solid-state linear sensor is used to image the scattered light, which extends the dynamic range of the sensor to produce a more stable and repeatable measurement than can be achieved with traditional scanning laser and photo multiplier tube (“PMT”)–based inspection systems. The platform’s enhanced sensitivity over existing inspection systems, without compromising throughput, allows customers to cost-optimize their inspection strategies and achieve tighter production control.

Electrical Line Monitoring

For advanced IC manufacturing, e-beam inspection is essential—not only during IC development, where the highest levels of sensitivity are needed to root out electrical defects, but also in production, where dedicated high-speed e-beam inspection systems are required at key process steps. During fiscal year 2005, we introduced the latest addition to our eSxx series of e-beam inspection systems targeted at 65-nm IC development and production—the eS31. The eS31 combines our advanced electron beam system architecture with our 23xx brightfield inspection software platform and provides high inspection sensitivity for development, with high throughput for production monitoring.

As part of the eS31, we also introduced our μ Loop™ (MicroLoop) methodology onto the eS3x platform for the first time. The faster time to result advantage of μ Loop™ versus traditional short-loop electrical test methodologies, has made μ Loop™ a key enabler for yield learning in advanced development and production fabs.

Our μ Loop™ (MicroLoop) methodology, introduced in 2001, provides a fab-wide framework of solutions that accelerates yield learning for new semiconductor processes in development and production. eD₆, the first product in the μ Loop™ family, combines non-contact electrical test with inline physical defect inspection to produce a fast root-cause analysis.

Wafer Surface Inspection

The wafer substrate is the foundation of an IC. Having a defect-free wafer substrate is essential, since defects on the surface of the wafer can adversely affect subsequent semiconductor processes and ultimately impact IC performance. In the IC fab, wafer surface inspection is often used to qualify new process tools quickly in order to begin making product wafers as soon as possible. Wafer surface inspection is also critical for monitoring the defect performance of fab equipment during production to ensure they remain within specification. In 1997, we introduced the Surfscan SP1™ series, which is today considered the de facto standard for bare wafer qualification, process monitoring and equipment monitoring applications.

At the 65-nm node and beyond, transistor performance in high-end devices can no longer be improved by scaling alone. New materials, including inline process films and engineered substrates, are also being added to augment transistor performance. However, these new materials introduce new control parameters and challenges. With engineered substrates, for example, traditional visible-wavelength wafer inspection systems are hampered by interference effects arising from multiple reflections from interfaces between silicon and buried oxide (“BOX”) layers. These cause false and inconsistent defect readings, and reduce overall defect sensitivity. In 2004, we unveiled our next-generation Surfscan platform, the Surfscan SP2, which incorporates a new UV illumination technology to significantly enhance inspection sensitivity and speed on both traditional silicon as well as engineered substrates such as SOI, strained silicon, and strained SOI. The system is capable of detecting defects as small as 30 nm at higher throughputs than the previous benchmark Surfscan SP1 DLS tool.

Wafer backside defects can have a significant impact on wafer and process uniformity, both of which are critical issues in advanced 300-mm processing. In 2002, we unveiled a new Backside Inspection Module (“BSIM”) option for the Surfscan SP1 and SP2 series that provides an automated, non-destructive inspection solution for the backsides of patterned production wafers.

Transparent Film and Substrate Inspection

Understanding the optical surface properties of modern materials has become a critical part of manufacturing in industries ranging from microelectronics to biomedicine. With the increasing complexity of manufacturing processes and products comes the need for extremely precise analysis and control of surface properties such as film thickness uniformity, contamination and defectivity, often in real time and online. This trend is paving the way for nondestructive optical metrology techniques to move into volume production environments. Through our acquisition of Candela Instruments during fiscal year 2005, we added the Candela™ series of Optical Surface Analyzers (“OSA”) to our inspection portfolio. The OSA systems automatically detect and classify surface defects on optoelectronic and semiconductor wafers, including transparent wafers such as sapphire and glass. Combining four technologies to simultaneously measure reflectivity and topographic variations on the surface, these systems enable detection of particles, stains, scratches, pits and bumps. Epi layers and film coatings can also be inspected for uniformity, particles, and surface defects.

Macro After-Develop Inspection

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. With the introduction of the 2401 macro defect inspection system in 1999 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. 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 μ PCM (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 reticle design, optimized test wafers and industry-leading expertise, μ PCM provides the 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.

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 130nm 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.

In 2000, we unveiled our TeraStar™ reticle inspection system for high-resolution reticle inspection down to the 90-nm node. With its ability to inspect up to a terapixel (one million by one million pixels) per reticle, TeraStar provides significant improvements in throughput compared to previous-generation systems. Tera™ algorithms enable the inspection of smaller linewidth geometries and complex resolution enhancement techniques (“RETs”), 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 are a major cause of yield loss in IC manufacturing at the 130-nm node and below. 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 2003, we introduced TeraScan™, the successor to TeraStar. A 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.

Process Window Qualification

Reticles that are used in the manufacture of today's advanced ICs incorporate extremely complex RETs that enable lithographers to "extend" existing lithographic processes to print design rules smaller than the wavelength of light used—a process called sub-wavelength lithography. These enhancements include billions of OPC features and PSM topography, which minutely adjust the wavelength of DUV light. If left unchecked, marginal RET designs can print as out-of-focus features on the wafer during photolithography (or not print at all), creating opens that translate into electrical failures within the device. However, since these errors are design marginalities rather than physical defects on the reticle, they cannot be caught using traditional reticle inspection tools.

Our Process Window Qualification ("PWQ") solution enables device manufacturers to identify reticle design errors, such as marginalities in scattering bars, rule and model-based OPC, and PSM, which can cause process window failure and adversely affect overall device yield. PWQ utilizes an intelligent wafer layout, inspected on KLA-Tencor's 23xx and 2800 series high-resolution imaging inspection systems, which enables lithographers to compare dies with modified lithography parameters against dies at optimized conditions. The resulting data is analyzed with algorithms to identify and prioritize repeating regions of process window marginality. This method enables lithographers to recognize problems that cause failure within the nominal process window or just outside of it—allowing for more informed decisions about whether to have the reticle redesigned, or fine-tune inline defect and CD monitoring efforts to minimize the design error impact on device yield.

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, critical dimension, film thickness and reflectivity measurements, IC manufacturers have the capabilities to maintain tight control of their lithography, etch, deposition and CMP processes.

Optical Overlay Metrology

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.

In 2001, we unveiled Archer 10, which enables overlay measurements to within 2-nm for sub-130-nm 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 fiscal year 2004, we introduced Archer AIM, which 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.

In fiscal year 2005, we introduced Archer AIM+, our latest overlay metrology solution, which is designed to address chipmakers' lithography overlay control needs beyond the 65-nm node. Archer AIM+ incorporates a new optic system design and improved illumination system to reduce total measurement uncertainty ("TMU"), a key metric of overlay metrology performance and exceed the 45-nm node overlay control requirements outlined in the 2004 edition of the International Technology Roadmap for Semiconductors.

Focus-exposure control in lithography is a key challenge for CD control at sub-100-nm nodes. 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. Our MPX option on our Archer overlay metrology platform enables lithographers to detect and 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 without requiring periodic offline monitoring of the exposure tool.

E-Beam CD Metrology

Every nanometer in CD variation in the IC manufacturing process affects device performance, which consequently impacts yield and bottom-line profitability. The eCD-1, which we introduced in fiscal year 2004, offers the precision and resolution needed to meet the CD metrology performance requirements for the 90-nm node and beyond. The eCD-1 is based on a new platform, and all of its design aspects have been precision suited for 90-nm node metrology requirements, with extendibility to the 65-nm node. eCD-1 is well suited for applications involving 193-nm lithography and very-high-aspect-ratio structures.

Among its key features, the eCD-1 incorporates ImagePlus™, an operating mode that provides control over resolution and depth of focus to enable lithographers to optimize tool performance on features with several topographies. With ImagePlus, the eCD-1 can measure contacts at the bottom of structures with high aspect ratios. Another key feature, the FlexScan™ off-axis tilt capability, enables the eCD-1 to generate 3-D profile information (sidewall angle, height) on certain features—providing enhanced in-line process control. Unlike CD SEM tilt systems that require stage movement or use magnetic deflection, the eCD-1 is totally hysteresis-free—relying exclusively on electrostatic deflection. As a result, tilt measurements can be performed without compromising metrology performance, thereby providing highly reliable and repeatable measurements.

Optical CD Metrology

Traditional CD linewidth measurements are no longer sufficient by themselves for providing all the information that chipmakers need to accurately predict yield and transistor performance. Today, complete feature profile information is needed, including CD, sidewall angle, height and depth. Contact hole profile measurements are also critical, since contact hole sizes that are significantly reduced or closed at the bottom of the structure can result in significant yield loss.

In 2004, we introduced the SpectraCD 100—our latest-generation inline optical CD metrology system for advanced patterning process control at the 90-nm and 65-nm nodes. SpectraCD 100 utilizes a new hardware platform and advanced 3-D modeling capabilities to conduct complete profile measurements of yield-critical structures with an improvement in precision and tool-to-tool matching over our previous-generation SpectraCD system. These capabilities, coupled with SpectraCD 100's production throughput and ability to non-destructively measure features down to 30 nm, provide chipmakers with an effective inline process control and product dispositioning tool for their most critical patterning steps.

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 2002, we unveiled SpectraFx 100, 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.

Traditional scatterometry-based metrology systems obtain information on process conditions by measuring blank metal test structures in the wafer scribe lines. At the 65-nm node, process tolerances are so small that these traditional proxy measurements are unable to detect process variations at the die level, which can have a major impact on device performance. In 2004, we introduced SpectraFx 200, our most advanced, seventh-generation thin-film metrology system, to enable IC manufacturers to achieve cost-effective production control over their advanced film processes at the 65-nm node and below. Based on our spectroscopic ellipsometry (“SE”) technology, SpectraFx 200 utilizes a unique Dielectric Pattern Metrology (“DPM”) capability to provide accurate and robust measurements of in-die process variation on product wafers non-destructively. The system also leverages a new 150 SE option to enable qualification and monitoring of such advanced films as ultra-thin ONO layers, nitrided films, high-k and low-k dielectrics, 193-nm anti-reflective coating (“ARC”) layers, and engineered substrates, including SOI, strained silicon, and silicon germanium (“SiGe”).

AccuFilm, an advanced option on our SpectraFx platform, 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.

In 2003, we introduced MetriX 100, an inline, non-contact metal films metrology system to provide independent measurements of both film composition and thickness on product wafers. MetriX 100 can be used for a wide range of applications—ranging from process development and characterization of ultra-thin atomic layer deposition (“ALD”) barrier films, high-k dielectrics and nitrided metal gates, to routine production monitoring of copper barrier/seed and other yield-limiting critical layers such as silicon oxynitride (“SiON”) gate dielectrics.

Contamination Monitoring

Gate dielectric quality is critical to the speed and reliability of an IC. Below the 130-nm node, dielectrics become so thin (less than 20 angstroms, or the equivalent of 2 nm) 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 key parameters that determine the quality of advanced gate dielectric films, including contamination and oxide thickness, as well as electrical capacitance and leakage.

Our latest addition to this product family, called Quantox XP, provides information on both the physical and electrical properties of advanced gate dielectric materials. These materials include SiON and high-k dielectrics, which are required for advanced 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.

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. The latest generation of our HRP® high resolution

profilers, the HRP-240^{ETCH}, 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 (“AFM”). 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.

Service

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

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.

Software and Other

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.

Klarity Defect® is our automated inline defect analysis module and defect data management system designed to help fabs achieve faster yield learning cycles. By identifying excursions in real time, Klarity Defect enables fabs to embed expert decision-making processes within analysis recipes. These processes are automatically triggered when user-specified events occur. In addition to freeing fab engineers from repetitive analysis tasks, this capability dramatically improves fab operating efficiency by providing relevant information in less time and with less effort for faster identification of yield problems.

Our Klarity ACE yield analysis software enables fast integration, correlation and analysis of yield- and process-related data to accurately determine the source of defects and process excursions. It can differentiate between random and systematic yield problems, providing users with the data they need in order to take appropriate corrective measures.

In fiscal year 2005, we introduced Klarity SSA (Spatial Signature Analysis), a new software capability that provides automated classification and root cause analysis of spatial signatures, which are defect clusters and patterns that can be indicative of an out-of-spec process or process tool problem. Klarity SSA can be utilized for a variety of applications where enhanced excursion detection is needed, including process line and tool monitoring, as well as engineering analysis, across key process modules.

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, as well as optimize their design-for-manufacturing (“DFM”) efforts.

Our IMPACT XP™ automated defect classification (“ADC”) software 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 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.

Data Storage Industry

Outside the semiconductor industry, we manufacture, sell and service yield management solutions to the data storage market, with offerings for hard disk drive and component makers. In the front-end of thin film head wafer manufacturing, we provide 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. In hard disk media manufacturing, our Candela products with OSA technology for both opaque and transparent films and substrates provide inspection systems optimized for the data storage industry. Additionally, we are leveraging our expertise in magnetics to meet customers’ needs in the emerging magnetic random access memory (“MRAM”) market.

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 years 2005 and 2004 no customer accounted for more than 10% of our total revenues. In 2003, one customer (Intel Corporation) accounted for 11% of our total 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.

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 United States, Europe, Asia-Pacific and Japan. We maintain an export compliance program that is designed to fully meet the requirements of the United States Departments of Commerce and State.

As of June 30, 2005, we employed over 3,000 sales and related personnel, service engineers and applications engineers. In addition to sales and service offices in the United States, we conduct sales, marketing and services out of wholly-owned subsidiaries or branches of United States subsidiaries in a variety of countries, including China, France, Germany, India, Israel, Italy, Japan, South Korea, Malaysia, Singapore, Taiwan, Thailand and the United Kingdom. International revenues accounted for approximately 76%, 77%, and 69% of our total revenues in fiscal 2005, 2004, and 2003 respectively. Additional information regarding our revenues from foreign operations for our last three fiscal years can be found in Note 13 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 United States will continue to be a significant percentage of our total 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 activities 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 \$646 million at June 30, 2005. We include in our backlog only those customer orders for which we have accepted purchase orders and assigned shipment dates within twelve months from the date of order. Orders for service and non-released products are excluded from the backlog. We expect to fill the present backlog of orders during fiscal year 2006; 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 that 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. As of June 30, 2005, we employed approximately 1,161 research and development personnel.

Our key research and development activities during fiscal year 2005 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 products, or that new 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, 2005, we employed approximately 891 manufacturing personnel.

Many of the parts, components and subassemblies (collectively "parts") are standard commercial products, although certain parts 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.

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 continuously evaluate a course of strategic acquisitions and alliances to expand our technologies, product offerings and distribution capabilities. 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. Additional information regarding business combinations during fiscal year 2005 can be found in Note 5 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.

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 United States and foreign patents and other proprietary rights of third parties.

Although we consider patents and other intellectual property significant to our business, 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, 2005, we employed approximately 5,500 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, 2005 is set forth below:

Location	Type	Principal use	Square Footage	Ownership
Chandler, AZ (Phoenix)	Office	Sales and Service	5,914	Leased
Hayward, CA	Plant	Manufacturing	14,150	Leased
Livermore, CA	Office and plant	Training, Service and Engineering	241,252	Owned
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	15,600	Leased
San Jose, CA	Office and plant	Research, Engineering and Manufacturing	17,060	Leased
San Jose, CA	Office, plant and warehouse	Corporate Headquarters, Research, Engineering, Marketing, Service and Sales Administration	603,325	Owned
Fremont, CA	Office, plant and warehouse	Research, Engineering, Marketing, Manufacturing and Service	15,755	Leased
Sunnyvale, CA	Office, plant and warehouse	Research, Engineering, Marketing, Manufacturing and Service	20,000	Leased
Colorado Springs, CO	Office	Sales and Service	4,002	Leased
Portsmouth, NH	Office	Sales and Service	2,100	Leased
Beaverton, OR	Office	Sales and Service	13,075	Leased

Location	Type	Principal use	Square Footage	Ownership
Austin, TX	Office	Sales, Service and Research	28,415	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	5,210	Leased
Hopewell Junction, NY	Office	Sales and Service	8,736	Leased
Essex Junction, VT	Office	Sales and Service	5,704	Leased
Slough and Basingstoke, England	Vacant	Marketing to sub-lease	9,602	Leased
Wokingham, England (Molly Millar property sub-let)	Office	Sales and Service	8,925	Leased
Livingston, Scotland	Sub-Let	Premises are occupied by sub-tenant under contract with KLA-Tencor	(2,200 sub-let) 5,712	Leased
Rousset, France	Office	Sales and Service	6,189	Leased
Grenoble, France	Office	Sales and Service	7,674	Leased
Dresden, Germany	Office	Sales and Service, Warehouse	12,909	Leased
Puchheim, Germany	Office	Sales and Service	5,240	Leased
Migdal Ha'Emek and Herzliya, Israel	Office and plant	Research, Engineering, Marketing, Manufacturing and Service and Sales Administration	64,584	Owned
Milan, Italy	Office	Sales and Service	5,705	Leased
Yokohama, Japan	Office	Sales, Service, and Warehouse	49,361	Leased
Kumamoto, Japan	Office	Sales and Service	5,038	Leased
Singapore	Office	Sales and Service	23,465	Leased
Kiheung, South Korea	Office	Sales and Service	11,759	Leased
Bundang, South Korea	Office	Sales and Service	7,508	Leased
Hsinchu, Taiwan	Office	Sales and Service	95,601	Leased
Tainan, Taiwan	Office	Sales and Service	7,294	Leased
Taipei, Taiwan	Office	Sales and Service	6,914	Leased
Shanghai, China	Office and R&D	Sales, Service, Engineering and Warehouse	58,886	Leased
Chennai, India	Office	Engineering	18,880	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, 2015 with renewal options at the fair market value for additional periods up to five years. Additional information regarding these leases 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 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.

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

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

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.

	Fiscal year 2005		Fiscal year 2004	
	High	Low	High	Low
First Quarter	\$ 47.16	\$ 35.69	\$ 59.45	\$ 46.50
Second Quarter	48.99	40.23	60.88	52.63
Third Quarter	50.81	42.25	62.60	49.47
Fourth Quarter	46.87	38.86	53.88	41.70

As of August 29, 2005, there were 886 stockholders of record of our common stock.

During the third fiscal quarter of 2005, our Board of Directors approved the initiation of a quarterly cash dividend. During the fourth fiscal quarter of 2005 we paid a dividend of 12 cents per share to our stockholders of record on May 2, 2005. The dividend for the first fiscal quarter of 2006 was declared on August 4, 2005 and is payable to our stockholders of record on August 15, 2005. Additional information concerning dividends may be found in the following sections of this Form 10-K: "Selected Financial Data" in Part II, Item 6 and "Consolidated Statements of Cash Flows" and "Consolidated Statements of Stockholders' Equity" in Part II, Item 8.

Equity Compensation Plans

The following table summarizes our equity compensation plans as of June 30, 2005:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights ⁽¹⁾	Weighted-average exercise price of outstanding options, warrants and rights.	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column 1) ⁽²⁾
Equity compensation plans approved by stockholders	25,680,578	\$ 36.72	13,620,320
Equity compensation plans not approved by stockholders	7,698,409	\$ 38.29	—
Total	33,378,987	\$ 37.08	13,620,320

(1) Amounts shown are for options granted only. There were 406,960 shares of restricted stock units issued under the 2004 Equity Incentive Plan as of June 30, 2005.

(2) Any 2004 equity Incentive Plan awards of restricted stock, performance shares, performance units or deferred stock units with a per share or unit purchase price lower than 100% of fair market value on the grant date shall be counted against the total number of shares issuable under the plan as 1.8 shares for every one share subject thereto. Including the restricted stock units issued during the year ended June 30, 2005, and applying the 1.8 ratio as required by the 2004 Equity Incentive Plan, and including the shares reserved for issuance under the employee stock purchase plan, the number of shares remaining available for future issuance under our equity compensation plans was 13,620,320 shares as of June 30, 2005.

Following is a summary of stock repurchases for the quarter ended June 30, 2005 (in thousands, except average price per share).⁽¹⁾

Period	Total Number of Shares (or Units Purchased) ⁽²⁾	Average Price Paid per Share (or Unit)	Maximum Number of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs ⁽³⁾
April 1, 2005 to April 30, 2005	365,000	\$ 41.60	9,585,000
May 1, 2005 to May 31, 2005	970,000	\$ 40.73	8,615,000
June 1, 2005 to June 30, 2005	265,000	\$ 45.81	8,350,000
Total	1,600,000	\$ 41.77	

(1) In July 1997, the Board of Directors authorized KLA-Tencor to systematically repurchase shares of its common stock in the open market. This program was entered in order 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, 2005 the Board of Directors had authorized KLA-Tencor to repurchase a total of 27.8 million shares. All such shares remain as treasury shares and are retired.

(2) All shares were purchased pursuant to the program publicly announced in July 1997 and as extended by the Board of Directors most recently in February 2005 by an additional 10.0 million shares.

(3) The stock repurchase program has no expiration date. We intend to continue making further purchases under the stock repurchase program.

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.

*Year ended June 30,
(in millions except per share data)*

	2005	2004	2003	2002	2001
Consolidated Statement of Operations:					
Revenues	\$ 2,085	\$ 1,497	\$ 1,323	\$ 1,637	\$ 2,104
Income from operations	583	297	139	245	458
Income before cumulative effect of change in accounting principle, net of tax	467	244	137	216	373
Cumulative effect of change in accounting principle, net of tax	—	—	—	—	(306)
Net income	467	244	137	216	67
Dividends paid per share	0.12	—	—	—	—
Earnings per share:					
Income before cumulative effect of change in accounting principle					
Basic	2.38	1.25	0.72	1.15	2.01
Diluted	2.32	1.21	0.70	1.10	1.93
Cumulative effect of change in accounting principle, net of tax					
Basic	—	—	—	—	(1.65)
Diluted	—	—	—	—	(1.59)
Net income					
Basic	2.38	1.25	0.72	1.15	0.36
Diluted	2.32	1.21	0.70	1.10	0.34

As of June 30, (in millions)

	2005	2004	2003	2002	2001
Consolidated Balance Sheets:					
Cash, cash equivalents and marketable securities	\$ 2,195	\$ 1,876	\$ 1,488	\$ 1,334	\$ 1,144
Working capital	2,271	1,280	1,155	932	913
Total assets	3,986	3,539	2,867	2,718	2,745
Stockholders’ equity	3,045	2,628	2,216	2,030	1,760

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 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 in applying our accounting policies 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 related disclosure 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. System revenue includes hardware and software that is incidental to the product. We 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. In limited cases, we deviate from the need for written acceptance and recognize system revenue upon shipment. These exceptions have accounted for approximately 6.6%, 4.9%, and 3.1% of our revenue for the fiscal years ended 2005, 2004 and 2003, respectively. The increase in revenue exceptions results from multiple shipments of same tools that have already met the required acceptance criteria, to customers who are looking to expand capacity. (See Note 1 of Notes to Consolidated Financial Statements under "Revenue Recognition" for detailed description of exceptions.) Shipping charges billed to customers are included in system revenue and the related shipping costs are included in cost of revenues.

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.

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, 2005 was \$210 million. This amount equals the amount of deferred system revenue that was invoiced and due on shipment less applicable product and warranty costs. The deferred profit balance decreased from \$285 million at June 30, 2004 primarily because shipments were lower than customer acceptance for which revenue was recognized during fiscal year 2005.

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 increased to \$80 million at June 30, 2005 from \$57 million at June 30, 2004 primarily due to an increase in service contracts as our installed base of equipment at customers' sites continues to increase.

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 or scrapped.

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 40 hours per week 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 revenues 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 named from time to time as a party to various legal proceedings. While we currently believe the ultimate outcome of these proceedings will not have a material adverse effect on our financial position, 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, 2005.

Income Taxes We account for income taxes in accordance with Statement of Financial Accounting Standard No. 109, "Accounting for Income Taxes," (SFAS No. 109) 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.

In addition, the calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues in the U.S. and other tax jurisdictions based on our estimate of whether, and the extent to which, additional tax payments are probable. If we ultimately determine that payment of these amounts is unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We record an additional charge in our provision for taxes in the period in which we determine that the recorded tax liability is less than we expect the ultimate assessment to be.

EXECUTIVE SUMMARY

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

Net sales, income from operations, net income, cash flow from operations, and diluted earnings per share are the key indicators we use to monitor our financial condition and operating performance. We also use certain non-GAAP measures such as net orders to assess business trends and performance, and to forecast and plan future operations. Net orders consist of current period orders less current period cancellations. The following table sets forth the key quarterly financial information which we use to manage our business (in millions, except per share data).

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal year 2005				
Revenues	\$ 519	\$ 533	\$ 541	\$ 492
Income from operations	\$ 157	\$ 156	\$ 155	\$ 115
Net income	\$ 117	\$ 122	\$ 123	\$ 105
Cash flow from operations	\$ 91	\$ 81	\$ 182	\$ 153
Net orders	\$ 529	\$ 479	\$ 422	\$ 426
Diluted earnings per share	\$ 0.58	\$ 0.61	\$ 0.61	\$ 0.52
Fiscal year 2004				
Revenues	\$ 318	\$ 339	\$ 390	\$ 450
Income from operations	\$ 37	\$ 51	\$ 88	\$ 121
Net income	\$ 37	\$ 45	\$ 66	\$ 96
Cash flow from operations	\$ 30	\$ 33	\$ 90	\$ 197
Net orders	\$ 340	\$ 508	\$ 599	\$ 607
Diluted earnings per share	\$ 0.18	\$ 0.22	\$ 0.33	\$ 0.48
Fiscal year 2003				
Revenues	\$ 376	\$ 335	\$ 304	\$ 308
Income from operations	\$ 57	\$ 27	\$ 26	\$ 29
Net income	\$ 51	\$ 29	\$ 27	\$ 30
Cash flow from operations	\$ 65	\$ 33	\$ 89	\$ 59
Net orders	\$ 242	\$ 286	\$ 316	\$ 337
Diluted earnings per share	\$ 0.26	\$ 0.15	\$ 0.14	\$ 0.15

Outlook

The semiconductor industry grew almost 30% while the semiconductor equipment industry grew 60% in calendar year 2004. Analysts are forecasting semiconductor revenue growth to slow to approximately 5% and semiconductor equipment revenues to decline by approximately 5% in calendar year 2005. New system and service orders on a fiscal basis, which are new orders net of cancellations, declined sequentially by approximately \$198 million or 10% in the year ended June 30, 2005, compared to the previous fiscal year due to near-term weakness in demand for semiconductor capital equipment.

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.

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

	Fiscal Year 2005	Fiscal Quarter 2005			
		First	Second	Third	Fourth
United States	\$ 436	\$ 107	\$ 98	\$ 96	\$ 135
Europe & Israel	211	79	53	36	43
Japan	540	123	157	121	139
Taiwan	308	90	66	104	48
Korea	243	91	57	58	37
Asia Pacific	118	39	48	7	24
Net orders	\$ 1,856	\$ 529	\$ 479	\$ 422	\$ 426

	Fiscal Year 2004	Fiscal Quarter 2004			
		First	Second	Third	Fourth
United States	\$ 550	\$ 71	\$ 129	\$ 192	\$ 158
Europe & Israel	247	21	75	70	81
Japan	438	80	128	92	138
Taiwan	449	96	89	97	167
Korea	145	23	21	74	27
Asia Pacific	225	49	66	74	36
Net orders	\$ 2,054	\$ 340	\$ 508	\$ 599	\$ 607

	Fiscal Year 2003	Fiscal Quarter 2003			
		First	Second	Third	Fourth
United States	\$ 374	\$ 80	\$ 92	\$ 98	\$ 104
Europe & Israel	167	30	58	40	39
Japan	289	57	67	64	101
Taiwan	135	46	17	44	28
Korea	106	21	38	29	18
Asia Pacific	110	8	14	41	47
Net orders	\$ 1,181	\$ 242	\$ 286	\$ 316	\$ 337

Orders received in a particular quarter affect revenue recognized in subsequent quarters. Net orders turn to revenue upon positive affirmation by the customer that the system has been installed and is operating according to predetermined specifications. Our backlog for unshipped system orders as of June 30, 2005 was approximately \$646 million, a majority of which we expect to ship over the next six to nine months. In addition, as of June 30, 2005 there was \$531 million that is related to products that have been delivered but are awaiting written acceptance from the customer.

Results of Operations

Revenues and Gross Margin

<i>(in millions)</i>	Fiscal year ended June 30,		
	2005	2004	2003
Revenues:			
Product	\$ 1,770	\$ 1,200	\$ 1,060
Service	315	297	263
Total revenues	\$ 2,085	\$ 1,497	\$ 1,323
Gross margin	\$ 1,223	\$ 827	\$ 652
Gross margin percentage	59%	55%	49%

Product revenues

Product revenue in fiscal year 2005 increased \$570 million, or 48% to \$1.8 billion, from \$1.2 billion in fiscal year 2004. Product revenue in fiscal year 2004 increased \$140 million, or 13% to \$1.2 billion, from \$1.1 billion in fiscal year 2003. Product revenue increases in fiscal year 2005 and 2004 were primarily the result of fulfilling higher level of orders received in prior periods as a result of increased capital spending by our customers. Our customers' increased capital spending in the area of process control and yield management is due to the increasing complexity of processing in their fabs as more complex chips are produced, new materials such as copper are introduced and device feature sizes are reduced.

Service revenues

Service revenue in fiscal year 2005 increased \$18 million, or 6% to \$315 million, from \$297 million in fiscal year 2004. Service revenue in fiscal year 2004 increased \$34 million, or 13% to \$297 million, from \$263 million in fiscal year 2003. 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 revenue continued to increase in absolute terms throughout the three 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.

Revenues by region

Revenues by region for the periods indicated were as follows (in millions):

	Fiscal year ended June 30,					
	2005		2004		2003	
United States	\$ 497	24%	\$ 343	23%	\$ 407	31%
Europe & Israel	266	13%	186	12%	193	15%
Japan	450	21%	395	26%	277	21%
Taiwan	430	21%	263	18%	253	19%
Korea	148	7%	144	10%	76	6%
Asia Pacific	294	14%	166	11%	117	8%
Total	\$ 2,085	100%	\$ 1,497	100%	\$ 1,323	100%

International revenues were 76%, 77% and 69% of revenue during the fiscal years ended June 30, 2005, 2004 and 2003, respectively. A significant portion of our revenue continues to be generated outside the United States where a significant portion of the world's semiconductor manufacturing capacity is located.

Gross margin

Gross margin improved by 4 points to 59% during fiscal year 2005 from 55% during fiscal year 2004. Gross margin improved by 6 points to 55% during fiscal year 2004 from 49% during fiscal year 2003. The improvement over the last two fiscal years can be attributed to the lower cost of building, installing and maintaining our products, combined with an increase in our revenues. Our gross margin fluctuates with revenue levels and product mix, and is affected by variations in costs related to manufacturing and servicing our products.

Engineering, Research and Development ("R&D")

<i>(in millions)</i>	Fiscal year ended June 30,		
	2005	2004	2003
Net R&D expenses	\$ 340	\$ 281	\$ 268
Percentage of total revenues	16%	19%	20%

Net R&D expenses increased \$59 million or 21% to \$340 million during fiscal year 2005 from \$281 million during fiscal year 2004. Net R&D expenses increased \$13 million or 5% to \$281 million during fiscal year 2004 from \$268 million during fiscal year 2003.

The gross dollars for R&D investment were partially offset by \$8 million, \$11 million and \$18 million of external funding received during the fiscal years 2005, 2004 and 2003, respectively, for certain strategic development programs conducted with several of our customers and from government grants.

The businesses acquired during this fiscal year contributed \$23 million of the increase in net R&D expenses during fiscal year 2005. For more information on the business combinations completed during fiscal year 2005, see Note 5 of the Notes to our Consolidated Financial Statements at Item 8 "Financial Statements and Supplementary Data" of this annual report. The reduction in R&D expenses as a percentage of revenue in fiscal year 2005 compared to the prior fiscal year was driven by our continued focus on cost reduction initiatives and by the increase in revenues. We expect our net R&D expenses to increase in absolute dollars as we accelerate our investments in critical programs focusing on new technologies and enhancements to existing products.

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 yield challenges our customers face at future technology nodes.

Selling, General and Administrative (“SG&A”)

<i>(in millions)</i>	Fiscal year ended June 30,		
	2005	2004	2003
SG&A expenses	\$ 300	\$ 249	\$ 254
Percentage of total revenues	14%	17%	19%

SG&A expenses increased \$51 million or 21% to \$300 million during fiscal year 2005 from \$249 million during the fiscal year 2004. SG&A expenses decreased \$5 million or 2% to \$249 million during fiscal year 2004 from \$254 million during the fiscal year 2003.

The increase in SG&A expenses compared to the prior fiscal year is due to an increase in customer application support, increased staffing, stock based compensation expense and consolidating the results of operations of the entities acquired during the quarter. The businesses acquired during this fiscal year contributed \$10 million of the increase in SG&A expenses during fiscal year 2005. For more information on the business combinations completed during fiscal year 2005, see Note 5 of the Notes to our Consolidated Financial Statements at Item 8 “Financial Statements and Supplementary Data” of this annual report. Also, stock-based compensation expense was \$3 million for fiscal year 2005 compared to none in prior periods. The reduction in selling, general and administrative expenses as a percentage of revenue was driven by our continued focus on cost reduction initiatives and by the increase in revenues. We expect our selling, general and administrative expenses to increase in absolute dollars as we build up our organization to meet increased customer demands.

The absolute dollars for selling, general and administrative expenses decreased in fiscal year 2004 compared to fiscal year 2003 primarily due to company mandated time-off, reductions in labor and discretionary spending as well as other cost saving measures implemented over fiscal years 2004 and 2003, in response to the industry slowdown.

Restructuring and Other Costs

There were no restructuring actions in fiscal year 2005 or 2004. In fiscal year 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 employees from manufacturing, engineering, sales, marketing, and administration in the United States, Japan and Europe. The restructuring actions taken in fiscal year 2003 are proceeding as planned, with the termination of employees having been completed and the facilities related lease payments expected to be completed by the end of fiscal year 2006. 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™ 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 year 2003, relating to a series of involuntary employee terminations.

The annual estimated cost savings from the restructuring actions incurred prior to fiscal year 2004 was \$9 million, of which \$7 million related to workforce reductions and \$2 million related to consolidation of facilities and was not expected to have a material effect on our cost of goods sold or operating expenses. There were no material variances between the actual and anticipated costs of restructuring. As of June 30, 2004, the remaining accrual balance was \$821,000. During the fiscal year ended June 30, 2005, the Company made lease payments of \$632,000 related to the exited facilities. As of June 30, 2005, the remaining accrual balance of \$189,000 is related to lease payments on facilities exited prior to fiscal year 2004 and is expected to be paid by the end of fiscal year 2006. This remaining accrual is included in the consolidated balance sheets under the caption of other current liabilities.

Interest Income and Other, Net

<i>(in millions)</i>	Fiscal year ended June 30,		
	2005	2004	2003
Interest income and other, net	\$ 38	\$ 27	\$ 42
Percentage of total revenues	2%	2%	3%

Interest income and other, net is comprised primarily of interest income earned on the investment and cash portfolio, realized gains or losses on sales of marketable securities, as well as income recognized upon settlement of certain foreign currency contracts.

Provision for Income Taxes

Our effective income tax rate was 25.3%, 25% and 24% in fiscal year 2005, 2004 and 2003, 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 tax exempt interest.

The fiscal year 2005 effective tax rate of 25.3% includes the reinstatement of the Federal R&D credit, which yielded a benefit of \$17.2 million or approximately 3%. The tax rate for fiscal year 2005 is favorably impacted by variances between the fiscal year 2004 tax return and the tax provision for that fiscal year.

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.

The Internal Revenue Service commenced an audit of the Company's fiscal year 2003 and 2004 corporate tax returns. Liabilities for anticipated worldwide tax audit issues have been established based on our estimate of whether, and the extent to which, additional tax payments are probable. The Company believes that adequate reserves have been provided to cover any potential additional tax assessments.

Equity Incentive Program

Our equity incentive 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. The equity incentive program consists of two plans: one under which non-employee directors may be granted options to purchase shares of our stock, and another in which non-employee directors, officers, key employees, consultants and all other employees may be granted options to purchase shares of our stock, restricted stock units and other types of equity awards. Under our equity incentive program, stock 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 generally granted at prices not less than the fair market value of our common stock at the grant date. Restricted stock units may be granted with varying criteria such as time based or performance based vesting. Substantially all of our employees that meet established performance goals and that qualify as Knowledge Employees participate in our main equity incentive plan.

On October 18, 2004, the Company's stockholders approved the 2004 Equity Incentive Plan (the "Omnibus Plan") which provides for the grant of options to purchase shares of the Company's Common Stock, stock appreciation rights, restricted stock, performance shares, performance units and deferred stock units to our employees, consultants and members of our Board of Directors. This new Plan replaces future grants under the 1982 Stock Option Plan and 2000 Nonstatutory Stock Option Plan and supplements the 1998 Outside Director Option Plan. The shareholder approval included the creation of a reserve establishment of 11,000,000 shares of common stock for use under the plan and the ability to transfer up to an additional 1,500,000 shares of forfeited or expired stock under the 1982 Stock Option Plan and the 2000 Nonstatutory Plan.

During the fiscal year ended June 30, 2005, the following actions were taken with regard to the New Equity Incentive Plan: a) a reserve of 11,000,000 shares was established, b) 1,465,853 shares were added to the reserve from the 1982 Stock Option Plan and the 2000 Nonstatutory Plan due to forfeitures or expiration, c) the 1982 Stock Option Plan was terminated; as a result, 12,358,625 shares expired, d) the 2000 Nonstatutory Plan was terminated; and, as a result, 3,447,748 shares expired, e) the 1993 Stock Option Plan was terminated, as a result, 3,500 shares expired and f) The Metrology Stock Option Plan was terminated, as a result 4,238 shares expired.

The following table summarizes the combined activity under the equity incentive plans for the indicated periods:

	Available For Grant	Awards Outstanding	Weighted- Average Price
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
Additional shares reserved	5,751,033	—	—
Options granted ⁽¹⁾	(6,298,343)	6,298,343	52.09
Options canceled/expired	978,478	(978,478)	38.66
Options exercised	—	(5,357,878)	25.74
Balances at June 30, 2004	17,350,886	29,695,945	\$ 35.11
Additional shares reserved	18,369,456	—	—
Plan shares expired	(15,814,111)	—	—
Options granted ⁽¹⁾	(9,625,481)	9,625,481	40.31
Restricted stock units granted ⁽²⁾	(732,528)	—	—
Options canceled/expired	2,267,362	(2,267,362)	41.84
Options exercised	—	(3,675,077)	26.56
Balances at June 30, 2005	11,815,584	33,378,987	\$ 37.08

- (1) Employees received options totaling 2,007,283 shares of common stock as an advance on their fiscal year 2006 focal option grants in the first fiscal quarter of 2005. The grant was equivalent to 50% of the employee's fiscal year 2005 stock option grant. These advanced grant options vest on a six year schedule with 20% vesting after year two and the remaining option shares vesting 1/48th per month for the remainder of the vesting term.
- (2) Any 2004 equity Incentive Plan awards of restricted stock, performance shares, performance units or deferred stock units with a per share or unit purchase price lower than 100% of fair market value on the grant date shall be counted against the total number of shares issuable under the plan as 1.8 shares for every one share subject thereto.

During the fiscal year ended June 30, 2005, our Board of Directors approved the grant of 406,960 shares, respectively, of restricted stock units to selected members of our senior management. These restricted stock units generally vest in two equal installments on the fourth and fifth anniversaries of the date of grant. We recorded the \$16.4 million value of these restricted stock unit grants as a component of shareholders' equity and will amortize that amount over the service period. The value of the restricted stock unit awards was based on the closing market price of our common stock on the date of award. Amortization expense for these awards for the fiscal year ended June 30, 2005 was \$2.3 million, the majority of which is included in selling, general and administrative expense. These restricted stock units were included in the calculation of diluted earnings per share utilizing the treasury stock method.

Liquidity and Capital Resources

<i>(in millions)</i>	As of June 30,		
	2005	2004	2003
Cash and cash equivalents	\$ 874	\$ 599	\$ 450
Short-term marketable securities	1,321	534	507
Long-term marketable securities	—	743	531
Total cash, cash equivalents and marketable securities	\$ 2,195	\$ 1,876	\$ 1,488
Percentage of total assets	55%	53%	52%

We have historically financed our operations through cash generated from operations. Cash provided by operating activities was \$507 million, \$350 million, and \$246 million in fiscal year 2005, 2004 and 2003, respectively. Cash provided by operating activities in fiscal year 2005 consisted primarily of net income of \$467 million increased by non-cash depreciation of \$71 million, and increase in other current liabilities of \$72 million, offset by a decrease in deferred system profit of \$75 million, an increase in net deferred tax assets of \$43 million and an increase in other assets of \$33 million.

Cash provided by operating activities during fiscal year 2004 consisted primarily of net income earned during the year of \$244 million, increases in the deferred system profit of \$107 million and other current liabilities of \$116 million, partially offset by an increase in accounts receivable of \$149 million and an increase in inventories of \$79 million.

Cash provided by operating activities during fiscal year 2003 consisted primarily of net income earned during the year of \$137 million increased by non-cash depreciation of \$71 million, a decrease in accounts receivable of \$53 million, a decrease in inventories of \$64 million, partially offset by a decrease in accounts payable of \$19 million, a decrease in deferred system profit of \$16 million and an increase in other assets of \$17 million.

Cash used in investing activities was \$158 million, \$321 million and \$198 million in fiscal year 2005, 2004 and 2003, 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.

We used \$81 million of cash in financing activities in fiscal year 2005, compared with \$113 million and \$27 million of cash generated from financing activities in fiscal year 2004 and 2003 respectively. Financing activities include dividend payments to our

common stockholders, and sales and repurchases of our common stock. Issuance of common stock provided \$134 million, \$169 million and \$92 million in fiscal year 2005, 2004 and 2003, respectively. We used \$204 million, \$56 million and \$66 million in fiscal year 2005, 2004 and 2003, respectively to repurchase shares of our common stock under the stock repurchase program initiated in 1997. During the third fiscal quarter of 2005, our Board of Directors also approved the initiation of a quarterly cash dividend and declared a dividend of 12 cents per share of our outstanding common stock, payable on June 1, 2005 to our stockholders of record on May 2, 2005. The total amount of dividend paid during the fourth quarter of fiscal year 2005 was \$24 million. Further, the dividend for the first fiscal quarter of 2006 was declared on August 4, 2005 and is payable to our stockholders of record on August 15, 2005. The total amount of dividend payable during the first quarter of fiscal year 2006 is approximately \$24 million.

At June 30, 2005, our principal sources of liquidity consisted of \$2.2 billion of cash, cash equivalents, and marketable securities. 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 at least the next twelve months.

The following is a schedule summarizing our significant operating lease commitments as of June 30, 2005 (in millions):

	Payments Due by Fiscal Year						
	Total	2006	2007	2008	2009	2010	Thereafter
Operating leases	\$ 25.7	\$ 8.4	\$ 6.1	\$ 3.9	\$ 2.8	\$ 1.6	\$ 2.9

We have agreements with financial institutions to sell certain of our trade receivables and promissory notes from customers without recourse. During the years ended June 30, 2005 and 2004, approximately \$306 million and \$166 million of receivables were sold under these arrangements, respectively.

In addition, from time to time we will discount without recourse, Letters of Credit ("LCs") received from customers in payment of goods. During the years ended June 30, 2005 and 2004, several LCs were sold with proceeds totaling \$30 million and \$42 million, respectively. Discounting fees were \$195,000 and \$215,000 for the years ended June 30, 2005 and 2004, respectively.

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 among different suppliers. We estimate our open inventory purchase commitment as of June 30, 2005 to be approximately \$147 million. Actual expenditures will vary based upon the volume of the transactions and length of contractual service provided. In addition, the amounts paid under these arrangements may be less in the event that the arrangements are renegotiated or cancelled. Certain agreements provide for potential cancellation penalties.

Working capital increased to \$2.3 billion as of June 30, 2005, compared to \$1.3 billion at June 30, 2004. 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, we believe that cash generated from operations, together with the liquidity provided by existing cash balances, will be sufficient to satisfy our liquidity requirements for at least the next twelve months.

FACTORS AFFECTING RESULTS, INCLUDING RISKS AND UNCERTAINTIES

Fluctuations in Operating Results and Stock Price

Our operating results and stock price 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 Quarterly Report on Form 10-Q. Our stock price will continue to be subject to daily variations as well. In addition, our future operating results and stock price may not follow any past trends. We believe the factors that could make our results fluctuate and difficult to predict include:

- our ability to successfully implement new systems;
- the cyclical nature of the semiconductor industry;
- global economic uncertainty;
- changing international economic conditions;
- competitive pressure;
- our ability to develop and implement new technologies and introduce new products;
- our ability to comply with internal controls evaluations and attestation requirements;
- our customers' acceptance and adoption of our new products and technologies;
- our ability to maintain supply of key components;
- our ability to manage our manufacturing requirements;
- our reliance on services provided by third parties;
- our ability to protect our intellectual property;
- our ability to attract, retain, and replace key employees;
- our ability to manage risks associated with acquisitions;
- litigation;
- worldwide political instability;
- recently enacted and proposed changes in securities laws and regulations;
- earthquake and other uninsured risks;
- future changes in accounting and tax standards or practices;
- changing regulatory environment;
- our exposure to fluctuations in foreign currency exchange rates; and
- our ability to guard against computer viruses

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.

Implementation of New Systems

We may experience difficulties with our new enterprise resource planning (“ERP”) system implemented as of February 7, 2005 that could disrupt our ability to timely and accurately process and report key components of the results of our consolidated operations, our financial position and cash flows. Any disruptions or difficulties that may occur in connection with this new ERP system or any future systems could also adversely affect our ability to complete the evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. System failure or malfunctioning may result in disruption of operations and the inability to process transactions and could adversely affect our financial results. If we encounter unforeseen problems with regard to system operations or the new ERP system, we could be adversely affected.

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.

Global Economic Uncertainty

Our business is ultimately driven by the global demand for electronic devices by consumers and businesses. The picture of end-user demand has been mixed over the last few months and visibility has been reduced as a result of high oil prices, the continued threat of terrorist activities and political instability in certain regions of the world. A protracted global economic slowdown may adversely affect our business and results of operations.

International Trade, Operations 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 or terrorism in regions where we have operations along with 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.

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 us. 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, similar to what we offer, using innovative technology to sell products into specialized markets. Loss of competitive position could negatively affect our prices, customer orders, revenue, gross margins, 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, in the current semiconductor industry, the size of semiconductor devices continues to shrink, there is a transition to copper and other new materials, and a 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 staffing of highly qualified employees. 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. We currently are in the initial stages of design and implementation of a new integrated financial and supply chain management system. Disruptions or delays in making changes to our integrated financial and supply chain management system could adversely impact our operations and our ability to forecast sales demand, ship products, manage our product inventory and record and report financial and management information on a timely and accurate basis.

Reliance on services provided by third parties

We outsource a number of services including our transportation and logistics management of spare parts to domestic and overseas third party service providers. While outsourcing arrangements may lower our cost of operations, they also reduce our direct control over the services rendered. It is uncertain what effect such diminished control will have on the quality or quantity of products delivered or services rendered, or our ability to quickly respond to changing market conditions. Disruptions or delays at our third-party service providers due to events such as regional economic, business, environmental, political, informational technology system failures, or military actions could adversely impact our operations and our ability to ship products, manage our product inventory and record and report financial and management information on a timely and accurate basis.

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, or instigation of litigation or other administrative proceedings 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.

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 alleging 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.

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 adversely affect 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. We are predominantly uninsured for losses and interruptions caused by terrorist acts and acts of war.

Recently enacted and proposed changes in securities laws and regulations

Recently enacted and proposed changes in the laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, will increase our expenses as we evaluate the implications of new rules and devote resources to respond to the new requirements. Sarbanes-Oxley Act mandates, among other things, that companies adopt new corporate governance measures and imposes comprehensive reporting and disclosure requirements, sets stricter independence and financial expertise standards for audit committee members and imposes increased civil and criminal penalties for companies, their chief executive officers and chief financial officers and directors for securities law violations. In particular, we expect to incur additional administrative expense as we implement Section 404 of the Sarbanes-Oxley Act, which requires management to report on, and our Independent Registered Public Accounting Firm to attest to, our internal control over financial reporting. In addition, The Nasdaq National Market, on which our common stock is listed, has also adopted comprehensive rules and regulations relating to corporate governance. These laws, rules and regulations have increased and will continue to increase the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management's attention from business operations. We also expect these developments to make it more difficult and more expensive for us to obtain director and officer liability insurance in the future, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. Further, our board members, Chief Executive Officer and Chief Financial Officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified board members and executive officers, which would adversely affect our business.

Earthquake and Other Uninsured Risks

We purchase insurance to help mitigate the economic impact of certain insurable risks, however, certain other risks are uninsurable or are insurable only at significant costs and cannot be mitigated with 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 occurs, we could suffer major financial loss.

Future Changes in Accounting and Taxation Standards or Practices

A change in accounting standards or practices or a change in existing taxation rules or practices can have a significant effect on our reported results and may even affect our reporting of transactions completed before the change is effective. New accounting pronouncements and taxation rules and varying interpretations of accounting pronouncements and taxation practice have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

For example, the adoption of SFAS No. 123(R) which would require us to measure all employee stock-based compensation awards using a fair value method beginning in fiscal year 2006 and record such expense in our consolidated financial statements will have a material impact on our consolidated financial statements as reported under generally accepted accounting principles in the United States.

Exposure to various risks related to the regulatory environment.

We are subject to various risks related to new, different, inconsistent or even conflicting laws, rules and regulations that may be enacted by legislative bodies and/or regulatory agencies in the countries in which we operate and with which we must comply.

Exposure to fluctuations in foreign currency exchange rates

We have some exposure to fluctuations in foreign currency exchange rates. We have international subsidiaries that operate and sell our products globally. We routinely hedge these exposures in an effort to minimize the impact of currency fluctuations. However, we may still be adversely affected by changes in foreign currency exchange rates or declining economic conditions in these countries.

Computer viruses may disrupt our operations

Despite our implementation of network security measures, our tools and servers are vulnerable to computer viruses, break-ins, and similar disruptions from unauthorized tampering with our computer systems and tools located at customer sites. Any such event could have an adverse effect on our business, operating results, and financial condition.

Effects of Recent Accounting Pronouncements

In December 2004, the FASB issued SFAS No. 123 (revised 2004), "Share-Based Payment." SFAS No. 123(R) would require us to measure all employee stock-based compensation awards using a fair value method and record such expense in its consolidated financial statements. In March 2005, the SEC issued SAB 107, which provides the Staff's views regarding interactions between SFAS No. 123(R) and certain SEC rules and regulations and provides interpretations of the valuation of share-based payments for public companies. The adoption of SFAS No. 123(R) will require additional accounting related to the income tax effects and additional disclosure regarding the cash flow effects resulting from share-based payment arrangements. SFAS No. 123(R) is effective for us beginning in the first quarter of fiscal 2006. The adoption of SFAS No. 123(R) will have a material impact on our consolidated results of operations, financial position and statement of cash flows. We are evaluating what pricing model to select upon adoption and the impact by financial statement line. Based on preliminary analysis, we believe the impact on our consolidated results of operations will be similar to the proforma impact disclosed under SFAS No. 123 in periods prior to adoption of SFAS No. 123(R).

In June 2005, the FASB issued SFAS No. 154, "Accounting Changes and Error Corrections", a replacement of APB Opinion No. 20, "Accounting Changes", and Statement No. 3, "Reporting Accounting Changes in Interim Financial Statements". Statement 154 changes the requirements for the accounting for and reporting of a change in accounting principle. Previously, most voluntary changes in accounting principles were required recognition via a cumulative effect adjustment within net income of the period of the change. Statement 154 requires retrospective application to prior periods' financial statements, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. Statement 154 is effective for accounting changes made in fiscal years beginning after December 15, 2005; however, the Statement does not change the transition provisions of any existing accounting pronouncements. The adoption of SFAS No. 154 is not expected have a material effect on our consolidated financial position, results of operations or cash flows.

In March 2005, the FASB published FASB Interpretation No. 47, "Accounting for Conditional Asset Retirement Obligations," which clarifies that the term, conditional asset retirement obligation, as used in SFAS No. 143, "Accounting for Asset Retirement Obligations," refers to a legal obligation to perform an asset retirement activity in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. The uncertainty about the timing and (or) method of settlement of a conditional asset retirement obligation should be factored into the measurement of the liability when sufficient information exists. The interpretation also clarifies when an entity would have sufficient information to reasonably estimate the fair value of an asset retirement obligation. This interpretation is effective no later than the end of our fiscal 2006. The adoption of this Interpretation is not expected to have a material effect on our consolidated financial position or results of operations.

In December 2004, the FASB issued SFAS No. 153, Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29. SFAS No. 153 addresses the measurement of exchanges of nonmonetary assets and redefines the scope of transactions that should be measured based on the fair value of the assets exchanged. SFAS No. 153 is effective for us for nonmonetary asset exchanges beginning in the first quarter of fiscal 2006. The adoption of SFAS No. 153 is not expected to have a material effect on our consolidated financial position or results of operations.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2, Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004. The American Jobs Creation Act introduces a special one-time dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer (repatriation provision), provided certain criteria are met. FSP FAS 109-2 provides accounting and disclosure guidance for the repatriation provision. We completed our evaluation of the Foreign Earnings Repatriation Provisions and decided not to repatriate foreign earnings because it was not beneficial to the Company.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs, an amendment of ARB No. 43, Chapter 4". SFAS No. 151 clarifies that abnormal inventory costs such as costs of idle facilities, excess freight and handling costs, and wasted materials (spoilage) are required to be recognized as current period charges. The provisions of SFAS No.151 are effective for the fiscal year beginning July 1, 2005. The adoption of SFAS No. 151 is not expected to have a material impact on our consolidated financial position, results of operations and cash flows.

In March 2004, the Emerging Issues Task Force ("EITF") reached a consensus on recognition and measurement guidance previously discussed under EITF 03-1. The consensus clarifies the meaning of other-than-temporary impairment and its application to investments in debt and equity securities, in particular investments within the scope of SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities," and investments accounted for under the cost method. In September 2004, the Financial Accounting Standards Board approved the issuance of a FASB Staff Position to delay the requirement to record impairment losses under EITF 03-1. The approved delay applies to all securities within the scope of EITF 03-1. We will evaluate the impact of EITF 03-1 once the final guidance is issued.

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, 2005. Actual results may differ materially.

At the end of fiscal year 2005, we had an investment portfolio of fixed income securities of \$1.3 billion, excluding those classified as cash and cash equivalents (detail of these securities is included in Note 3 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, 2005, the fair value of the portfolio would have declined by \$5.5 million.

As of June 30, 2005, we had net forward contracts to sell \$289 million in foreign currency in order to hedge currency exposures (detail of these contracts is included in Note 12 of the Notes to the Consolidated Financial Statements under "Derivative Instruments." If we had entered into these contracts on June 30, 2005, the U.S. dollar equivalent would be \$281 million. A 10% adverse move in all currency exchange rates affecting the contracts would decrease the fair value of the contracts by \$39 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

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KLA-TENCOR CORPORATION
Consolidated Balance Sheets

	As of June 30,	
	2005	2004
<i>(in thousands, except per share data)</i>		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 874,509	\$ 598,698
Marketable securities	1,320,677	534,456
Accounts receivable, net	333,218	372,773
Inventories, net	358,339	337,414
Deferred income taxes	265,467	310,150
Other current assets	50,435	38,011
Total current assets	3,202,645	2,191,502
Land, property and equipment, net	385,222	376,052
Marketable securities	—	743,202
Other assets	398,505	228,423
Total assets	\$ 3,986,372	\$ 3,539,179
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 67,717	\$ 63,991
Deferred system profit	209,899	284,813
Unearned revenue	80,122	57,318
Other current liabilities	574,124	505,507
Total current liabilities	931,862	911,629
Commitments and contingencies (Note 11)		
Minority interest in subsidiary	9,253	—
Stockholders' equity:		
Preferred stock, \$0.001 par value, 1,000 shares authorized, none outstanding	—	—
Common stock, \$0.001 par value, 500,000 shares authorized, 196,624 and 196,836 shares issued and outstanding	196	196
Capital in excess of par value	957,541	984,608
Deferred stock based compensation	(14,415)	—
Retained earnings	2,083,638	1,640,587
Accumulated other comprehensive income	18,297	2,159
Total stockholders' equity	3,045,257	2,627,550
Total liabilities and stockholders' equity	\$ 3,986,372	\$ 3,539,179

See accompanying notes to consolidated financial statements.

KLA-TENCOR CORPORATION
Consolidated Statements of Operations

	<i>Year ended June 30,</i>		
	2005	2004	2003
<i>(in thousands except per share data)</i>			
Revenues:			
Product	\$ 1,770,300	\$ 1,200,160	\$ 1,060,142
Service	314,853	296,558	262,907
Total revenues	2,085,153	1,496,718	1,323,049
Costs and operating expenses:			
Costs of revenues	862,353	670,013	671,505
Engineering, research and Development	340,277	280,641	268,291
Selling, general and Administrative	299,961	248,706	253,933
Non-recurring restructuring and other	—	—	(9,402)
Total costs and operating expenses	1,502,591	1,199,360	1,184,327
Income from operations	582,562	297,358	138,722
Interest income and other, net	37,755	27,358	41,796
Income before income taxes and minority interest	620,317	324,716	180,518
Provision for income taxes	157,000	81,015	43,327
Income before minority interest	463,317	243,701	137,191
Minority interest	3,378	—	—
Net income	\$ 466,695	\$ 243,701	\$ 137,191
Net income per share:			
Basic	\$ 2.38	\$ 1.25	\$ 0.72
Diluted	\$ 2.32	\$ 1.21	\$ 0.70
Weighted average number of shares:			
Basic	196,346	194,976	189,817
Diluted	201,014	201,799	194,785

See accompanying notes to consolidated financial statements.

KLA-Tencor Corporation
Consolidated Statements of Stockholders' Equity

<i>(in thousands)</i>	Common Stock and Capital in Excess of Par Value		Retained Earnings	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income	Totals
	Shares	Amount				
Balances 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 gain 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 and retirement of common stock	(1,972)	(65,912)	—	—	—	(65,912)
Tax benefits of stock option transactions	—	22,435	—	—	—	22,435
Balances at June 30, 2003	191,733	\$ 814,968	\$ 1,396,886	—	\$ 3,687	\$ 2,215,541
Components of comprehensive income:						
Net income	—	—	243,701	—	—	243,701
Change in unrealized gain on investments	—	—	—	—	(9,724)	(9,724)
Currency translation adjustments	—	—	—	—	10,009	10,009
Deferred gains on cash flow hedging instruments	—	—	—	—	(1,813)	(1,813)
Total comprehensive income						242,173
Net issuance under employee stock plans	6,278	168,812	—	—	—	168,812
Repurchase and retirement of common stock	(1,175)	(55,806)	—	—	—	(55,806)
Tax benefits of stock option transactions	—	56,830	—	—	—	56,830
Balances at June 30, 2004	196,836	\$ 984,804	\$ 1,640,587	—	\$ 2,159	\$ 2,627,550
Components of comprehensive income:						
Net income	—	—	466,695	—	—	466,695
Change in unrealized gain on investments	—	—	—	—	5,315	5,315
Currency translation adjustments	—	—	—	—	3,929	3,929
Deferred gains on cash flow hedging instruments	—	—	—	—	6,894	6,894
Total comprehensive income						482,833
Net issuance under employee stock plans	4,734	133,602	—	—	—	133,602
Repurchase and retirement of common stock	(4,946)	(203,658)	—	—	—	(203,658)
Issuance of restricted stock units	—	16,423	—	(16,423)	—	—
Stock options assumed in acquisitions	—	1,490	—	(908)	—	582
Amortization of deferred stock-based compensation	—	—	—	2,916	—	2,916
Cash dividends paid (\$0.12 per share)	—	—	(23,644)	—	—	(23,644)
Tax benefits of stock option transactions	—	24,525	—	—	—	24,525
Other	—	551	—	—	—	551
Balances at June 30, 2005	196,624	\$ 957,737	\$ 2,083,638	\$ (14,415)	\$ 18,297	\$ 3,045,257

See accompanying notes to consolidated financial statements.

KLA-Tencor Corporation
Consolidated Statements of Cash Flows

<i>(in thousands)</i>	Year ended June 30,		
	2005	2004	2003
Cash flows from operating activities:			
Net income	\$ 466,695	\$ 243,701	\$ 137,191
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	70,853	82,926	71,448
Non-cash stock based compensation	2,916	—	—
Minority interest	(3,378)	—	—
Net (gain) loss on sale of marketable securities and other investments	3,204	(8,889)	(24,082)
Non-recurring restructuring charges	—	—	(11,912)
Deferred income taxes	(42,604)	(24,578)	(10,629)
Tax benefit from employee stock options	24,525	56,830	22,435
Changes in assets and liabilities, net of assets acquired and liabilities assumed in business combinations:			
Accounts receivable, net	36,645	(149,240)	53,468
Inventories	(18,778)	(78,616)	64,215
Other assets	(33,254)	(26,291)	(17,183)
Accounts payable	2,751	30,104	(19,093)
Deferred system profit	(74,914)	107,327	(16,366)
Other current liabilities	72,074	116,403	(3,235)
Net cash provided by operating activities	506,735	349,677	246,257
Cash flows from investing activities:			
Acquisitions of businesses, net of cash received	(44,628)	—	—
Purchase of property, plant and equipment	(59,675)	(55,528)	(133,766)
Proceeds from sale of property, plant and equipment	—	—	3,197
Purchase of available-for-sale securities	(2,579,371)	(2,078,409)	(1,688,769)
Proceeds from sale of available-for-sale securities	2,205,354	1,649,558	1,541,455
Proceeds from maturity of available-for-sale securities	320,252	163,823	79,769
Net cash used in investing activities	(158,068)	(320,556)	(198,114)
Cash flows from financing activities:			
Issuance of common stock	133,602	168,812	92,499
Payment of dividends to stockholders	(23,644)	—	—
Stock repurchases	(203,658)	(55,806)	(65,912)
Proceeds from sale of minority interest in subsidiary	12,631	—	—
Net cash provided by (used in) in financing activities	(81,069)	113,006	26,587
Effect of exchange rate changes on cash and cash equivalents	8,213	6,968	2,753
Net increase in cash and cash equivalents	275,811	149,095	77,483
Cash and cash equivalents at beginning of period	598,698	449,603	372,120
Cash and cash equivalents at end of period	\$ 874,509	\$ 598,698	\$ 449,603
Supplemental cash flow disclosures:			
Income taxes paid, net	\$ 185,315	\$ 11,899	\$ 7,053
Interest paid	\$ 1,114	\$ 647	\$ 352
Supplemental non-cash investing activities:			
Software and technology exchanged for common stock of public company	\$ —	\$ —	\$ 15,152

See accompanying notes to consolidated financial statements.

KLA-TENCOR CORPORATION
NOTES 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 majority-owned subsidiaries, and the ownership interests of minority investors are recorded as minority interests. 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.

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

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 original or remaining maturities of less than three months at the date of purchase are considered to be cash equivalents. Prior to the third fiscal quarter of 2005, the Company classified a portion of its available-for-sale securities as long-term investments. During the third fiscal quarter of 2005, the Company made the determination that these investments be available for use in current operations. Therefore, as of June 30, 2005, the Company classified all available-for-sale securities as short-term investments or cash equivalents. 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. 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 were classified as trading securities prior to December 31, 2003. These trading securities were 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. As of December 31, 2003, all of the trading securities had been sold.

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, KLA-Tencor

typically does not attempt to reduce or eliminate the inherent market risks. Non-marketable equity securities and other investments are recorded at historical cost. 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. The Company reviews and sets standard costs semi-annually at current manufacturing costs in order to approximate actual costs. The Company's manufacturing overhead standards for product costs are calculated assuming full absorption of forecasted spending over projected volumes, adjusted for excess capacity. Abnormal inventory costs such as costs of idle facilities, excess freight and handling costs, and wasted materials (spoilage) are recognized as current period charges. The Company writes down inventory based on forecasted demand and technological obsolescence. These factors are impacted by market and economic conditions, technology changes, new product introductions and changes in strategic direction and require estimates that may include uncertain elements. Actual demand may differ from forecasted demand and such differences may have a material effect on recorded inventory values.

Property and Equipment Property and equipment are recorded at cost, net of accumulated depreciation. 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. Depreciation expense for the years ended June 30, 2005, 2004 and 2003 was \$66 million, \$69 million, and \$60 million, respectively.

Goodwill and Intangible Assets As required by SFAS No. 142, goodwill is not amortized but is subject to impairment tests annually, or earlier if indicators of potential impairment exist, using a fair-value-based approach. Purchased technology, patents, trademarks and other intangible assets are presented at cost, net of accumulated amortization. Intangible assets are amortized over their estimated useful lives and assessed for impairment under SFAS No. 144. The Company completed its annual evaluation of the goodwill by reporting unit during the quarter ended December 31, 2004, and concluded that there was no impairment. There have been no significant events or circumstances affecting the valuation of goodwill subsequent to the impairment test performed in the second quarter of fiscal year 2005.

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, 2005 and 2004, there were no amounts capitalized as KLA-Tencor's current development process is essentially completely concurrent with the establishment of technological feasibility.

KLA-Tencor also capitalizes certain internal and external costs incurred to acquire and create internal use software in accordance with AICPA Statement of Position 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." Capitalized software is included in property and equipment and is depreciated over three to five years when development is complete.

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, United States 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 an allowance 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 and in certain factoring transactions. These counterparties are large international financial institutions and to date, no such counterparty has failed to meet its financial obligations to us.

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 forecasted foreign currency denominated transactions expected to occur within twelve 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 forecasted 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.

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 revenues 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 11 "Commitments and Contingencies").

Revenue Recognition KLA-Tencor recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed or determinable, and collectibility is reasonably assured. 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. KLA-Tencor recognizes revenue for system sales upon a positive affirmation by the customer that the system has been installed and is operating according to predetermined specifications. This positive affirmation is generally evidenced by an acceptance document signed by the customer. In certain limited cases, KLA-Tencor may deviate from the need for a written acceptance by the customer, as follows:

- 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;
- 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;
- 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 represents the fair value of installation;

- 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;
- 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 6.6% of total revenue for fiscal year 2005, 4.9% of total revenue for fiscal year 2004 and 3.1% of total revenue for fiscal years 2003. Shipping charges billed to customers are included in system revenue and the related shipping costs are included in cost of revenues.

KLA-Tencor also allows for multiple element revenue arrangements 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 relative fair value of the undelivered 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 unit of accounting, and fulfill the following criteria. (a), the delivered item(s) has value to the customer on a standalone basis; (b), there is objective and reliable evidence of the fair value of the undelivered item(s); and (c), if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the Company. If the arrangement does not meet all the above criteria, the entire amount of the sales contract is deferred until all elements are accepted by the customer.

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 contract 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, and collectibility is reasonably assured.

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.

The deferred profit balance as of June 30, 2005 and 2004 was \$210 million and \$285 million, respectively and equals the amount of system revenue that was invoiced and due on shipment but deferred,

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, 2005 and 2004 was \$80 million and \$57 million, respectively.

Strategic Development Agreements Gross engineering, research and development expenses were partially offset by \$8 million, \$11 million and \$18 million in external funding received under certain strategic development programs conducted with several of KLA-Tencor's customers and government grants in fiscal year 2005, 2004 and 2003, respectively.

Shipping and Handling Costs Shipping and handling costs are included as a component of cost of sales.

Advertising Expenses Advertising costs are expensed as incurred. Advertising expenses for fiscal years 2005, 2004 and 2003 were \$4.6 million, \$3.9 million and \$3.6 million, 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 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 presented is the inclusion of the dilutive effect of stock options and restricted stock units.

Accounting for Stock-Based Compensation Plans KLA-Tencor accounts for its employee stock option and employee stock purchase plans under the intrinsic value recognition and measurement principles of Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees," and related Interpretations, and has adopted the disclosure-only provisions of Statement of Financial Accounting Standard ("SFAS") No. 123, "Accounting for Stock-Based Compensation," as amended by SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosures."

Pro forma information regarding net income and net income per share is required by SFAS No. 123, and has been determined as if KLA-Tencor had accounted for its employee stock purchase plan and employee stock options under the fair value method of SFAS No. 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:

	2005	2004	2003
Stock option plan:			
Expected stock price volatility	58%	60%	70%
Risk free interest rate	3.6%	3.4%	2.8%
Dividend yield ⁽¹⁾	0.04%	--	--
Expected life of options (in years)	5.6	5.5	5.5
Stock purchase plan:			
Expected stock price volatility	34%	47%	75%
Risk free interest rate	3.4%	1.6%	2.2%
Expected life of options (in years)	1-2	1-2	1-2

⁽¹⁾ During the third fiscal quarter of 2005, the Company's Board of Directors approved the initiation of a quarterly cash dividend of 12 cents per share of outstanding common stock.

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 No. 123, the estimated fair value of the options is amortized to expense over the options' vesting periods using the straight-line method. KLA-Tencor's pro-forma information is as follows (in thousands except per share data):

Year ended June 30,	2005	2004	2003
Net income – as reported	\$ 466,695	\$ 243,701	\$ 137,191
Add:			
Stock-based compensation expense included in reported net income, net of tax	1,831	—	—
Deduct:			
Total stock-based compensation expense determined under fair value based method for all awards, net of tax	(93,281)	(82,446)	(90,880)
Net income – pro forma	\$ 375,245	\$ 161,255	\$ 46,311
Earnings per share:			
As reported			
Basic	\$ 2.38	\$ 1.25	\$ 0.72
Diluted	\$ 2.32	\$ 1.21	\$ 0.70
Pro forma			
Basic	\$ 1.91	\$ 0.83	\$ 0.24
Diluted	\$ 1.87	\$ 0.80	\$ 0.24

Variable Interest Entities In December 2003, FASB revised FIN 46(R). FIN 46(R) requires that if an entity is the primary beneficiary of a variable interest entity, the assets, liabilities, and results of operations of the variable interest entity should be included in the consolidated financial statements of the entity. KLA-Tencor adopted FIN 46(R) effective March 31, 2004. KLA-Tencor had a minority equity interest in a development stage company for which KLA-Tencor was considered to be the primary beneficiary within the provisions of FIN 46(R). KLA-Tencor consolidated this entity as of March 31, 2004. During the fiscal quarter ended December 31, 2004, KLA-Tencor acquired the remaining equity outstanding in this entity. Subsequently, KLA-Tencor transferred the assets of this entity to a limited liability corporation in which a third party acquired a minority interest (see Note 5 Business Combinations). The impact of the consolidation did not have a material impact on KLA-Tencor's financial position or results of operations. KLA-Tencor has concluded that none of the Company's remaining equity investments are not material to the Company's financial position and do not require consolidation as they are either not variable interest entities or in the event they are variable interest entities, that KLA-Tencor is not considered to be the primary beneficiary.

Recent Accounting Pronouncements In December 2004, the FASB issued SFAS No. 123 (revised 2004), "Share-Based Payment." SFAS No. 123(R) would require the Company to measure all employee stock-based compensation awards using a fair value method and record such expense in its consolidated financial statements. In March 2005, the SEC issued SAB 107, which provides the Staff's views regarding interactions between SFAS No. 123(R) and certain SEC rules and regulations and provides interpretations of the valuation of share-based payments for public companies. The adoption of SFAS No. 123(R) will require additional accounting related to the income tax effects and additional disclosure regarding the cash flow effects resulting from share-based payment arrangements. SFAS No. 123(R) is effective for the Company beginning in the first quarter of fiscal 2006. The adoption of SFAS No. 123(R) will have a material impact on the Company's consolidated results of operations, financial position and statement of cash flows. The Company is evaluating what pricing model to select upon adoption and the impact by financial statement line. Based on preliminary analysis, the Company believes the impact on the Company's consolidated results of operations will be similar to the proforma impact disclosed under SFAS No. 123 in periods prior to adoption of SFAS No. 123(R).

In June 2005, the FASB issued SFAS No. 154, "Accounting Changes and Error Corrections", a replacement of APB Opinion No. 20, "Accounting Changes", and Statement No. 3, "Reporting Accounting Changes in Interim Financial Statements". Statement 154 changes the requirements for the accounting for and reporting of a change in accounting principle. Previously, most voluntary changes in accounting principles were required recognition via a cumulative effect adjustment within net income of the period of the change. Statement 154 requires retrospective application to prior periods' financial statements, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. Statement 154 is effective for accounting changes made in fiscal years beginning after December 15, 2005; however, the Statement does not change the transition provisions of any existing accounting pronouncements. The adoption of SFAS No. 154 is not expected have a material effect on the Company's consolidated financial position, results of operations or cash flows.

In March 2005, the FASB published FASB Interpretation No. 47, "Accounting for Conditional Asset Retirement Obligations," which clarifies that the term, conditional asset retirement obligation, as used in SFAS No. 143, "Accounting for Asset Retirement Obligations," refers to a legal obligation to perform an asset retirement activity in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. The uncertainty about the timing and (or) method of settlement of a conditional asset retirement obligation should be factored into the measurement of the liability when sufficient information exists. The interpretation also clarifies when an entity would have sufficient information to reasonably estimate the fair value of an asset retirement obligation. This interpretation is effective no later than the end of the Company's fiscal 2006. The adoption of this Interpretation is not expected to have a material effect on the Company's consolidated financial position or results of operations.

In December 2004, the FASB issued SFAS No. 153, Exchanges of Nonmonetary Assets, an amendment of APB Opinion No. 29. SFAS No. 153 addresses the measurement of exchanges of nonmonetary assets and redefines the scope of transactions that should be measured based on the fair value of the assets exchanged. SFAS No. 153 is effective for the Company for nonmonetary asset exchanges beginning in the first quarter of fiscal 2006. The adoption of SFAS No. 153 is not expected to have a material effect on the Company's consolidated financial position or results of operations.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2, Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004. The American Jobs Creation Act introduces a special one-time dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer (repatriation provision), provided certain criteria are met. FSP FAS 109-2 provides accounting and disclosure guidance for the repatriation provision. The Company completed its evaluation of the Foreign Earnings Repatriation Provisions and decided not to repatriate foreign earnings because it was not beneficial to the Company.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs, an amendment of ARB No. 43, Chapter 4". SFAS No. 151 clarifies that abnormal inventory costs such as costs of idle facilities, excess freight and handling costs, and wasted materials (spoilage) are required to be recognized as current period charges. The provisions of SFAS No.151 are effective for the fiscal year beginning July 1, 2005. The adoption of SFAS No. 151 is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

In March 2004, the Emerging Issues Task Force (“EITF”) reached a consensus on recognition and measurement guidance previously discussed under EITF 03-1. The consensus clarifies the meaning of other-than-temporary impairment and its application to investments in debt and equity securities, in particular investments within the scope of SFAS No. 115, “Accounting for Certain Investments in Debt and Equity Securities,” and investments accounted for under the cost method. In September 2004, the Financial Accounting Standards Board approved the issuance of a FASB Staff Position to delay the requirement to record impairment losses under EITF 03-1. The approved delay applies to all securities within the scope of EITF 03-1. The Company will evaluate the impact of EITF 03-1 once the final guidance is issued.

NOTE 2 – FINANCIAL STATEMENT COMPONENTS

Consolidated Balance Sheets

June 30, (in thousands)

	2005	2004
Accounts receivable, net		
Accounts receivable, gross	\$ 345,443	\$ 385,171
Allowance for doubtful accounts	(12,225)	(12,398)
	<u>\$ 333,218</u>	<u>\$ 372,773</u>
Inventories, net		
Customer service parts	\$ 124,631	\$ 104,445
Raw materials	87,298	92,070
Work-in-process	64,388	69,497
Finished goods and demonstration equipment	82,022	71,402
	<u>\$ 358,339</u>	<u>\$ 337,414</u>
Land, property and equipment, net		
Land	\$ 84,548	\$ 84,053
Buildings and improvements	154,405	149,813
Machinery and equipment	348,145	306,309
Office furniture and fixtures	41,480	41,251
Leasehold improvements	138,787	135,622
Construction in process	6,276	14,672
	<u>773,641</u>	<u>731,720</u>
Less: accumulated depreciation	(388,419)	(355,668)
	<u>\$ 385,222</u>	<u>\$ 376,052</u>
Other assets		
Goodwill & other intangibles, net	\$ 58,670	\$ 20,621
Long-term investments	137,143	110,287
Deferred tax assets – long-term	192,613	88,593
Other	10,079	8,922
	<u>\$ 398,505</u>	<u>\$ 228,423</u>

June 30, (in thousands)

	2005	2004
Other current liabilities		
Warranty and retrofit	\$ 52,845	\$ 44,497
Compensation and benefits	251,060	224,191
Income taxes payable	142,855	146,632
Restructuring accrual	189	821
Other accrued expenses	127,175	89,366
	<u>\$ 574,124</u>	<u>\$ 505,507</u>
Accumulated other comprehensive income (loss):		
Currency translation adjustments	\$ 11,374	\$ 7,445
Gains (losses) on cash flow hedging instruments	5,335	(1,559)
Unrealized gains (losses) on investments, net of taxes (benefits) of \$945 in 2005 and \$(2,353) in 2004	1,588	(3,727)
	<u>\$ 18,297</u>	<u>\$ 2,159</u>

Consolidated Statements of Operations

Year ended June 30, (in thousands)	2005	2004	2003
Interest income and other, net			
Interest income	\$ 38,783	\$ 20,359	\$ 24,466
Interest expense	(1,750)	(519)	(386)
Foreign exchange gain (loss)	4,762	3,527	(3,058)
Realized gains (losses) on sale of investments	(2,889)	8,889	21,780
Other	(1,151)	(4,898)	(1,006)
	<u>\$ 37,755</u>	<u>\$ 27,358</u>	<u>\$ 41,796</u>

NOTE 3 – MARKETABLE SECURITIES

The amortized costs and estimated fair value of securities available-for-sale as of June 30, 2005 and 2004 are as follows:

<i>June 30, 2005 (in thousands)</i>	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasuries	\$ 42,898	\$ 19	\$ (335)	\$ 42,582
Mortgage-backed securities	34,798	—	—	34,798
Municipal bonds	1,457,114	1,295	(2,561)	1,455,848
Corporate equity securities	7,772	4,115	—	11,887
Money market bank deposits and other	520,124	—	—	520,124
	<u>2,062,706</u>	<u>5,429</u>	<u>(2,896)</u>	<u>2,065,239</u>
Less: Cash equivalents	744,571	—	(9)	744,562
Short-term marketable securities	1,318,135	5,429	(2,887)	1,320,677
Long-term marketable securities	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

<i>June 30, 2004 (in thousands)</i>	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasuries	\$ 113,873	\$ 298	\$ (596)	\$ 113,575
Mortgage-backed securities	15,215	18	(85)	15,148
Municipal bonds	1,406,776	604	(6,496)	1,400,884
Corporate equity securities	928	250	(73)	1,105
Money market bank deposits and other	212,307	—	—	212,307
	<u>1,749,099</u>	<u>1,170</u>	<u>(7,250)</u>	<u>1,743,019</u>
Less: Cash equivalents	465,447	—	(86)	465,361
Short-term marketable securities	537,109	447	(3,100)	534,456
Long-term marketable securities	<u>\$ 746,543</u>	<u>\$ 723</u>	<u>\$ (4,064)</u>	<u>\$ 743,202</u>

Prior to the third fiscal quarter of 2005, the Company classified auction rate securities with reset dates of 90 days or less, as cash equivalents on the Consolidated Balance Sheets. In the third fiscal quarter of 2005, the Company classified all auction rate securities as short-term investments. To conform to the current year presentation, the Company reclassified \$204.0 million and \$157.3 million of auction rate securities from cash equivalents to short-term investments as of June 30, 2004 and 2003, respectively. This change in classification had no effect on the amounts previously reported under the headings of “total current assets”, “total assets”, “net income” or “cash flow from operations” of the Company. The impact on the Consolidated Statement of Cash Flows was an increase of \$46.7 million and \$99.6 million in cash used in investing activities for the year ended June 30, 2004 and 2003, respectively.

The following table summarizes the amounts in the Consolidated Balance Sheets as previously reported and as reclassified (in thousands):

Year ended June 30,	As Reported			As Reclassified		
	Cash and Cash Equivalents	Short-term Marketable Securities	Total	Cash and Cash Equivalents	Short-term Marketable Securities	Total
2004	\$ 802,678	\$ 330,476	\$ 1,133,154	\$ 598,698	\$ 534,456	\$ 1,133,154
2003	\$ 606,903	\$ 350,061	\$ 956,964	\$ 449,603	\$ 507,361	\$ 956,964

The following table summarizes the amounts in the Consolidated Statement of Cash Flows as previously reported and as reclassified (in thousands):

Year ended June 30,	As Reported			As Reclassified		
	Purchase of available for sale securities	Proceeds from sale of available for sale securities	Total	Purchase of available for sale securities	Proceeds from sale of available for sale securities	Total
2004	\$ (1,736,822)	\$ 1,354,651	\$ (382,171)	\$ (2,078,408)	\$ 1,649,558	\$ (428,850)
2003	\$ (1,288,151)	\$ 1,240,437	\$ (47,714)	\$ (1,688,769)	\$ 1,541,455	\$ (147,314)

Prior to the third fiscal quarter of 2005, the Company classified a portion of its available-for-sale securities as long-term investments. During the quarter ended March 31, 2005, the Company made the determination that these investments will be available for use in current operations. Therefore, as of June 30, 2005, the Company classified all available-for-sale securities as short-term investments or cash equivalents.

KLA-Tencor’s investment portfolio consists of both corporate and government securities that have a maximum maturity of 10 years. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields.

As yields increase, those securities with a lower yield-at-cost show a mark-to market unrealized loss. All unrealized losses are due to changes in interest rates and bond yields. We have the ability to realize the full value of all these investments upon maturity. The following table summarizes the fair value and gross unrealized losses of our investments, aggregated by investment instrument and length of time that the individual securities have been in a continuous unrealized loss position at June 30, 2005 (in thousands):

	Total in a loss position ⁽¹⁾	
	FMV	Gross Unrealized Losses
U.S Government and agency securities	\$ 48,655	(259)
Asset-backed securities	20,089	(76)
Municipal bonds	493,173	(2,561)
Total	\$ 561,917	(2,896)

⁽¹⁾ Of the total gross unrealized losses approximately \$1.2 million of gross unrealized losses relates primarily to municipal bonds with a fair value of \$125.0 million that have been in a loss position for 12 months or more.

The contractual maturities of debt securities classified as available-for-sale as of June 30, 2005, regardless of the consolidated balance sheet classification, are as follows (in thousands):

	Amortized Cost	Estimated Fair Value
Due within one year	\$ 1,308,083	\$ 1,307,637
Due after one year through three years	425,286	423,551
Due after three years	321,565	322,164
	\$ 2,054,934	\$ 2,053,352

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 losses for the year ended June 30, 2005 were approximately \$3.2 million. Net realized gains for the years ended June 30, 2004 and 2003 were approximately \$9 million and \$22 million, respectively.

NOTE 4 – GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

The carrying value of goodwill was \$47.4 million and \$17.6 million as of June 30, 2005 and 2004, respectively, and was allocated to KLA-Tencor's reporting units pursuant to SFAS No. 142. In accordance with SFAS No. 142, KLA-Tencor completed its annual evaluation of the goodwill by reporting unit during the quarter ended December 31, 2004, and concluded that there was no impairment. There have been no significant events or circumstances affecting the valuation of goodwill subsequent to our impairment test performed in the second quarter of fiscal year 2005.

Other Intangible Assets

The components of other intangible assets as of June 30, 2005 (in thousands) were as follows:

	Gross Carrying Amount	Accumulated Amortization	Net Amount
Existing technology	\$ 12,537	\$ 2,807	\$ 9,730
Patents	4,761	3,889	872
Trademark	1,225	602	623
Other	200	200	—
Total	\$ 18,723	\$ 7,498	\$ 11,225

The components of other intangible assets as of June 30, 2004 (in thousands) were as follows:

	Gross Carrying Amount	Accumulated Amortization	Net Amount
Existing technology	\$ 1,852	\$ 992	\$ 860
Patents	4,761	2,823	1,938
Trademark	625	417	208
Total	\$ 7,238	\$ 4,232	\$ 3,006

For the fiscal years ended June 30, 2005 and 2004, amortization expense for other intangible assets was \$3.3 million and \$1.5 million, respectively. Based on intangible assets recorded at June 30, 2005, and assuming no subsequent additions to, or impairment of the underlying assets, the remaining estimated annual amortization expense is expected to be as follows (in thousands):

Fiscal year ended June 30:	Amount
2006	\$ 2,784
2007	1,953
2008	1,582
2009	1,458
2010	1,458
Thereafter	1,990
Total	\$ 11,225

NOTE 5 – BUSINESS COMBINATIONS

All of the Company's qualifying business combinations have been accounted for using the purchase method of accounting. Consideration includes the cash paid and the value of options assumed, less any cash acquired, and excludes contingent employee compensation payable in cash. The Company accounts for the intrinsic value of stock options assumed related to future services as deferred stock based compensation within stockholders' equity.

During the fiscal year 2005, the Company completed the acquisition of the following three businesses for net cash consideration of approximately \$43.5 million primarily to expand the Company's product portfolio.

Entity	Date Acquired	Business
Candela Instruments	October 2004	Laser-based surface inspection systems optimized for the data storage industry
Blue29 Corporation	October 2004	Electroless metal deposition
Inspex Incorporated	August 2004	Wafer inspection

The following table summarizes the estimated fair values of the net assets acquired at the date of the acquisitions (in thousands):

	Amount
Cash	\$ 4,653
Purchased in-process research & development	700
Existing technology	10,685
Trademarks	600
Other intangible assets	200
Other tangible assets and liabilities	(1,615)
Deferred stock based compensation	908
Deferred tax asset	4,827
Goodwill	28,713
Net assets acquired	\$ 49,671
Cash consideration	\$ 48,181
Value of stock options assumed	1,490
Total consideration	\$ 49,671

In connection with certain business combinations and purchased technology transactions entered into prior to fiscal year 2005, KLA-Tencor was subject to \$1.1 million contingent consideration based upon sales volume and the occurrence of other events. The payment of the contingency in the quarter ended December 31, 2004 also resulted in an increase to goodwill.

In connection with the acquisitions completed during the fiscal year 2005, KLA-Tencor is subject to a \$9.1 million contingent cash payment based on the continued employment of certain employees over two years. The contingency is accounted for as compensation expense over the contingent employment period. None of this amount was paid at June 30, 2005.

The fair value of the purchased IPR&D and identified intangibles was determined using the income approach, which discounts expected future cash flows from projects to their net present value. Each project was analyzed to determine the technological innovations included; the utilization of core technology; the complexity, cost and time to complete development; any alternative future use or current technological feasibility; and the stage of completion. Future cash flows were estimated, taking into account the expected life cycles of the products and the underlying technology, relevant market sizes and industry trends.

The Company determined a discount rate for each project based on the relative risks inherent in the project's development horizon, the estimated costs of development, and the level of technological change in the project and the industry, among other factors. The Company began amortizing the acquired identified intangibles over their useful life of six months to seven years.

The deferred stock based compensation recognized in connection with these business combinations is being amortized over the period earned. Amortization of deferred stock-based compensation was \$627,000 during the fiscal year ended June 30, 2005.

During the quarter ended December 31, 2004, KLA-Tencor acquired the remaining equity outstanding of Blue29, its variable interest entity consolidated after adoption of FIN46(R). Subsequently, KLA-Tencor transferred the assets of Blue29 to a limited liability corporation in which a third party acquired a minority interest for total proceeds of \$12.6 million.

Pro-forma earnings information has not been presented because the effect of these acquisitions was not material either on an individual or an aggregate basis.

NOTE 6 - NON-RECURRING RESTRUCTURING CHARGES

There were no restructuring actions in fiscal year 2005 or 2004. In fiscal year 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 employees from manufacturing, engineering, sales, marketing, and administration in the United States, Japan and Europe. The restructuring actions taken in fiscal year 2003 are proceeding as planned, with the termination of employees having been completed and the facilities related lease payments KLA-Tencor expects to complete by the end of fiscal year 2006. 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™ 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 year 2003, relating to a series of involuntary employee terminations.

As of June 30, 2004, the remaining accrual balance was \$821,000. During the fiscal year ended June 30, 2005, the Company made lease payments of \$632,000 related to the exited facilities. As of June 30, 2005, the remaining accrual balance of \$189,000 is related to lease payments on facilities exited prior to fiscal year 2004 and is expected to be paid by the end of fiscal year 2006. This remaining accrual is included in the consolidated balance sheets under the caption of other current liabilities.

NOTE 7 – 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 increased to include the number of additional shares of common stock that would have been outstanding if the dilutive potential shares of common stock had been issued. The dilutive effect of

outstanding options and restricted stock is reflected in diluted earnings per share by application of the treasury stock method. Under the treasury stock method, an increase in the fair market value of the Company's common stock can result in a greater dilutive effect from outstanding options and restricted stock. Additionally, the exercise of employee stock options and the vesting of restricted stock can result in a greater dilutive effect on earnings per share.

The following table sets forth the computation of basic and diluted earnings per share (in thousands, except per share amounts):

<i>Fiscal year ended June 30,</i>	2005	2004	2003
Numerator:			
Net income	\$ 466,695	\$ 243,701	\$ 137,191
Denominator:			
Weighted average shares outstanding, excluding unvested restricted stock	196,346	194,976	189,817
Effect of dilutive options and restricted stock	4,668	6,823	4,968
Denominator for diluted earnings per share	201,014	201,799	194,785
Basic earnings per share	\$ 2.38	\$ 1.25	\$ 0.72
Diluted earnings per share	\$ 2.32	\$ 1.21	\$ 0.70

Potentially dilutive securities that were excluded from the computation of diluted earnings per share for the above periods because their effect would have been anti-dilutive were as follows (in thousands except price data):

<i>Fiscal year ended June 30,</i>	2005	2004
Number of shares	9,924	2,192
Price range	\$43.61-\$68.00	\$53.14-\$68.00

During the quarter ended March 31, 2005, the Company's Board of Directors authorized a quarterly cash dividend of \$0.12 per share with the first dividend payable on June 1, 2005 to shareholders of record as of May 2, 2005. The total amount of dividend paid during the fourth quarter of fiscal year 2005 was \$24 million.

NOTE 8 - 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, and to return excess cash to the Company's shareholders. Since the inception of the repurchase program in 1997 through June 30, 2005 the Board of Directors had authorized KLA-Tencor to repurchase a total of 27.8 million shares, including 10 million shares authorized in February 2005.

Share repurchases for the fiscal years ended June 30, 2005 and 2004 were as follows (in thousands):

<i>Fiscal year ended June 30,</i>	2005	2004
Number of shares of common stock repurchased	4,946	1,175
Total cost of repurchase	\$ 203,658	\$ 55,806

As of June 30, 2005, the amount related to unsettled share repurchases was \$2.7 million.

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 2005, 2004 and 2003 employees purchased 1,059,415; 958,698 and 1,071,571 of shares issued at a weighted average fair value of \$34.43, \$31.99 and \$30.26, 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 KLA-Tencor estimates will be required to issue under the plan during the forthcoming fiscal year. At June 30, 2005, a total of 1,804,736 shares were reserved and available for issuance under this plan.

Equity Incentive Program The equity incentive 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. The equity incentive program consists of two plans: one under which non-employee directors may be granted options to purchase shares of our stock, and another in which non-employee directors, officers, key employees, consultants and all other employees may be granted options to purchase shares of our stock, restricted stock units and other types of equity awards. Under our equity incentive program, stock 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 generally granted at prices not less than the fair market value of our common stock at the grant date. Restricted stock units may be granted with varying criteria such as time based or performance based vesting. Substantially all of our employees that meet established performance goals and that qualify as Knowledge Employees participate in our main equity incentive plan.

On October 18, 2004, the Company's stockholders approved the 2004 Equity Incentive Plan (the "Omnibus Plan") which provides for the grant of options to purchase shares of the Company's Common Stock, stock appreciation rights, restricted stock, performance shares, performance units and deferred stock units to our employees, consultants and members of our Board of Directors. This new Plan replaces future grants under the 1982 Stock Option Plan and 2000 Nonstatutory Stock Option Plan and supplements the 1998 Outside Director Option Plan. The shareholder approval included the creation of a reserve establishment of 11,000,000 shares of common stock for use under the plan and the ability to transfer up to an additional 1,500,000 shares of forfeited or expired stock under the 1982 Stock Option Plan and the 2000 Nonstatutory Plan.

During the fiscal year ended June 30, 2005, the following actions were taken with regard to the New Equity Incentive Plan: a) a reserve of 11,000,000 shares was established, b) 1,465,853 shares were added to the reserve from the 1982 Stock Option Plan and the 2000 Nonstatutory Plan due to forfeitures or expiration, c) the 1982 Stock Option Plan was terminated; as a result, 12,358,625 shares expired, d) the 2000 Nonstatutory Plan was terminated; and, as a result, 3,447,748 shares expired, e) the 1993 Stock Option Plan was terminated, as a result, 3,500 shares expired and f) The Metrology Stock Option Plan was terminated, as a result 4,238 shares expired.

The following table summarizes our equity compensation plans as of June 30, 2005:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights ⁽¹⁾	Weighted-average exercise price of outstanding options, warrants and rights.	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column 1) ⁽²⁾
Equity compensation plans approved by stockholders	25,680,578	\$ 36.72	13,620,320
Equity compensation plans not approved by stockholders	7,698,409	\$ 38.29	—
Total	33,378,987	\$ 37.08	13,620,320

(1) Amounts shown are for options granted only. There were 406,960 shares of restricted stock units issued under the 2004 Equity Incentive Plan as of June 30, 2005.

(2) Any 2004 equity Incentive Plan awards of restricted stock, performance shares, performance units or deferred stock units with a per share or unit purchase price lower than 100% of fair market value on the grant date shall be counted against the total number of shares issuable under the plan as 1.8 shares for every one share subject thereto. Including the restricted stock units issued during the year ended June 30, 2005, and applying the 1.8 ratio as required by the 2004 Equity Incentive Plan, and including the shares reserved for issuance under the employee stock purchase plan, the number of shares remaining available for future issuance under our equity compensation plans was 13,620,320 shares as of June 30, 2005.

The following table summarizes the combined activity under the equity incentive plans for the indicated periods:

	Available For Grant	Awards Outstanding	Weighted- Average Price
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
Additional shares reserved	5,751,033	—	—
Options granted	(6,298,343)	6,298,343	52.09
Options canceled/expired	978,478	(978,478)	38.66
Options exercised	—	(5,357,878)	25.74
Balances at June 30, 2004	17,350,886	29,695,945	\$ 35.11
Additional shares reserved	18,369,456	—	—
Plan shares expired	(15,814,111)	—	—
Options granted	(9,625,481) ⁽¹⁾	9,625,481	40.31
Restricted stock units granted ⁽²⁾	(732,528)	—	—
Options canceled/expired	2,267,362	(2,267,362)	41.84
Options exercised	—	(3,675,077)	26.56
Balances at June 30, 2005	11,815,584	33,378,987	\$ 37.08

(1) Employees received options totaling 2,007,283 shares of common stock as an advance on their fiscal year 2006 focal option grants in the first fiscal quarter of 2005. The grant was equivalent to 50% of the employee's fiscal year 2005 stock option grant. These advanced grant options vest on a six year schedule with 20% vesting after year two and the remaining option shares vesting 1/48th per month for the remainder of the vesting term.

(2) Any 2004 Equity Incentive Plan awards of restricted stock, performance shares, performance units or deferred stock units with a per share or unit purchase price lower than 100% of fair market value on the grant date shall be counted against the total number of shares issuable under the plan as 1.8 shares for every one share subject thereto.

The options outstanding at June 30, 2005 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, 2005	Weighted-Average Remaining Contract Life (in years)	Weighted-Average Exercise Price at June 30, 2005	Number Vested and Exercisable	Weighted-Average Exercise Price at June 30, 2005
\$5.95-\$10.63	2,124,657	3.05	\$ 10.52	2,124,657	\$ 10.52
\$10.63-\$20.19	764,202	2.64	\$ 14.73	764,202	\$ 14.73
\$20.19-\$30.28	6,045,479	6.01	\$ 28.63	4,157,516	\$ 28.38
\$30.28-\$39.35	12,811,170	7.65	\$ 36.83	4,664,989	\$ 34.19
\$39.35-\$49.92	7,296,260	7.51	\$ 44.32	3,678,092	\$ 45.16
\$49.92-\$59.44	4,320,414	8.11	\$ 54.34	1,925,273	\$ 54.16
\$59.44-\$68.00	16,805	4.64	\$ 68.00	16,805	\$ 68.00
\$5.95-\$68.00	33,378,987	6.97	\$ 37.08	17,331,534	\$ 33.62

The weighted average fair value of options granted in fiscal years 2005, 2004 and 2003 were \$22.33, \$29.09 and \$21.65 respectively. Options exercisable were 17,331,534; 16,438,597 and 16,526,585 as of June 30, 2005, 2004 and 2003, respectively.

Restricted Stock During the fiscal year ended June 30, 2005, under the 2004 Equity Incentive Plan the Company's Board of Directors approved the grant of 406,960 shares of restricted stock to selected members of the Company's senior management. These restricted stock units generally vest in two equal installments on the fourth and fifth anniversaries of the date of grant. The Company recorded the \$16.4 million value of these restricted stock grants as a component of stockholders' equity and will amortize that amount over the service period. The value of the restricted stock awards was based on the closing market price of the Company's common stock on the date of award. Amortization expense for these awards for the fiscal year ended June 30, 2005 was \$2.3 million, the majority of which is included in selling, general and administrative expense. These restricted stock units were included in the calculation of diluted earnings per share utilizing the treasury stock method.

NOTE 9 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 \$16 million, \$9 million and \$10 million in fiscal years 2005, 2004 and 2003, respectively. KLA-Tencor has no defined benefit plans in the United States. In addition to the profit sharing plan and the United States 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. Consistent with the requirements of local law, the company deposits funds for certain of these plans with insurance companies, third-party trustees, or into government-managed accounts, and/or accrues for the unfunded portion of the obligation. The assumptions used in calculating the obligation for the foreign plans depend on the local economic environment. The benefit obligations and related assets under these plans have been measured as of June 30, 2005.

Summary data relating to the KLA-Tencor's foreign defined benefit pension plans, including key weighted average assumptions used is provided in the following tables (amounts in thousands):

	Year ended June 30,	
	2005	2004
Change in projected benefit obligation		
Projected benefit obligation at beginning of fiscal year	\$ 15,390	\$ 12,625
Service cost, including plan participant contributions	2,541	2,174
Interest cost	387	338
Actuarial (gain) loss	2,586	75
Benefit payments	(291)	(786)
Foreign currency exchange rate changes	118	964
Projected benefit obligation at the end of the fiscal year	<u>\$ 20,731</u>	<u>\$ 15,390</u>
Change in fair value of plan assets		
Fair value of plan assets at beginning of fiscal year	\$ 3,382	\$ 2,682
Actual return on plan assets	(1)	26
Employer contributions	840	646
Benefit and expense payments	(83)	(77)
Foreign currency exchange rate changes	147	105
Fair value of plan assets at end of fiscal year	<u>\$ 4,285</u>	<u>\$ 3,382</u>

	As of June 30,	
	2005	2004
Funded status		
Ending funded status	\$ (16,446)	\$ (12,008)
Unrecognized transition obligation	546	775
Unrecognized net actuarial (gain) loss	5,180	2,461
Net amount recognized	\$ (10,720)	\$ (8,772)

The accumulated benefit obligation for all defined benefit plans was \$14 million and \$11 million at June 30, 2005 and 2004, respectively.

	As of June 30,	
	2005	2004
Plans with accumulated benefit obligations in excess of plan assets		
Accumulated benefit obligation	\$ 13,563	\$ 9,544
Projected benefit obligation	20,731	14,176
Plan assets at fair value	4,285	2,208

	For the year ended June 30,		
	2005	2004	2003
Weighted-average assumptions			
Discount rate	1.5%-5.5%	1.5% -5.3%	3.5% -5.3%
Expected return on assets	3.5%-4.3%	3.5% -5.3%	3.8% - 5.3%
Rate of compensation increases	2.0%-4.0%	2.0% -3.3%	0% - 3.3%

The components of KLA-Tencor's net periodic cost relating to its foreign subsidiaries defined pension plans are as follows (amounts in thousands):

	For the year ended June 30,		
	2005	2004	2003
Components of net periodic pension cost			
Service cost, net of plan participant contributions	\$ 2,541	\$ 2,174	\$ 2,177
Interest cost	387	338	378
Return on plan assets	(148)	(75)	(115)
Amortization of net transitional obligation	255	248	231
Amortization of net gain (loss)	70	37	17
Net periodic pension cost	\$ 3,105	\$ 2,722	\$ 2,688

The foreign plans' investments are managed by third-party trustees consistent with regulations or market practice of the country where the assets are invested. KLA-Tencor is not actively involved in the investment strategy and nor does it have control over the target allocation of these investments. These investments made up 100% of total foreign plan assets in fiscal year 2005 and 2004.

Expected funding for the foreign plans during fiscal year 2006 is \$197,000.

The total benefits to be paid from the foreign pension plans are not expected to exceed \$1 million in any year through 2014.

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. KLA-Tencor controls the investment of these funds and the participants remain general creditors of KLA-Tencor. Distributions from the plan commence the quarter following a participant's retirement or termination of employment. At June 30, 2005, KLA-Tencor had a deferred compensation liability under the plan of \$122 million included as a component of other current liabilities on the consolidated balance sheet.

NOTE 10 - INCOME TAXES

The components of income before income taxes are as follows:

<i>Year ended June 30, (in thousands)</i>	2005	2004	2003
Domestic income before income taxes	\$ 544,681	\$ 258,744	\$ 151,229
Foreign income before income taxes	75,636	65,972	29,289
Total net income before taxes	\$ 620,317	\$ 324,716	\$ 180,518

The provision for income taxes is comprised of the following:

<i>Year ended June 30, (in thousands)</i>	2005	2004	2003
Current:			
Federal	\$ 165,524	\$ 73,256	\$ 33,665
State	13,358	11,911	3,157
Foreign	20,721	20,754	17,207
	\$ 199,603	\$ 105,921	\$ 54,029
Deferred:			
Federal	(42,714)	(14,311)	(2,726)
State	(802)	(10,299)	(4,602)
Foreign	913	(296)	(3,374)
	(42,603)	(24,906)	(10,702)
Provision for income taxes	\$ 157,000	\$ 81,015	\$ 43,327

Actual current tax liabilities are lower than reflected above for fiscal years 2005, 2004 and 2003 by \$25 million, \$57 million and \$22 million, respectively, due primarily 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:

<i>Year ended June 30, (in thousands)</i>	2005	2004
Deferred tax assets:		
Tax credits and net operating losses	\$ 44,281	\$ 106,886
Employee benefits accrual	64,268	52,917
Capitalized R&D expenses	108,731	382
Depreciation and amortization	5,161	7,042
Inventory reserve	61,900	57,855
Non-deductible reserves	39,814	35,536
Unrealized loss on investments	—	2,353
Deferred profit	86,129	112,118
Unearned revenue	21,404	18,454
Other	22,606	16,466
Total deferred tax assets	\$ 454,294	\$ 410,009
Deferred tax liabilities:		
Unremitted earnings of foreign subsidiaries not permanently reinvested	(11,189)	(11,437)
Unrealized gain on investments	(945)	—
Other	(7,543)	(3,261)
Total deferred tax liabilities	(19,677)	(14,698)
Total net deferred tax assets	\$ 434,617	\$ 395,311

At June 30, 2005, approximately \$10.5 million of federal net operating loss (“NOL”) carryforwards were available to offset future taxable income. Since the acquisition of Blue29 Corporation constituted an ownership change as defined under Section 382 of the Internal Revenue Code, the utilization of Blue29 Corporation’s pre-ownership change NOLs is subject to an annual limitation. However, such annual limitation will not impair the realization of these NOLs. If not utilized, the federal NOLs will begin to expire in 2021.

KLA-Tencor has federal and state tax credits carryforward at June 30, 2005 totaling \$53 million, of which \$0.4 million and \$1.8 million will begin to expire in 2024 and 2025, respectively. There is no expiration limit on the remaining \$51 million of tax credits.

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

<i>Year ended June 30,</i>	2005	2004	2003
Federal statutory rate	35.0 %	35.0 %	35.0 %
State income taxes, net of federal benefit	1.3	0.3	(0.5)
Effect of foreign operations taxed at various rates	(1.7)	(1.6)	1.9
Export sales benefit	(4.8)	(3.8)	(5.2)
Research and development tax credit	(2.8)	(2.1)	(3.3)
Tax exempt interest	(1.7)	(1.8)	(3.8)
Other	—	(1.0)	(0.1)
Provision for Income Taxes	\$ 25.3 %	\$ 25.0 %	24.0 %

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 \$68 million at June 30, 2005, and it is the Company’s intention that such undistributed earnings be permanently reinvested. The Company would be subject to additional United States taxes if these earnings were repatriated. Determination of the amount of unrecognized deferred income tax liability related to these earnings is not practicable.

KLA-Tencor enjoys several tax holidays in Israel where it manufactures certain of its products. These tax holidays are on approved investments and are scheduled to expire at varying times within the next four to ten years.

On October 22, 2004, the President signed the American Jobs Creation Act of 2004 (the “Act”). The Act provides a deduction for income from qualified domestic production activities, which will be phased in from 2005 through 2010. In return, the Act also provides for a two-year phase-out of the existing extra-territorial income exclusion (“ETI”) (also known as “export sales benefit”) for foreign sales that was viewed to be inconsistent with international trade protocols by the European Union. In the long term, KLA-Tencor expects the net effect of the phase out of the ETI and the phase in of this new deduction to result in an increase in the effective tax rate of approximately 2 percentage-points based on current earnings levels.

NOTE 11 - COMMITMENTS AND CONTINGENCIES

Factoring KLA-Tencor has agreements with financial institutions to sell certain of its trade receivables and promissory notes from customers without recourse. During the fiscal year ended June 30, 2005 and 2004, approximately \$306 million and \$166 million of receivables were sold under these arrangements, respectively. KLA-Tencor does not believe it is at risk for any material losses as a result of these agreements.

In addition, from time to time KLA-Tencor will discount without recourse Letters of Credit ("LCs") received from customers in payment of goods. During the fiscal year 2005 and 2004 several LCs were sold with proceeds totaling \$30 million and \$42 million, respectively. Discounting fees of \$195,000 and \$215,000 for fiscal year 2005 and 2004 were equivalent to interest expense and were recorded in interest and other income net.

Facilities KLA-Tencor leases certain of its facilities under operating leases, which qualify for operating lease accounting treatment under Statement of Financial Accounting Standard 13, "Accounting for Leases," and, as such, these facilities are not included on its Condensed Consolidated Balance Sheet. Rent expense was approximately \$12 million, \$12 million, and \$16 million for the years ended June 30, 2005, 2004, and 2003, respectively.

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

Fiscal year ended June 30,	Amount
2006	\$ 8,414
2007	6,103
2008	3,910
2009	2,767
2010	1,642
Thereafter	2,909
Total minimum lease payments	\$ 25,745

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 among different suppliers. The Company's open inventory purchase commitments were approximately \$147 million as of June 30, 2005. Actual expenditures will vary based upon the volume of the transactions and length of contractual service provided. In addition, the amounts paid under these arrangements may be less in the event that the arrangements are renegotiated or cancelled. Certain agreements provide for potential cancellation penalties.

Guarantees 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 revenues 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.

The following table provides the changes in the product warranty accrual for the fiscal years ended June 30, 2005 and 2004 (in thousands):

	2005	2004
Beginning balance	\$ 38,865	\$ 33,226
Accruals for warranties issued during the period	54,871	41,326
Changes in liability related to pre-existing warranties	(12,246)	(6,179)
Settlements made during the period	(34,843)	(29,508)
Ending balance	\$ 46,647	\$ 38,865

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.

KLA-Tencor is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in connection with contracts and license agreements or the sale of assets, under which the Company customarily agrees to hold the other party harmless against losses arising from a breach of warranties, representations and covenants related to such matters as title to assets sold, validity of certain intellectual property rights, non-infringement of third-party rights, and certain income tax-related matters. In each of these circumstances, payment by the Company is typically subject to the other party making a claim to and cooperating with the Company pursuant to the procedures specified in the particular contract. This usually allows the Company to challenge the other party's claims or, in case of breach of intellectual property representations or covenants, to control the defense or settlement of any third-party claims brought against the other party. Further, the Company's obligations under these agreements may be limited in terms of amounts, activity (typically at the Company's option to replace or correct the products or terminate agreement with a refund to the other party), and duration. In some instances, the Company may have recourse against third parties and/or insurance covering certain payments made by the Company.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the Company's obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the Company under these agreements did not have a material effect on its business, financial condition, results of operations or cash flows.

Legal Matters KLA-Tencor is named from time to time as a party to lawsuits in the normal course of its 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.

NOTE 12 – 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.

KLA-Tencor accounts for derivatives in accordance with Statement of Financial Accounting Standard 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.

Cash flow Hedges

KLA-Tencor's international sales are primarily denominated in U.S. dollars. For forecasted 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 forecasted foreign currency sales are reclassified to revenue upon recognition in income of the underlying hedged exposure. All amounts reported in OCI at June 30, 2005 are anticipated to be reclassified to revenue within twelve months. At June 30, 2005, KLA-Tencor had cash flow hedge contracts, maturing throughout fiscal year 2005 to sell \$167.0 million and purchase \$21.9 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):

	2005	2004
Beginning Balance	\$ (1,559)	\$ 253
Effective portion of cash flow hedging instruments	4,428	(8,233)
Reclassified to revenue upon revenue recognition	2,466	6,421
Ending Balance	\$ 5,335	\$ (1,559)

Other Foreign Currency Hedges

KLA-Tencor hedges its monetary non-functional assets and liabilities, and those of its subsidiaries. Statement of Financial Accounting Standard 52 *Foreign Currency Translation* (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, 2005, KLA-Tencor had other foreign currency hedge contracts maturing throughout fiscal year 2005 to sell \$198.2 million and purchase \$54.5 million, in foreign currency, primarily in Japanese yen.

NOTE 13 – SEGMENT REPORTING AND GEOGRAPHIC INFORMATION

KLA-Tencor operates in one segment in accordance with the provisions of SFAS 131, "Disclosures about Segments of an Enterprise and Related Information." Operating segments are defined as components of an enterprise about which separate financial information is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. KLA-Tencor's chief operating decision maker is the Chief Executive 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 primarily of net property and equipment and are attributed to the geographic location in which they are located.

The following is a summary of revenues by geographic region for fiscal years 2005, 2004 and 2003 (in thousands).

	Year ended June 30,		
	2005	2004	2003
Revenue:			
United States	\$ 496,973	\$ 342,678	\$ 407,225
Europe & Israel	266,177	186,424	193,264
Japan	450,397	394,740	276,321
Taiwan	429,759	263,386	253,218
Korea	148,355	143,547	75,549
Asia Pacific	293,492	165,943	117,472
Total	\$ 2,085,153	\$ 1,496,718	\$ 1,323,049

Long-lived assets by geographic region as of June 30, 2005 and June 30, 2004 were as follows (in thousands):

	As of June 30,	
	2005	2004
Long-lived assets:		
United States	\$ 372,425	\$ 367,547
Europe & Israel	9,074	6,263
Japan	4,350	4,280
Taiwan	2,356	2,348
Korea	4,849	3,502
Asia Pacific	2,247	1,034
Total	\$ 395,301	\$ 384,974

The following is a summary of major product revenues for fiscal years 2005, 2004 and 2003 (as a percentage of total revenue).

	Year ended June 30,		
	2005	2004	2003
Defect Inspection	65 %	61 %	57 %
Metrology	17 %	15 %	17 %
Service	14 %	20 %	20 %
Software and other	4 %	4 %	6 %
	100 %	100 %	100 %

For the fiscal period ended June 30, 2005, no customer accounted for more than 10% of total revenues and one customer accounted for 12% of net accounts receivable. For the fiscal period ended June 30, 2004, no customer accounted for more than 10% of total revenues and one customer accounted for 10% of net accounts receivable. For the fiscal period ended June 30, 2003, one customer accounted for 11% of total revenues and two customers accounted for 13% and 11% of net accounts receivable.

NOTE 14 - QUARTERLY CONSOLIDATED RESULTS OF OPERATIONS (UNAUDITED)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended June 30, 2005. 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 state fairly the unaudited quarterly results of operations set forth herein.

<i>(In thousands, except per share data)</i>	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal year 2005				
Revenue	\$ 518,773	\$ 532,853	\$ 541,611	\$ 491,916
Total costs and operating expenses	361,806	377,345	386,764	376,676
Income from operations	156,967	155,508	154,847	115,240
Net income	116,405	122,077	123,163	105,050
Net income per share:				
Basic	\$ 0.59	\$ 0.62	\$ 0.63	\$ 0.54
Diluted	\$ 0.58	\$ 0.61	\$ 0.61	\$ 0.52
Fiscal year 2004				
Revenue	\$ 317,970	\$ 338,538	\$ 389,772	\$ 450,438
Total costs and operating expenses	281,002	287,476	302,019	328,863
Income from operations	36,968	51,062	87,753	121,575
Net income	36,837	44,515	66,182	96,167
Net income per share:				
Basic	\$ 0.19	\$ 0.23	\$ 0.34	\$ 0.49
Diluted	\$ 0.18	\$ 0.22	\$ 0.33	\$ 0.48
Fiscal year 2003				
Revenue	\$ 375,520	\$ 334,918	\$ 304,298	\$ 308,313
Total costs and operating expenses	318,236	308,162	278,698	279,231
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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have completed an integrated audit of KLA-Tencor Corporation's 2005 consolidated financial statements and of its internal control over financial reporting as of June 30, 2005 and audits of its 2004 and 2003 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

Consolidated financial statements and financial statement schedule

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of KLA-Tencor Corporation and its subsidiaries at June 30, 2005 and 2004, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 2005 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements 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.

Internal control over financial reporting

Also, in our opinion, management's assessment, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of June 30, 2005 based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2005, based on criteria established in *Internal Control — Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial

reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

San Jose, California
September 1, 2005

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Attached as exhibits to this Annual Report are certifications of the CEO and the CFO, which are required in accordance with Rule 13a-14 of the Securities Exchange Act of 1934, as amended (Exchange Act). This Controls and Procedures section includes the information concerning the controls evaluation referred to in the certifications, and it should be read in conjunction with the certifications for a more complete understanding of the topics presented.

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in the Rules 13a-15(e) and 15d-15(e) under the Exchange Act) (Disclosure Controls) as of the end of the period covered by this Annual Report required by Exchange Act Rules 13a-15(b) or 15d-15b. The controls evaluation was conducted under the supervision and with the participation of management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO). Based on this evaluation, our CEO and our CFO have concluded that as of the end of the period covered by this report our disclosure controls and procedures are effective.

Definition of Disclosure Controls

Disclosure Controls are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Exchange Act, such as this Annual Report, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure Controls are also designed to reasonably assure that such information is accumulated and communicated to our management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Our Disclosure Controls include components of our internal control over financial reporting, which consists of control processes designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles in the U.S. To the extent that components of our internal control over financial reporting are included within our Disclosure Controls, they are included in the scope of our annual controls evaluation.

Management's report on internal control over financial reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of June 30, 2005. Our management's assessment of the effectiveness of our internal control over financial reporting as of June 30, 2005 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears on page 84.

Limitations on the Effectiveness of Controls

The Company's management, including the CEO and CFO, does not expect that our Disclosure Controls or our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in internal controls over financial reporting

There were no changes in our internal controls over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

For the information required by this Item, see “Information About Executive Officers”, “Section 16(a) Beneficial Ownership Reporting Compliance”, and “Our Corporate Governance Practices – Standards of Business Conduct” in the Proxy Statement, which is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

For the information required by this Item, see “Executive Compensation And Other Matters” 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 of Certain Beneficial Owners and 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 and Other Matters” in the Proxy Statement, which is incorporated herein by reference.

ITEM 14. PRINCIPAL INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FEES AND SERVICES

For the information required by this Item, see “Ratification of Appointment of Accountants” in the Proxy Statement, which is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(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, 2005 and 2004
 Consolidated Statements of Operations for each of the three years in the period ended June 30, 2005
 Consolidated Statements of Stockholders' Equity for each of the three years in the period ended June 30, 2005
 Consolidated Statements of Cash Flows for each of the three years in the period ended June 30, 2005
 Notes to Consolidated Financial Statements
 Report of Independent Registered Public Accounting Firm

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

Incorporated by Reference

Exhibit Number	Exhibit Description	Form	File No.	Exhibit Number	Filing Date
3.1	Amended and Restated Certificate of Incorporation	10-Q	No. 000-09992	3.1	May 14, 1997
3.2	Certificate of Amendment of Amendment and Restated Certificate of Incorporation	10-Q	No. 000-09992	3.1	February 14, 2001
3.3	Bylaws, as amended November 17, 1998	S-8	No. 333-68415	3.2	December 4, 1998
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	8-A/A, Amendment No. 2	No. 0-9992	1	September 24, 1996
10.1	1998 Outside Director Option Plan*	S-8	No. 333-68423	10.1	December 4, 1998

10.2	1997 Employee Stock Purchase Plan*	S-8	No. 333-45271	10.2	January 30, 1998
10.3	Tencor Instruments Amended and Restated 1993 Equity Incentive Plan	S-8	No. 333-22939	10.75	March 7, 1997
10.4	Restated 1982 Stock Option Plan, as amended November 18, 1996*	S-8	No. 333-22941	10.74	March 7, 1997
10.5	Excess Profit Stock Plan*	S-8	No. 333-60883	10.15	August 7, 1997
10.6	Form of KLA-Tencor Corporation Corporate Officers Retention Plan*	S-4	No. 333-23075	10.2	March 11, 1997
10.7	Form of Indemnification Agreement*	10-K	No. 000-09992	10.3	September 29, 1997
10.8	Livermore Land Purchase and Sale Agreement	10-K	No. 000-09992	10.16	September 28, 2000
10.9	Severance Agreement and General Release	10-K	No. 000-09992	10.9	August 30, 2004
10.10	2004 Equity Incentive Plan*	Proxy	No. 000-09992	Appendix A	September 9, 2004
10.11	Form of Option Agreement under 1998 Outside Director Option Plan*	8-K	No. 000-09992	10.1	October 18, 2004
10.12	Blue29 Corporation 2003 Stock Incentive Plan*	S-8	No. 333-120218	10.1	November 4, 2004
10.13	Agreement by and between KLA-Tencor Corporation and Kenneth L. Schroeder*	8-K	No. 000-09992	10.1	February 23, 2005
21.1	List of Subsidiaries				
23.1	Consent of Independent Registered Public Accounting Firm				
31.1	Certification of Chief Executive Officer under Rule 13a-14(a) of the Securities Exchange Act of 1934				
31.2	Certification of Chief Financial Officer under Rule 13a-14(a) of the Securities Exchange Act of 1934				
32	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350				

* Denotes a management contract, plan or arrangement

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.

September 2, 2005
(Date)

KLA-Tencor Corporation

By: /s/ KENNETH L. SCHROEDER

Kenneth L. Schroeder
Chief Executive Officer

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u> /s/ KENNETH LEVY</u> Kenneth Levy	Chairman of the Board and Director	September 2, 2005
<u> /s/ KENNETH L. SCHROEDER</u> Kenneth L. Schroeder	Chief Executive Officer and Director (Principal Executive Officer)	September 2, 2005
<u> /s/ JOHN H. KISPERT</u> John H. Kispert	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	September 2, 2005
<u> /s/ EDWARD W. BARNHOLT</u> Edward W. Barnholt	Director	September 2, 2005
<u> /s/ H. RAYMOND BINGHAM</u> H. Raymond Bingham	Director	September 2, 2005
<u> /s/ ROBERT T. BOND</u> Robert T. Bond	Director	September 2, 2005
<u> /s/ RICHARD J. ELKUS, Jr.</u> Richard J. Elkus, Jr.	Director	September 2, 2005
<u> /s/ STEPHEN P. KAUFMAN</u> Stephen P. Kaufman	Director	September 2, 2005
<u> /s/ MICHAEL E. MARKS</u> Michael E. Marks	Director	September 2, 2005
<u> /s/ JON D. TOMPKINS</u> Jon D. Tompkins	Director	September 2, 2005
<u> /s/ LIDA URBANEK</u> Lida Urbanek	Director	September 2, 2005

SCHEDULE II

Valuation and Qualifying Accounts

<i>(in thousands)</i>	Balance at Beginning of Period	Charged to Expense	Deductions	Balance At End of Period
Year Ended June 30, 2003:				
Allowance for Doubtful Accounts	\$ 13,391	\$ 192	\$ (966)	\$ 12,617
Year Ended June 30, 2004:				
Allowance for Doubtful Accounts	\$ 12,617	\$ 57	\$ (276)	\$ 12,398
Year Ended June 30, 2005:				
Allowance for Doubtful Accounts	\$ 12,398	\$ 228	\$ (401)	\$ 12,225

KLA-TENCOR CORPORATION
EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit Number	Filing Date
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3.2	Certificate of Amendment of Amendment and Restated Certificate of Incorporation	10-Q	No. 000-09992	3.1	February 14, 2001
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32	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350				

* Denotes a management contract, plan or arrangement

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	Delaware
VLSI Standards, Inc.	California
Blue 29 Corporation	California
Candela Instruments	California
INTERNATIONAL SUBSIDIARIES	
KLA-Tencor Corporation (Cayman) Limited, I	Cayman Islands
KLA-Tencor Corporation (Cayman) Limited, II	Cayman Islands
KLA-Tencor Corporation (Cayman) Limited, III	Cayman Islands
KLA-Tencor (Cayman) Limited IV	Cayman Islands
KLA-Tencor Corporation (Israel) Ltd.	Israel
KLA-Tencor Holding Limited	Israel
KLA-Tencor Corporation 1992 Ltd.	Israel
KLA-Tencor Integrated Metrology (Israel) (2002) Ltd.	Israel
KLA-Tencor Italy S.R.L.	Italy
KLA-Tencor Japan, Ltd.	Japan
VLSI Standards, K.K.	Japan
KLA-Tencor GmbH	Germany
KLA-Tencor France SARL	France
KLA-Tencor Korea, Inc.	Korea
KLA-Tencor Limited	United Kingdom
KLA-Tencor (Services) 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-Tencor Semiconductor Equipment Technology (Shanghai) Co., Ltd.	China
KLA Instruments S.A.	Switzerland
Yield Analysis Software Technologies, Inc.	Taiwan
Lee Ta Technologies (BVI), Inc.	British Virgin Islands
KLA-Tencor (Thailand) Ltd.	Thailand
KLA-Tencor Software India Private Limited	India

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-121637, No. 333-120218, No. 333-113358, No. 333-100166, 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 September 1, 2005, relating to the financial statements, financial statement schedules, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
September 1, 2005

**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(s) 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) 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
 - (d) 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 financial reporting; and
5. The registrant's other certifying officer(s) 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 2, 2005
(Date)

/s/ KENNETH L. SCHROEDER

Kenneth L. Schroeder
Chief Executive Officer
(Principal Executive Officer)

**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(s) 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) 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
 - (d) 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 financial reporting; and
5. The registrant's other certifying officer(s) 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 2, 2005
(Date)

/s/ JOHN H. KISPERT

John H. Kispert
Executive Vice President
and Chief Financial Officer
(Principal Accounting Officer)

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, 2005 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 2, 2005
Dated

By: /s/ Kenneth L. Schroeder

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, 2005 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 2, 2005
Dated

By: /s/ John H. Kispert

Name: John H. Kispert
Title: Executive Vice President and
Chief Financial Officer