

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 [FEE REQUIRED]
FOR THE FISCAL YEAR ENDED JUNE 30, 1996

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

FOR THE TRANSITION PERIOD FROM TO COMMISSION FILE NO. 0-9992

KLA INSTRUMENTS 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 NO.)
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160 RIO ROBLES SAN JOSE, CALIFORNIA (ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)	95134 (ZIP CODE)
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REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: (408) 468-4200

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

TITLE OF EACH CLASS NONE	NAME OF EACH EXCHANGE ON WHICH REGISTERED NONE
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SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

COMMON STOCK, \$0.001 PAR VALUE
COMMON STOCK PURCHASE RIGHTS
(TITLE OF CLASS)

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant based upon the average bid and asked prices of the registrant's stock, as of August 31, 1996, was \$761,763,320. 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 51,050,005 shares of Common Stock outstanding as of August 31, 1996.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Annual Report to Stockholders for the fiscal year ended June 30, 1996 ("1996 Annual Report to Stockholders") are incorporated by reference into Parts I, II and IV of this Report.

Portions of the Proxy Statement for the Annual Meeting of Stockholders ("Proxy Statement") to be held on November 18, 1996, and to be filed pursuant to Regulation 14A within 120 days after registrant's fiscal year ended June 30, 1996, are incorporated by reference into Part III of this Report.

PART I

ITEM 1. DESCRIPTION OF BUSINESS

THE COMPANY AND ITS PRODUCTS

KLA Instruments Corporation was incorporated in Delaware in July 1975. The Company's headquarters are located at 160 Rio Robles, San Jose, California, 95134, telephone (408) 468-4200. Unless the text requires otherwise, the "Company" or "KLA" refers to KLA Instruments Corporation and its subsidiaries.

KLA is the leader in the design, manufacture, marketing and service of yield management and process monitoring systems for the semiconductor industry. KLA believes that it is the world's largest supplier to the wafer and reticle inspection and optical metrology equipment markets. KLA's systems are used to analyze product and process quality at critical steps in the manufacture of integrated circuits and to provide feedback so that fabrication problems can be identified, addressed and contained. This understanding of defect sources and how to contain them enables semiconductor manufacturers to increase yields. Quickly attaining and then maintaining high yields is one of the most important determinants of profitability in the semiconductor industry. The Company believes that its customers typically experience rapid paybacks on their investments in the Company's systems. The Company sells to virtually all of the world's semiconductor manufacturers and has achieved very high market shares in its principal businesses.

The Company's technological strength has enabled it to develop and introduce major new product families in the past four years for the following three business units: WISARD, which addresses semiconductor wafer inspection; RAPID, which addresses reticle inspection; and Metrology, which addresses overlay registration and linewidth measurement. The Company believes that its WISARD and RAPID product families incorporate proprietary technologies which provide greater sensitivity to defects than any competing systems.

YIELD MANAGEMENT

Maximizing yields, or the number of good die per wafer, is a key goal of modern semiconductor manufacturing. Higher yields increase the revenue a manufacturer can obtain for each semiconductor wafer processed. As geometry linewidths decrease, yields become more sensitive to the size and density of defects. Semiconductor manufacturers use yield management and process monitoring systems to improve yields by identifying defects, by analyzing them to determine process problems, and, after corrective action has been taken, by monitoring subsequent results to ensure that the problem has been contained. Monitoring and analysis often takes place at various points in the fabrication process as wafers move through a production cycle consisting of hundreds of separate process steps.

Semiconductor factories are increasingly expensive to build and equip. Yield management and process monitoring systems, which typically represent a small percentage of the total investment required to build and equip a fabrication facility, enable integrated circuit manufacturers to leverage these expensive facilities and improve their returns on investment.

The most significant opportunities for yield improvement generally occur when production is started at new factories and when new products are first built. Equipment that helps a manufacturer quickly increase new product yields enables the manufacturer to offer these new products in volume at a time when they are likely to generate the greatest profits.

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The following are some of the methods used to manage yield, all of which require the capture and analysis of data gathered through many measurements:

- - Engineering analysis is performed off the manufacturing line to identify and analyze defect sources. Engineering analysis equipment operates with very high sensitivity to enable comprehensive analysis of wafers. Because they operate off-line, engineering analysis systems do not require high speeds of operation.
- - In-line monitoring is used to review the status of circuits during

production steps. Information generated is used to determine whether the fabrication process steps are within required tolerances and to make any necessary process adjustments in real-time before wafer lots move to subsequent process stations. Because the information is needed quickly to be of greatest value, in-line monitoring requires both high throughput and high sensitivity.

- - Pass/fail tests are used at several steps in the manufacturing process to evaluate products. For example, a pass/fail test is used to determine whether reticles used in photolithography are defect-free; electrical pass/fail testing is performed at the end of the manufacturing process to determine whether products meet performance specifications.

YIELD MANAGEMENT AND PROCESS MONITORING SYSTEMS

KLA's systems are developed to offer customers integrated yield management solutions. KLA offers inspection systems for key steps in the semiconductor manufacturing process and analysis systems comprised of database management hardware and software to translate raw inspection data into patterns which reveal process problems. The Company's wafer inspection and metrology systems are used for engineering analysis and in-line monitoring, and its reticle inspection systems are used for pass/fail tests. The Company's software productivity and analysis systems collect, store and analyze data collected by test equipment manufactured by both the Company and others to provide semiconductor manufacturers with an integrated yield management application. The Company's principal business units are: Wafer Inspection Systems (WISARD); Reticle Inspection Systems (RAPID); Metrology, including Optical Metrology and E-Beam Metrology; Software Productivity and Analysis Systems (PRISM); Scanning Electron Microscope Inspection Systems (SEMSpec); and ATS Watcher Division (ATS).

WISARD-WAFER INSPECTION SYSTEMS

KLA's WISARD business unit created the market for automated inspection of semiconductor wafers with the introduction of the KLA 2000 series over eleven years ago. KLA continues to have a predominant market share with its current generation of wafer inspection systems, the 2100 series.

The 2100 series of inspection systems offers an increase in inspection speed of up to 2,000 times over that of KLA's original wafer inspection system. This marked increase in speed and sensitivity allows customers to obtain very prompt feedback on process status by placing wafer inspection systems on the production line. The selection of the technology architecture for the 2100 series was made to allow the base unit to support a family of products capable of performance enhancements through upgrades of various subsystems. The first model, the KLA 2110, was introduced in 1991 with sufficient speed and sensitivity to enable in-line inspection of repeating arrays typical in memory devices. Since then, KLA has introduced three new repeating array models in succession, the 2111, 2112 and 2115. Each new model has had greater sensitivity and greater maximum speed compared to its predecessor. The 2115 was introduced in 1996 with twice the throughput and higher sensitivity compared to the 2112.

In 1992, KLA introduced the KLA 2130 which is capable of "all pattern" inspection required for microprocessors and other logic devices as well as both the logic and repeating array portions of memory devices. Since then, KLA has introduced three new all pattern inspection models in succession, the 2131, 2132 and 2135. Each new model has had greater sensitivity and greater maximum speed compared to its predecessor. The 2135 was introduced in 1996 with twice the throughput and higher sensitivity compared to the 2132. The Company believes that there are further opportunities to expand the 2100 series and has several new models under development.

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RAPID-RETICLE INSPECTION SYSTEMS

RAPID, KLA's first business unit, created the market for automated inspection of reticles and photomasks for the semiconductor manufacturing industry over 18 years ago and continues to have a predominant market share. KLA has delivered over 750 reticle and photomask inspection systems worldwide.

During photolithography, a stepper projects a circuit pattern from a reticle onto a wafer. Error-free reticles are the first step in ensuring high

yields in the manufacturing process because defects in reticles can translate into millions of ruined die.

In 1992, KLA introduced a new generation of reticle inspection systems, the 300 series. The KLA 301 Reticle Inspection System and the KLA 50 Reference Data Computer together form the KLA 351 Inspection System, which represents a major advance in speed, sensitivity and flexibility. The KLA 351 offers the highest inspection sensitivity available in the marketplace, which the Company believes is vital to meet reticle inspection requirements for today's more complex microprocessors and larger DRAMs. This dedicated image processor employs a flexible system architecture which permits future upgrades and enhancements through software, rather than hardware changes. Furthermore, the KLA 351's optics include a rotating telescope turret to provide three sensitivities in one system. The KLA 351 offers flexibility for users who need a versatile inspection system to address the inspection needs of both the most demanding and the more routine semiconductor manufacturing processes. Users may obtain higher throughput by selecting lower sensitivity inspections.

The KLA 351 incorporates a reference database generator and data preparation system which gives full die-to-database functionality to the inspection, permitting inspection against the ideal reticle pattern as specified by the user's CAD program. The Company is continuing to develop enhancements to the KLA 351 inspection system to improve performance, serviceability and reliability.

In 1995, the Company introduced a new reticle inspection product, STARlight, which uses reflected and transmitted light detection techniques simultaneously to identify reticle contaminants, including particles. STARlight permits users to identify defects which previously had not been detectable. The Company believes STARlight will be applied by mask manufacturers and semiconductor manufacturers. STARlight is offered as an option on the KLA 351 inspection system and as a stand-alone unit.

METROLOGY GROUP

Optical Metrology Business Unit. Lithography for sub-micron semiconductor fabrication requires increasingly stringent overlay and critical dimension tolerances. In particular, decreasing linewidths, larger die sizes, and additional layers have made overlay mis-registration errors a crucial cause of yield loss. To address these challenges, KLA offers the KLA 5000 series metrology systems: the 5100 for overlay; and the 5105 for both overlay and critical dimension measurement. In June 1996, KLA introduced the 5200 overlay system, which has performance and usability enhancements compared to the 5100. KLA estimates that during fiscal 1994, 1995 and 1996, it had the leading share in the worldwide market for overlay registration systems.

The KLA 5000 series uses a patented coherence probe microscopy technology which permits fast autofocus and precision critical dimension measurements. Applying its expertise in digital image processing, KLA has developed sophisticated measurement algorithms that are more tolerant of process variations. With coherence probe microscopy, the system scans the image-forming coherence region through the wafer plane, only gathering information from in-focus surfaces. As a result, measurements are more tolerant of process and substrate reflectivity variations than those from ordinary optical systems.

The precision measurements from the KLA 5000 series identify the magnitude and direction of overlay mis-registration errors arising from the stepping process and from optical distortion inherent in the stepper lens. Based upon these measurements, users can fine-tune the stepper program to compensate for these errors, and improve process yield.

The disk drive manufacturing industry is an emerging market for KLA's metrology systems. Disk drive manufacturers use a semiconductor photolithography process to produce thin film heads. The Company's coherence probe technology is particularly well-suited to handle the complex topography characteristics encountered in the thin film head process. The Company believes that its solution to these requirements has allowed it to achieve the major share of the thin film head metrology market.

E-Beam Metrology Business Unit. KLA broadened its portfolio of metrology products in December 1994 with the acquisition of Metrologix, Inc., a

manufacturer of advanced electron beam measurement equipment. With this acquisition, KLA's E-Beam Metrology business gained an established position in the CD SEM inspection market, a market which KLA believes is larger than the optical overlay market, and one which it believes will grow as semiconductor manufacturers continue to produce more complex semiconductor devices.

KLA's first generation E-Beam metrology system features high throughput and automated setup. One major U.S. memory manufacturer and two major U.S. microprocessor manufacturers have purchased multiple systems for use in both production and research and development. The Company has made substantial investments in engineering and manufacturing to bring to market the next-generation tool, the KLA 8100. Production shipments of this product began in June 1996.

PRISM-SOFTWARE PRODUCTIVITY AND ANALYSIS SYSTEMS

The PRISM division was formed in April 1994 to address the market for software products that can be utilized in semiconductor fabrication applications for yield management and productivity improvement. The PRISM division is developing and marketing two software product lines, Discovery and CIMA. Discovery is an enterprise-wide yield management system that collects, stores and correlates yield information from multiple data sources in a fabrication facility. This product was the result of a cooperative development project with Motorola. The Company released production versions of Discovery in early fiscal 1996. CIMA is a test floor automation product that was developed by the Company and introduced in August 1994. CIMA collects test data from, and automates the operation of, the wafer floor. CIMA is currently in production and is installed in several modern fabrication facilities. PRISM has formed a client services organization to provide system integration and consulting services to assist its customers in the integration of its software products into the facility's information systems.

SEMSPEC-SCANNING ELECTRON MICROSCOPE INSPECTION SYSTEMS

As feature sizes of semiconductor circuits continue to decrease for leading edge semiconductor products, the Company believes that conventional optical technologies ultimately will begin to reach physical limits imposed by the wavelength of light and fail to provide the necessary inspection resolution. Working closely with those customers with the most advanced inspection requirements, KLA has developed the world's only fully automatic electron beam inspection systems. These systems, comprised of the world's fastest scanning electron-optical column and a high speed image computer, are used for wafer and x-ray mask inspection. The development of these systems was funded in part by customer-sponsored research and development programs. KLA expects the market for these inspection systems to emerge slowly.

ATS WATCHER DIVISION-IMAGE PROCESSING SUBSYSTEMS

The ATS Watcher division develops and manufactures the image processing electronics and optical subsystems sold to Tokyo Electron, Limited ("TEL") for inclusion in TEL's wafer probers. TEL manufactures the prober's mechanical chassis and incorporates the KLA electronics and subsystems.

On April 30, 1996, TEL and KLA reached agreement to transfer all of KLA's prober distribution operations to TEL. Under the agreement, KLA transferred all prober related assets to TEL, and KLA is no longer selling or servicing prober systems.

CUSTOMERS AND APPLICATIONS

The Company believes that it is one of the few suppliers which sells its systems to virtually all of the world's semiconductor manufacturers. In fiscal 1994, 1995 and 1996, no single customer accounted for more than 10% of the Company's revenues.

SALES, SERVICE AND MARKETING

The Company believes that the size and location of its field sales, service and applications engineering organization represents a competitive advantage in its served markets. In the United States, Europe, Asia Pacific and Japan the Company has a direct sales force located in major geographical markets. The Company's sales, service and applications facilities throughout the world

employ over 600 sales, service and applications engineers.

In fiscal 1996, the Company sold its systems in Japan, Singapore and Taiwan through local sales representatives. Starting in July 1996, KLA began selling direct in these countries and no longer uses a local sales representative, except in Japan. In Japan, the Company took over the majority of the sales duties in July 1996, but will be phasing out its distributor (TEL) through December 1996.

KLA maintains an export compliance program that fully meets the requirements of the U.S. Department of Commerce. KLA has never been denied approval to ship against a purchase order.

For information regarding the Company's revenues from foreign operations for the Company's last three fiscal years, see Note 10 on page 22 of the 1996 Annual Report to Stockholders, incorporated herein by reference.

TECHNOLOGY

The Company's inspection and metrology systems precisely capture trillions of features on wafers and reticles that are as small as 10 millionths of an inch on a side and analyze each of these features for possible defects through the use of the following technologies:

Image Acquisition. The Company's systems acquire images of sub-micron features on wafers and reticles. The quality and brightness of the images greatly influence the speed and sensitivity of the final inspection system. The Company has developed a wide range of optical imaging systems, such as laser scanners, interference microscope systems, and conventional white light and deep UV optical systems. To satisfy the future sensitivity requirements of advanced lithography, the Company has developed an electron beam system which incorporates the world's fastest scanning electron-optical column.

Image Conversion. The Company's equipment converts the photon or electron image to an electronic digital format. The Company has been a pioneer in the use of time-delay-integration sensors. The Company also utilizes other image conversion technologies such as avalanche diode detectors, photo multiplier systems and fixed frame pickups.

Precision Mechanics. In the most common configuration of an inspection system, the reticle or the wafer is moved at a constant speed through the field of the imaging system. Since areas of interest are as small as 5 millionths of an inch, and vibrations in the scanning system of one-tenth of the area of interest can degrade system performance, the mechanical stage must be extremely smooth and precise. To address these requirements, the Company has ten years of experience in the design and manufacture of air-bearing linear drive stages.

Proprietary Algorithms. To perform the inspection or measurement task, the Company's equipment examines the properties of the digitized images using a set of logical steps (algorithms) which measure the desired image property. The Company's engineers develop sets of algorithms that are specifically tailored to obtain optimum performance for its wafer, reticle and metrology systems. These algorithms are largely responsible for the state-of-the-art performance of the Company's systems.

Image Computers. The combination of proprietary algorithms and special purpose computers allows the Company's equipment to have a high performance to cost ratio. While general purpose computers are capable of executing the Company's algorithms, very few computer architectures can sustain the computing speed that is required in the Company's systems. To address this requirement, the Company develops and builds special purpose image computers designed to execute its algorithms.

Database Analysis. Many of the inspections that the Company's reticle inspection systems perform require a digital image representation of the ideal pattern obtained from the data used to manufacture the reticle. This capability allows inspection systems to compare the actual circuit with its design specifications. The Company has been developing database systems for over 16 years to satisfy this objective. Its present generation of special purpose database computers is capable of generating simulated images at the same high speeds at which the Company's image conversion systems generate the digital image from the actual reticle.

Statistical Process Control. Integrated circuit yield management and process monitoring systems generate hundreds of thousands of data items each day. To enhance the utility of this data, the Company has a team of software engineers who build systems containing statistical process control software to simplify data and present this data in a useful manner. The Company is continuing to work on new software to enhance its statistical process control systems.

RESEARCH AND DEVELOPMENT

The market for yield management and process monitoring systems is characterized by rapid technological development and product innovation. The Company believes that continued and timely development of new products and enhancements to existing products are necessary to maintain its competitive position. Accordingly, the Company devotes a significant portion of its personnel and financial resources to research and development programs and seeks to maintain close relationships with customers to remain responsive to their needs. In order to meet continuing developments in the semiconductor industry and to broaden the applications for its image processing technology, the Company is committed to significant engineering efforts for product improvement and new product development. The Company reports engineering, research and development expense net of this funding.

KLA typically receives some external funding from customers, industry groups, and government sources to augment its engineering, research and development efforts. The Company reports engineering, research and development expense net of this funding. Thus, recorded amounts for engineering, research and development expense were 9%, 10% and 11% of sales in fiscal 1994, 1995 and 1996, respectively. For information regarding the Company's research and development expense during the last three fiscal years, see Notes 1 and 8 on pages 18 and 22, respectively, of the 1996 Annual Report to Stockholders incorporated herein by reference.

MANUFACTURING

The Company's principal manufacturing activities take place in San Jose, California, and Migdal Ha'Emek, Israel, and consist primarily of manufacturing, assembling and testing components and subassemblies which are acquired from third party vendors and then integrated into the Company's finished products. Due to the discontinuation of the Wafer Probing Systems agreement with TEL, the Company discontinued manufacturing operations in Bevaix, Switzerland in April 1996. The Company is also cross-training personnel, so that it can respond to changes in product mix by reallocating personnel in addition to hiring.

The Company has been working with key vendors to improve inventory management. Volume purchase agreements and just-in-time delivery schedules have helped control both inventory levels and costs. The Company's manufacturing engineers, in conjunction with key vendors, are improving the manufacturability and reliability of the new wafer and reticle inspection systems and metrology systems.

Many of the components and subassemblies are standard products, although certain items are made to Company specifications. Certain of the components and subassemblies included in the Company's systems are obtained from a single source or a limited group of suppliers. Those parts subject to single or limited source supply are routinely monitored by management and the Company endeavors to ensure that adequate supplies are available to maintain manufacturing schedules, should supply for any part be interrupted. Although the Company seeks to reduce its dependence on sole and limited source suppliers, in some cases the partial or complete loss of certain of these sources could have at least a temporary adverse effect on the Company's results of operations and damage customer relationships.

COMPETITION

The market for yield management and process control systems is highly competitive. In each of the markets it serves, the Company faces competition from established and potential competitors, some of which may have greater financial, engineering, manufacturing and marketing resources than the Company. Significant competitive factors in the market for yield management and process control systems include system performance, ease of use, reliability, installed base and technical service and support.

The Company believes that, while price and delivery are important competitive factors, the customers' overriding requirement is for systems which easily and effectively incorporate automated, highly accurate inspection capabilities into their existing manufacturing processes, thereby enhancing productivity. The Company's yield management and process control systems for the semiconductor industry are generally higher priced than those of its present competitors and are intended to compete based upon performance and technical capabilities. These systems also compete with less expensive, more labor-intensive manual inspection devices.

The Company's wafer and reticle inspection systems have a predominant share of their respective markets. The Company believes that it is the leading provider of overlay registration systems.

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Many of the Company's competitors are investing in the development of new products aimed at applications currently served by the Company. The Company's competitors can be expected to continue to improve the design and performance of their products in each product area and to introduce new products with competitive price/performance characteristics. Competitive pressures often necessitate price reductions which can adversely affect operating results. Although the Company believes that it has certain technical and other advantages over its competitors, maintaining such advantages will require a continued high level of investment by the Company in research and development and sales and marketing. There can be no assurance that the Company will have sufficient resources to continue to make such investments or that the Company will be able to make the technological advances necessary to maintain these competitive advantages.

The yield management and process control industry is characterized by rapidly changing technology and a high rate of technological obsolescence. Development of new technologies that have price/performance characteristics superior to the Company's technologies could adversely affect the Company's results of operations. In order to remain competitive, the Company believes that it will be necessary to expend substantial effort on continuing product improvement and new product development. There can be no assurance that the Company will be able to develop and market new products successfully or that the products introduced by others will not render the Company's products or technologies non-competitive or obsolete.

PATENTS AND OTHER PROPRIETARY RIGHTS

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

The Company protects its proprietary technology through a variety of intellectual property laws including patents, copyrights and trade secrets. The Company's source code is protected as a trade secret and as an unpublished copyright work. The Company has a number of United States and foreign patents and patent applications. The Company's effort to protect its intellectual property rights through trade secret and copyright protection may be impaired if third parties are able to copy or otherwise obtain and use the Company's technology without authorization. Effective intellectual property protection may be unavailable or limited in certain foreign countries. In addition, the semiconductor industry is characterized by frequent litigation regarding patent and other intellectual property rights. No assurance can be given that any patent held by the Company will provide sufficient protection.

BACKLOG

Backlog orders for systems were \$250 and \$385 million at June 30, 1995 and 1996, respectively. In general, systems ship within six months to a year after receipt of a customer's purchase order.

EMPLOYEES

As of August 31, 1996, the Company employed a total of approximately 2,500 persons. None of the Company's employees are represented by a labor union. The Company has experienced no work stoppages and believes that its employee

relations are good.

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

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ITEM 2. PROPERTIES

The Company owns a corporate facility which houses engineering, manufacturing and administrative functions in San Jose, California, occupying approximately 232,000 square feet. The Company purchased this facility in 1990 at a total cost of approximately \$30 million, including improvements. The Company leases additional office space for manufacturing, engineering, sales and service activities, including seven locations in the U.S., eleven in Japan, eight in Europe, two each in Korea and Israel, and one each in Malaysia and Taiwan. The Company leases three buildings adjacent to its campus facility, consisting of an aggregate of approximately 87,000 square feet. Two of these leases have been extended to fiscal 2000 (73,000 square feet).

In June 1995, the Company entered into a five-year operating lease for a 105,000 square-foot building constructed on land owned by the Company in San Jose, California. Monthly rent payments for the building commenced on July 1, 1996, and will vary based on the London interbank offering rate (LIBOR). The Company may, at its option, purchase the building during the term of the lease for \$12.5 million. In August 1995, the Company entered into a five-year operating lease agreement for an additional 120,000 square feet in two buildings in San Jose, California. Monthly rent payments for the buildings commenced on May 1, 1996, and will vary based on the LIBOR rate. The Company may, at its option, purchase the buildings during the term of the lease for \$18.7 million. If the Company does not purchase any or all of the buildings at the end of their respective leases, the Company will guarantee the lessor 85% of the aforementioned purchase prices of the building or buildings not purchased. In addition, the lease agreements require the Company to maintain, among other items, minimum quick ratio, tangible net worth and profitability. As of June 30, 1996, the Company was in compliance with all of these covenants.

ITEM 3. LEGAL PROCEEDINGS

Not Applicable.

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

Not Applicable.

PART II

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

"Common Stock" on page 24 of the 1996 Annual Report to Stockholders is incorporated herein by reference.

ITEM 6. SELECTED FINANCIAL DATA

"Selected Financial Data" on page 14 of the 1996 Annual Report to Stockholders is incorporated herein by reference.

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

"Management's Financial Commentary" on pages 12 and 13 of the 1996 Annual Report to Stockholders is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements, together with the report thereon of Price Waterhouse LLP dated August 7, 1996, appearing on pages 14 through 24 of the 1996 Annual Report to Stockholders are incorporated herein by reference. With the exception of the aforementioned information and the information incorporated in Items 5, 6, 7 and 8, the 1996 Annual Report to Stockholders is

not to be deemed filed as part of this Form 10-K Annual Report.

ITEM 9. DISAGREEMENTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not Applicable.

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PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below are the names of the present executive officers of the Company, their ages and positions held with the Company.

Name - ----	Age ---	Position -----
Kenneth Levy	53	Chairman of the Board of Directors and Chief Executive Officer
Kenneth L. Schroeder	50	President, Chief Operating Officer and Director
Robert J. Boehlke	55	Vice President of Finance and Administration, Chief Financial Officer and Assistant Secretary
Frank L. Brienzo	45	Vice President, Asia Operations
Virginia J. DeMars	54	Vice President, Human Resources
Gary E. Dickerson	38	Group Vice President, Wafer Inspection
Samuel A. Harrell	56	Senior Vice President, Strategic Business Development
Michael W. Morrissey	51	Group Vice President, Customer Group
Neil Richardson	41	Vice President, Metrology
Magnus O. W. Ryde	40	Vice President, U.S. and European Sales Organizations
Arthur P. Schnitzer	53	Group Vice President
Christopher Stoddart	40	Treasurer
Bin-Ming Ben Tsai	38	Vice President, Chief Technical Officer
William Turner	40	Vice President, Corporate Finance
Edward W. Barnholt	53	Director
Leo J. Chamberlain	66	Director
Robert E. Lorenzini	59	Director
Yoshio Nishi	56	Director
Samuel Rubinovitz	66	Director
Dag Tellefsen	54	Director

Mr. Levy co-founded the Company in July 1975 and served as President and Chief Executive Officer and a Director of the Company until November 1991, when he became Chairman of the Board of Directors and Chief Executive Officer. Since May 1993, Mr. Levy has been a Director of Ultratech Stepper, Inc., a manufacturer of photolithography equipment; since April 1993, a Director of Network Peripherals, Inc., a supplier of high-performance client-server networking solutions; and since August 1995, a Director of Integrated Process Equipment Corporation, a manufacturer of chemical, mechanical, polishing and cleaning equipment which is used in the manufacturing of advanced semiconductor devices.

Mr. Schroeder rejoined the Company in November 1991 as President, Chief Operating Officer and Director. Mr. Schroeder had worked previously at KLA from 1979 through 1987, during which time he held the positions of Vice President of Operations (1979); Vice President and General Manager, RAPID (1982); Vice President and General Manager, WISARD (1983); and Senior Vice President (1985). In July 1988, he became President and Chief Executive Officer of Photon Dynamics, Inc., a manufacturer of electro-optic test equipment. In mid-1990, he was appointed President, Chief Operating Officer and Director of Genus, Inc., a manufacturer of CVD chemical vapor deposition and ion implant equipment. He left Genus in October 1991, to rejoin KLA. Since July, 1993, Mr. Schroeder has been a director of SEMI/SEMATECH, an organization of American equipment companies supporting SEMATECH and its mission; since August, 1995, Mr. Schroeder has been a director of GaSonics, International, a supplier of resist stripping, cleaning, etching and deposition equipment.

Mr. Boehlke joined the Company in April 1983 as Vice President and General Manager of the RAPID Division. Subsequently, he was General Manager of several divisions and groups of divisions at KLA. In June 1985, Mr. Boehlke was elected

to Senior Vice President and to Executive Vice President in January 1989, and to Chief Operating Officer in August 1989 until July 1990, when he became Chief Financial Officer. From 1988 until 1993 he served on the Board of Directors of SEMI/SEMATECH, where he was a member of the executive committee.

Mr. Brienzo joined the Company in March 1986 as Director of Quality Assurance and Customer Acceptance, WISARD Division. In Sept. 1986, he became Vice President of Operations, WISARD Division. In October 1990, he was named President of KLA Acrotec. He served there until September 1994, when he took the position of Vice

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President Operations, KLA Japan. In July 1995, he was promoted to Vice President, Asia Operations and General Manager, KLA Japan.

Ms. DeMars joined KLA in 1988 as Director of Human Resources after a 13 year career in Employee Relations at Monolithic Memories, Inc. and Advanced Micro Devices. In November 1991, KLA promoted Ms. DeMars to Vice President of Human Resources, worldwide.

Mr. Dickerson joined KLA in January 1986 as a Senior Applications Engineer in the Wafer Inspection Division. In July 1987 he was promoted to Manager of Applications Engineering for the Wafer Inspection Division, followed by Manager of Product Planning in July 1989, Director of Marketing in July 1990, and Vice President of Marketing in July 1992. In July 1993, he was promoted to Vice President and Director of the Wafer Inspection Business Unit. In July 1994, he was elected Vice President of the Company and promoted to Group Vice President in January, 1996.

Dr. Harrell joined the Company in September 1995 as Senior Vice President and Chief Strategy Officer. Dr. Harrell is responsible for strategic corporate development. Dr. Harrell served from October 1992 to December 1995 as the Senior Vice President and Chief Strategy Officer of SEMATECH. From August 1987 to September 1992 he served as President of SEMI/SEMATECH.

Mr. Morrissey joined KLA in April 1996 as Group Vice President for the Customer Group, after a 26 year career with NCR and AT&T. He was Vice President of NCR's Workstation Product Division from July 1993 to April 1996 and Vice President of the Microelectronics Division from March 1991 to June 1993. Mr. Morrissey has also served on the Board of Directors for SEMATECH.

Dr. Richardson joined KLA in June 1993 as Vice President and General Manager of the Metrology Division, and was elected Vice President of the Company in July 1994. He served as Vice President and General Manager of the Diagnostic Systems Group of Schlumberger Technologies from September 1985 to November 1991, and was the Corporate Technology Adviser for Schlumberger Ltd., a manufacturer of electronic test equipment, from November 1991 to May 1993.

Mr. Ryde joined KLA in June 1980 as Production Control Manager. In May 1981 he was promoted to Materials Manager, followed by Production Manager in January 1982 and Manager, Advance Manufacturing - KLA208 in May 1984. In March 1985, he became Product Marketing Manager for the RAPID Division. In December 1988, after leaving KLA for 6 months to pursue other interests, he returned as Director of EMMI Business within the ATS Division. In January 1989, he was promoted to Director of Operations - Europe, and in January 1991 became Vice President of Operations for the ATS Division. He was promoted to Vice President and General Manager of the Customer Support Division in July 1992 and was elected to Vice President of the Company in July 1994. In July 1995, he became Vice President of the U.S. and European Sales Organizations.

Mr. Schnitzer joined the Company in July 1978 as Software Engineering Manager, was promoted to Director of Engineering of the RAPID Division in July 1982, and was promoted to Vice President in July 1983. He became Vice President of Technology and Marketing of RAPID in May 1987, and Vice President of Advanced Inspection in January 1989. In October 1989, he was promoted to General Manager of the WISARD Division and, additionally, was elected to Vice President of the Company in July 1990. In July 1993, he became Group Vice President and is presently responsible for RAPID, SEMSpec and PRISM.

Mr. Stoddart joined the Company in December 1991 as Treasurer. Prior to joining the Company, Mr. Stoddart was Treasurer of General Cellular Corporation, a cellular telephone service provider, from October 1989 to September 1991 and previously with The Cooper Companies, Inc., a manufacturer of pharmaceuticals

and medical and implant equipment, as Assistant Treasurer from August 1986 to July 1988, and then Treasurer from July 1988 to September 1989.

Dr. Tsai joined the Company in June 1984 as a member of the WISARD Technical Staff and was promoted to Manager of Algorithm Development for the WISARD Division. From August 1989 until September 1990 he served as Director of Engineering for WISARD. In October 1990, he was promoted to Vice President of Engineering for KLA Acrotec, and in July 1994 he was elected Vice President of the Company and promoted to Chief Technical Officer.

Mr. Turner joined the Company in September 1983 as a Financial Analyst. After serving as Controller for the Rapid, ATS and International divisions, he was named Corporate Controller in December 1989 and was elected Vice President of the Company in July 1990. In August 1996, he was named Vice President of Corporate Finance.

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Mr. Barnholt has served as a Director of the Company since September 1995. From October 1990 to October 1993 he served as Vice President and General Manager of the Test and Measurement Organization for Hewlett-Packard. In November 1993 he was promoted to Senior Vice President and General Manager of the Test and Measurement Organization.

Mr. Chamberlain has served as a Director of the Company since 1982. He has also served as a Director of Octel Communications Corporation, a manufacturer of high performance voice processing systems since March 1989.

Mr. Lorenzini has served as a Director of the Company since 1976. He has served since January 1993 as Chairman of SunPower Corporation, a manufacturer of optoelectronic devices, and from October 1988 to January 1993, he served as President and Chief Executive Officer. Since July 1993, he has also been a Principal in Dalton Partners, a turn-around management company. He was a founder and, until December 1986, Chairman of the Board of Siltec Corporation, a manufacturer of semiconductor materials and manufacturing equipment. Since October 1986, Mr. Lorenzini has also served as a Director of FSI International, a semiconductor process equipment manufacturer.

Dr. Nishi has served as a Director of the Company since 1989. He has served as Senior Vice President and Director of Research and Development for the Semiconductor Group of Texas Instruments since May 1995. Mr. Nishi served as a Director of numerous research laboratories at Hewlett-Packard from January 1986 to April 1995. He is a consulting professor in the Stanford University Department of Electrical Engineering and teaches at Waseda University in Japan as a visiting Professor of the Materials Science and Engineering Department and the Electronic Communication Engineering Department.

Mr. Rubinovitz previously served as a Director of the Company from October 1979 to January 1989, and rejoined the Company as a Director in 1990. From April 1989 through January 1994, he served as Executive Vice President of EG&G, Inc., a diversified manufacturer of scientific instruments and electronic, optical and mechanical equipment, and previously as Senior Vice President of EG&G, Inc. between April 1986 and April 1989. From April 1989 to April 1996, Mr. Rubinovitz served as a Director of EG&G. Since October 1984, he has served as Director of Richardson Electronics, Inc., a manufacturer and distributor of electron tubes and semiconductors and, since October 1986, Director of Kronos, Inc., a manufacturer of electronic time keeping systems. Since December 1994, he has served as a Director of LTX Corporation, a manufacturer of Semiconductor Test Equipment.

Mr. Tellefsen has served as a Director of the Company since 1978. He is Managing Partner of Glenwood Management, a venture capital firm. Since January 1983, he has served as a Director of Iwerks Entertainment, a producer of movie-based specialty theaters, and since 1982, as a director of Octel Communications Corporation.

ITEM 11. EXECUTIVE COMPENSATION

The information regarding Executive Compensation as it appears in the Proxy Statement is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information regarding Security Ownership of Certain Beneficial Owners and Management as it appears in the Proxy Statement is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information regarding Certain Relationships and Related Transactions as it appears in the Proxy Statement is incorporated herein by reference.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENTS, SCHEDULES, AND REPORT ON FORM 8-K

- (a) (1) Financial Statements: See Index to Financial Statements, page 14.
- (2) Financial Statement Schedules: See Index to Financial Statement Schedules, page 14.
- (3) Exhibits: See Index to Exhibits, pages 15 and 16.
- (b) No reports on Form 8-K were filed during the quarter ended June 30, 1996.

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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 in the City of San Jose, State of California, on the 26th day of September 1996.

KLA INSTRUMENTS CORPORATION

By /s/ WILLIAM TURNER

William Turner
Vice President of Corporate Finance

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

Signature	Title	Date
/s/ KENNETH LEVY ----- Kenneth Levy	Director, Chairman of the Board, and Chief Executive Officer	September 26, 1996
/s/ KENNETH L. SCHROEDER ----- Kenneth L. Schroeder	Director, President and Chief Operating Officer	September 26, 1996
/s/ ROBERT J. BOEHLKE ----- Robert J. Boehlke	Vice President of Finance and Administration, Chief Financial Officer, and Assistant Secretary	September 26, 1996
/s/ EDWARD W. BARNHOLT ----- Edward W. Barnholt	Director	September 26, 1996
/s/ LEO J. CHAMBERLAIN ----- Leo J. Chamberlain	Director	September 26, 1996
/s/ ROBERT E. LORENZINI ----- Robert E. Lorenzini	Director	September 26, 1996
/s/ DR. YOSHIO NISHI ----- Dr. Yoshio Nishi	Director	September 26, 1996

/s/ SAMUEL RUBINOVITZ

Samuel Rubinovitz

Director

September 26, 1996

/s/ DAG TELLEFSEN

Dag Tellefsen

Director

September 26, 1996

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KLA INSTRUMENTS CORPORATION AND SUBSIDIARIES

INDEX TO FINANCIAL STATEMENTS

	Page(s) in 1996 Annual Report*

Consolidated Statement of Operations for the three years ended June 30, 1996	14
Consolidated Balance Sheet at June 30, 1995 and 1996	15
Consolidated Statement of Stockholders' Equity for the three years ended June 30, 1996	16
Consolidated Statement of Cash Flows for the three years ended June 30, 1996	17
Notes to the Consolidated Financial Statements	18-23
Report of Independent Accountants	24

*Incorporated by reference from the indicated pages of the 1996 Annual Report to Stockholders.

INDEX TO FINANCIAL STATEMENT SCHEDULES

Financial Statement Schedules not included in this Form 10-K Annual Report have been omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

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INDEX TO EXHIBITS

- (i) EXHIBITS INCORPORATED BY REFERENCE:
- 3.1 Certificate of Incorporation as amended(7)
 - 3.2 Bylaws, as amended(7)
 - 4.1 Amended and Restated Rights Agreement dated as of August 26, 1995, between the Company and First National Bank of Boston, as Rights Agent. The Rights Agreement includes as Exhibit A, the form of Right Certificate and as Exhibit B, the summary of transactions of Rights.(1)
 - 10.15 Statement of Partnership to Triangle Partners dated April 12, 1983(2)
 - 10.16 Lease Agreement and Addendum thereto dated January 10, 1983, between BB&K Partnership and the Company(2)
 - 10.18 Purchase and Sale Agreement dated January 10, 1983, between BB&K Partnership, Triangle Partners and the Company(2)
 - 10.35 Research and Development Agreement, Cross License and Technology Transfer Agreement and Agreement for Option to License and Purchase Resulting Technology, all dated October 1, 1986, by and between KLA Development No. 4, Ltd., and the Company(3)
 - 10.45 Distribution Agreement dated July 1990, by and between Tokyo Electron Limited, a Japanese Corporation, and the Company(4)

- 10.46 Principal facility Purchase Agreement dated July 1990, including all exhibits and amendments; Lease Agreement, Termination of Lease, Lot line adjustment, rights of first refusal, Deeds of Trust(4)
- 10.47 Joint Venture Agreement between the Company and Nippon Mining Company, Limited, dated September 18, 1990(5)
- 10.49 Exercise of Option to Purchase Technology made effective as of January 1, 1990, by and between KLA Development No. 4, and the Company(5)
- 10.54 Micrion Corporation Series E Preferred Stock Purchase Agreement, dated September 13, 1991(6)
- 10.67 Amendment of Credit Agreement between Bank of America NT & SA and the Company, dated April 30, 1994(9)
- 10.68 Credit Agreement between Bank of America NT & SA and the Company as amended, on February 7, 1996(9)
- 10.71 1990 Outside Directors Stock Option Plan(8)
- 10.73 Amendment of Credit Agreement between Bank of America NT & SA and the Company dated December 31, 1994(10)
- 10.74 1981 Employee Stock Purchase Plan, as amended by the Board of Directors on October 7, 1994(10)
- 10.75 1982 Stock Option Plan, as amended on November 15, 1995(10)
- 10.76 Amendment of Credit Agreement between Bank of America NT & SA and the Company dated February 15, 1995(10)
- 10.77 Lease Agreement, Ground Lease Agreement and Purchase Agreement dated June 5, 1995, between BNP Leasing Corporation and the Company(10)
- 10.78 Lease Agreement and Purchase Agreement dated August 10, 1995, between BNP Leasing Corporation and the Company(10)
- 10.79 Amendment of Credit Agreement between Bank of America NT & SA and the Company dated December 29, 1995(11)
- (ii) EXHIBITS INCLUDED HEREWITH:
- 10.80 Mortgage Loan Supplement Program between Bank of the West and the Company dated May 8, 1996.
- 13.1 1996 Annual Report to Stockholders. This Annual Report shall not be deemed to be filed except to the extent that the information is specifically incorporated by reference.
- 21 List of Subsidiaries of KLA Instruments Corporation
- 23.1 Consent of Independent Accountants
- 27 Financial Data Schedule

(1)Filed as exhibit number 1 to Registrant's Form 8-A/A Amendment number 2 to Registration Statement, filed on September 24, 1996

(2)Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1983

(3)Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1987

(4)Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1990

(5)Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1991

(6) Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1992

(7) Filed as the same exhibit number to Registrant's registration statement no.33-51819 on Form S-3, dated February 2, 1994

(8) Filed as exhibit number 4.6 as set forth herein to Registrant's Form 10-K for the year ended June 30, 1991

(9) Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1994

(10) Filed as the same exhibit number as set forth herein to Registrant's Form 10-K for the year ended June 30, 1995

(11) Filed as the same exhibit number as set forth herein to Registrant's Form 10-Q for the quarter ended December 31, 1995

May 2, 1996

Mr. Christopher Stoddart
Mr. Douglas Reed
KLA Corporation
160 Rio Robles
P.O. Box 49055
San Jose, California 95161-9055

Dear Chris and Doug:

We are pleased to confirm our extension of a Three Million Dollar (\$3,000,000) loan facility (the "Facility") to KLA Instruments Corporation ("KLA") to make second mortgage loans to your eligible present and future employees and other eligible co-borrowers on the terms and conditions set forth in this commitment facility letter. The credit extended under this Facility is to be used by approved eligible employees (the "Borrowers") to assist them in purchasing their primary residence (the "Mortgage Loan Supplement Program" or the "Program").

1. All Borrowers under the Mortgage Loan Supplement Program will be eligible KLA employees. Eligibility for participation in the Program will be determined by KLA.
2. The loans made under the Mortgage Loan Supplement Program (the "Loans") will be for the purpose of assisting eligible employees in purchasing their primary residence.
3. The minimum amount of each Loan will be Fifteen Thousand and No/100 Dollars (\$15,000.00). The maximum amount of each Loan will be One Hundred Thousand and No/100 Dollars (\$100,000.00), or greater, if specifically requested in writing by KLA, and approved by Bank of the West which approval the Bank of the West may withhold in sole and absolute discretion. In no event shall the amount of any Loan, when added to all senior indebtedness secured by the property, exceed ninety-five percent (95%) of the lower the purchase price or the appraised value of the property.

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4. The interest rate on the Loans will be the published The Wall Street Journal, Western Edition, prime rate (the "Index Rate") plus one percent (1%) per annum and will be computed on a 360-day year, twelve 30-day months' basis. The maximum interest rate shall not exceed five percentage points (5%) above the initial loan rate. The interest rate will be fixed each month as of the first day of each month ("Change Date"). If the Change Date occurs on a weekend or holiday and no Index Rate is published on that day, then the Index Rate published on the next succeeding business day shall be utilized to determine the interest applicable to the Change Date.
5. The term of each Loan will be three to seven years from the making of the Loan, as determined by Bank of the West in consultation with KLA. Principal will be paid in equal annual installments. Interest will accrue monthly and be paid annually along with each yearly principal payment.
6. KLA employees who are residents of California will provide a second deed of trust on the residence purchased as collateral for Loans extended under the Program. Loans to employees in other states will be secured by second mortgages on the residences purchased. The closing of the Loan will occur simultaneously with the closing of the first deed of trust/mortgage.
7. KLA will pay all escrow fees, title insurance fees (including

endorsements), appraisal fees (Lender will use senior deed of trust lender's appraisal if it's current and meets regulatory standards) and all other similar closing costs and loan costs in connection with the loans. Bank of the West will not charge any "points" or up front fees in connection with the Loans.

8. Documentation for these transactions will be a variable rate promissory note, Bank of the West's second deed of trust or mortgage documentation in effect from time to time (which will be modified, as appropriate to accommodate the special features of this Facility), appraisals, casualty insurance (naming Bank of the West as additional loss payee), lender title insurance, and other traditional closing documentation. The currently effective Bank of the West second deed of trust is attached here to. Second mortgage documentation, if applicable, will be subject to prior review and approval by KLA.

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9. If a Borrower's employment with KLA is terminated as a result of a lay off or reduction in force, permanent disability, or death prior to maturity, the Loan will continue until maturity; if a Borrower's employment with KLA is terminated by the employee voluntarily or by KLA other than as a result of a layoff or reduction in force, then the Loan will mature sixty days thereafter. The Guaranty (as defined below) will continue until the Loan is paid in full. At maturity or upon earlier termination as described above, the Borrower will be required to repay the Loan. Upon default or upon maturity, Bank of the West will have the right to either (i) foreclose on the deed of trust or (ii) call on the Guaranty. If KLA pays on the Guaranty, Bank of The West will assign the Note, Deed of Trust and other loan documents and all of their rights thereunder to KLA.

10. Bank of the West will provide KLA with a copy of each annual payment request sent to each Borrower.

11. KLA agrees to:

(a) Provide Bank of the West with a master continuing guaranty substantially in the form attached (the "Guaranty"), guaranteeing the Borrowers' obligations and performance on the indebtedness (including indebtedness arising out of actions taken by Bank of the West to protect its security under any Loan made pursuant to this Facility). KLA agrees and acknowledges that because the loan-to-value ratio permitted under this Facility will be high, Bank of the West is relying on the Guaranty as its assurance against any loss in connection with the Loans to be made to the Borrowers,

(b) Provide Bank of the West with a letter (in the form attached hereto) as part of each loan application by an eligible Borrower(s), confirming such Borrowers' eligibility to apply under the Program (the "Eligibility Letter").

(c) Provide Bank of the West with 10-Qs and 10-Ks and such other KLA financial data as reasonably requested from time to time. Such data shall include, without limitation, an annual audited balance sheet and income statement substantially in the form previously submitted to Banque Nationale de Paris.

(d) Provide Bank of the West with adequate documentation to substantiate KLA's authorization and authority, to enter into this transaction, including, without limitation, an opinion of counsel for KLA regarding the due execution and enforceability of the Guaranty, certified copy of the Board of Directors Resolution Certificate approving the transaction and an Incumbency Certificate.

(e) Inform Bank of the West if a Borrower's employment is terminated for any reason, and whether the termination is the result of a reduction in force, lay off, permanent disability or death prior to maturity of the loan.

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(f) Provide Bank of the West a list of persons authorized to execute Eligibility Letters.

12. Termination of Facility

This Facility may be terminated at any time by either Bank of the West or KLA by written notice given to the other party. Notwithstanding any such termination, (i) all Loans outstanding under this Facility at the time of termination shall remain in effect in accordance with their terms and (ii) all rights of Bank of the West under loan documentation, including the Guaranty, shall continue in effect until all outstanding indebtedness under this Facility has been repaid in full and all related obligations have been performed.

Dated: May 2, 1996

Bank of the West

James M. Griffith
Vice President and Manager

Accepted:

KLA Instruments Corporation

By: /s/ Chris Stoddart

Date: May 8, 1996

UNCONDITIONAL GUARANTY

This Guaranty (the "Guaranty") is made as of May 8, 1996 by KLA Instruments Corporation ("KLA"), a Delaware corporation (the "Guarantor"), in favor of Bank of the West, a California corporation (the "Lender").

1. This Guaranty is made in order to induce the Lender to make loans to certain of Guarantor's employees and their spouses (the "Borrowers") identified by the Guarantor as eligible to participate in the Mortgage Loan Supplement Program (as defined in the Mortgage Loan Supplement Program Commitment dated May 2, 1996) (the "Loans"). The Guarantor understands that the proceeds of each Loan will be used by each of the Borrowers to purchase their, his, or her primary residence or to pay off existing loans made by KLA to certain Borrowers. The amount of each Loan shall not be less than Fifteen Thousand and No/100 Dollars (\$15,000.00) nor more than One Hundred Thousand and No/100 Dollars (\$100,000.00), provided, however, the Lender may in its sole and absolute discretion loan an amount in excess of One Hundred Thousand and No/100 Dollars (\$100,000.00) to a Borrower if the Guarantor specifically requests in writing that such loan be made. The total original, principal amount of all Loans shall not in the aggregate exceed Three Million and No/100 Dollars (\$3,000,000.00). Each Loan will be evidenced by an adjustable rate promissory note in substantially the form attached to this Guaranty executed by the respective Borrowers (the "Notes"). All Loans will be secured by a second lien priority deed of trust or mortgage, depending on the state in which the purchased residence is located, (the "Deeds of Trust") and certain other documents evidencing or securing the Loans, each of which shall be in substantially the form reviewed and approved by Guarantor prior to the execution thereof. The Borrowers will also execute certain other documents such as, but not limited to, Truth-in-Lending disclosure statements and Regulation Z forms and RESPA statements in connection with these Loans. (The Note, Deed of Trust, and all other documents executed by the Borrowers in connection with the Loan shall hereinafter be referred to as the "Loan Documents".) Lender will provide Guarantor with true, correct and complete copies of the Loan Documents promptly

following delivery, execution, and recording (as the case may be) of such documents.

2. The Guarantor guarantees to the Lender, its successors, and assigns the full and prompt payment of each of the Notes in accordance with its terms, when due, by acceleration or otherwise and the full, prompt, and complete performance of all obligations of the Borrowers set forth in the Loan Documents. Upon a default by a Borrower in the performance of any of its obligations under the Loan Documents (excluding performance of its payment obligations), Bank shall give Guarantor notice of such default and the opportunity to cure such default for a period of thirty (30) days before exercising any remedies against the Borrower, including the remedy of accelerating the Loan. If Guarantor does not, within said time period, cure such default to the satisfaction of Bank, then Bank shall have the right to exercise any and all of its remedies against the Borrower under the Loan Documents, including accelerating the Loan.

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3. The liability of the Guarantor on this Guaranty is a guaranty of payment and performance and not of collectibility, and is not conditional or contingent on the genuineness, validity, regularity, or enforceability of the Notes, or the other Loan Documents, or on the pursuit by the Lender of any remedies that it now has or may hereafter have with respect thereto.

4. The liability of the Guarantor under this Guaranty shall in no way be affected by:

- a. The release or discharge of the Borrowers in any creditor proceeding, receivership, bankruptcy, or other proceeding (by operation of law);
- b. The impairment, limitation, or modification of the liability of the Borrowers or the estate of the Borrowers, or of any remedy for the enforcement of the Borrowers' liability, resulting from the operation of any present or future provision of the Bankruptcy Code (Title 11 of the United States Code, as amended; 11 USC sections 101-1301) or any bankruptcy, insolvency, debtor relief statute (state or federal), or any other statute, or from the decision of any court;
- c. The rejection or disaffirmance of the indebtedness, or any portion of the indebtedness, in any judicial or administrative proceeding;
- d. The cessation by operation of law of the liability of the Borrowers to the Lender;
- e. Any change in employment status of any of the Borrowers;
- f. Any divorce or marital separation proceedings or decree with respect to any of the Borrowers.

5. The Guarantor will file all claims against any Borrowers in any creditor proceeding, receivership, bankruptcy, or other proceeding in which the filing of claims is required by law on any indebtedness of such Borrowers to the Guarantor. The Guarantor will assign to the Lender all rights of the Guarantor on any such indebtedness to the extent that such Borrower's obligations under its Loan Documents have not been satisfied. If the Guarantor does not file any such claim, the Lender, as attorney-in-fact for the Guarantor, is authorized to do so in the name of the Guarantor or, in the Lender's discretion, to assign the claim and to file a proof of claim in the name of the Lender's nominee. In all such proceedings, the person or persons authorized to pay such claim shall pay to the Lender the full amount of any such claim. To the full extent necessary for that purpose, the Guarantor assigns to the Lender all of the Guarantor's rights to any such payments or distributions to which the Guarantor would otherwise be entitled to the extent that such Borrower's obligations under its Loan Documents have not been satisfied.

6. The Guarantor hereby waives:

a. Diligence and demand of payment;

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b. All notices to the Guarantor, to any Borrowers, or to any other person, including, without limitation, notice of the acceptance of this Guaranty, notice of the accrual of any obligations contained in the Loan Documents or notice of any other matters relating thereto;

c. All demands whatsoever, other than demand for payment under this Guaranty, provided however, failure of Lender to make a demand for payment under this Guaranty shall not exonerate this Guaranty or the Guarantor;

d. Any statute of limitations affecting liability under this Guaranty or the enforcement of this Guaranty;

e. Any duty on the part of the Lender to disclose to the Guarantor any facts it may now or hereafter know about the Borrowers, regardless of whether the Lender has reason to believe that any such facts materially increase the risk beyond that which the Guarantor intends to assume, or has reason to believe that such facts are unknown to the Guarantor, or has a reasonable opportunity to communicate such facts to the Guarantor. The Guarantor is fully responsible for being and keeping informed of the financial condition of the Borrowers and of all circumstances bearing on the risk of nonpayment of any indebtedness hereby guaranteed;

f. All rights and defenses arising out of an election of remedies by the Lender even though that election of remedies, such as a nonjudicial foreclosure with respect to security for a guaranteed obligation, has destroyed the Guarantor's rights of subrogation and reimbursement against the Borrowers or by any Borrower by the operation of Section 580d of the Code of Civil Procedure or otherwise; and

g. Guarantor's rights of subrogation and reimbursement and any other rights and defenses available to the Guarantor by reason of Sections 2787 to 2855 of the California Civil Code, inclusive, and any rights or defenses the Guarantor may have by reason of protection afforded to Guarantor and or the Borrowers (or any Borrowers), with respect to the obligations guaranteed herein, pursuant to the antideficiency or other laws of the State of California limiting or discharging the Guarantor's or the Borrowers' (or any Borrower's) liability, obligations, or indebtedness, including, without limitation, Sections 580a, 580b, 580d, or 726 of the Code of Civil Procedure. The Guarantor agrees that its obligations shall not be affected by any circumstances that constitute a legal or equitable discharge of a guarantor or surety. Notwithstanding the waivers set forth in Paragraph 6 or anything in this Guaranty to the contrary, upon payment in full by Guarantor of all obligations under the Loan Documents with respect to any individual Borrower, Lender shall assign to Guarantor, without representation, warranty or recourse, all right, title, interest and security

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(including without limitation, rights or choices in action, if any), held by Lender in respect of such Borrower's Loan Documents.

7. The Guarantor agrees that the Lender may enforce this Guaranty without the necessity of resorting to or exhausting any security or collateral. The Guarantor waives the right to require the Lender to proceed against any Borrower (or Borrowers); to foreclose any lien on any real or personal property; to exercise any right or remedy under the Loan Documents; to pursue any other remedy; or to enforce any other right.

8. The Guarantor agrees that the defenses of California Code of Civil Procedure section 726 shall not apply to prevent the Lender from suing upon the Note following taking judgment against the Guarantor. The Guarantor further agrees that nothing herein contained shall prevent the Lender from suing on the Note or from exercising any other rights available to it under the Note or the Loan Documents, including, without limitation, nonjudicial foreclosure under California Civil Code section 2924, and the exercise of any of the aforesaid rights shall not constitute a legal or equitable discharge of the Guarantor or the Loan Documents even though such exercise may affect, destroy, or eliminate the Guarantor's right of subrogation against the Borrower with respect to any sums paid to the Lender. Without limiting the generality of the waivers contained in this Guaranty, the Guarantor expressly waives any rights or defenses to liability under this Guaranty, based upon *Union Bank v Gradsky*, or subsequent cases; arising out of California Civil Code sections 2809, 2810, 2819, 2824, 2825, and 2845 through 2850 and California Code of Civil Procedure sections 726, 580a, 580b, and 580d; (including without limitation any right to a fair market value hearing under section 580a of the California Code of Civil Procedure).

9. The Guarantor shall continue to be liable under this Guaranty, and its provisions shall remain in full force and effect notwithstanding: (a) any defect in the genuineness, validity, regularity, or enforceability of the Notes, the indebtedness evidenced thereby, or the other Loan Documents; (b) any waiver of or failure to enforce any of the terms, covenants, or conditions contained in the Notes or other Loan Documents; (c) any modification, agreement, or stipulation between the Borrowers or a Borrower and the Lender, or their respective successors and assigns, with respect to the Notes or other Loan Documents, except the Lender shall obtain Guarantor's prior written consent with respect to any increase in the amount of the indebtedness to any Borrower (not including the accrual of interest or advances made by Lender to protect its security, including but not limited to the payment of real property taxes and assessments, insurance, attorney fees, costs of collection, and payment to cure defaults on senior liens); and (d) any release by operation of law of any real or personal property or other security then held by the Lender for the performance of the obligations hereby guaranteed.

10. With respect to any Loans made to a Borrower or Borrowers, until all the terms, covenants, and conditions of the Loan Documents on a Borrower's part to be performed and ob-

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served are fully performed and observed, including payment in full of all obligations under the Note relating to such Loan, the Guarantor:

- a. Shall have no right of subrogation against such Borrower or Borrowers by reason of any payments or acts of performance by the Guarantor in compliance with the obligations of the Guarantor under this Guaranty;
- b. Waives any right to enforce any remedy that the Guarantor shall have against such Borrower or Borrowers by reason of any one or more payments or acts of performance in compliance with the obligations of the Guarantor under this Guaranty; and
- c. Subordinates any liability or indebtedness of such Borrower or Borrowers held by the Guarantor to the obligations of such Borrower or Borrowers to the Lender under any of the Loan Documents or any other instrument of indebtedness.

11. The Guarantor's obligations under this Guaranty shall be accelerated and become immediately due and payable by any breach or default as described in the following sentence under any other agreement involving the borrowing of money or the extension of credit under which Guarantor may be obligated as borrower, including, without limitation, the Amended and Restated Credit Agreement dated as of April 30, 1994, between Guarantor and Bank of

America National Trust and Savings Association, as amended from time to time, and any credit arrangement between Guarantor and Banque Nationale de Paris. Such breach or default shall consist solely of failure to pay any indebtedness when due or such other default that permits or causes (or upon a lapse of time or notice or both would permit or cause) the acceleration of any indebtedness or the termination of any commitment to lend, after the expiration of any grace or cure period provided therein. Provided, however, if a good faith dispute exists between the Guarantor and any such creditor concerning the amount due or the existence of a default, the Guarantor's failure to cure such breach or default, or to pay any amounts claimed, pending resolution of the dispute, shall not constitute a Guarantor's default or breach hereunder.

12. With or without notice to the Guarantor, the Lender, in its sole discretion, at any time and from time to time, and in such manner and on such terms as it deems fit may apply any or all payments or recoveries (i) from a Borrower, from the Guarantor, or from any other guarantor or endorser under this or any other instrument or (ii) realized from any security to the indebtedness of a Borrower under its respective the Loan Documents, whether such indebtedness is guaranteed by this Guaranty, is otherwise secured, or is due at the time of such application provided, however, that Lender shall apply all payments and recoveries with respect to an individual Borrower's indebtedness, to that Borrower's indebtedness, and shall refund to Guarantor or such Borrower, as their interests may appear, any amount paid or recovered in excess of the amount of such indebtedness then due and payable. All such payments and

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recoveries shall be applied and in such manner, order, or priority as set forth in the Loan Documents.

13. This Guaranty shall continue to be effective or be reinstated, as the case may be, if any payment must be returned by Bank upon the insolvency, bankruptcy or reorganization of a Borrower, the Guarantor, any other guarantor, or otherwise, as though such payment had not been made.

14. No provision of this Guaranty or right of the Lender under this Guaranty can be waived nor can the Guarantor be released from its obligations under this Guaranty except by a writing duly executed by an authorized representative of the Lender or the payment in full of the obligations of all Borrowers (whether such payment is made by Borrowers, Guarantor, proceeds received by Lender upon sale or foreclosure of any real or personal property security, any other guarantor, or from any other source whatsoever) the Guarantor shall continue to be liable under the terms of this Guaranty notwithstanding the transfer by a Borrower of all or any portion of any property securing such Borrower's indebtedness provided, however, that the Deed of Trust shall contain a "due on sale" provision, and the indebtedness of a Borrower shall become due and payable upon the sale or transfer of the property.

15. Except as set forth in the following sentence the Guarantor shall forthwith pay to the Lender the amount of all reasonable attorneys' fees and costs incurred by the Lender in enforcement or collection of this Guaranty or in the defense or enforcement of the Lender's interests (whether or not the Lender files a lawsuit against the Guarantor) in the event the Lender retains counsel or incurs costs in order to: enforce, or seek to enforce, any of its rights; commence, intervene in, respond to, or defend any action or proceeding relating to this Guaranty; file or prosecute a claim in any action or proceeding (including, without limitation, any probate claim, bankruptcy claim, third party claim, or secured creditor claim) relating to this Guaranty; or represent the Lender in any litigation with respect to the Guarantor's obligations under this Guaranty.

If either the Guarantor or the Lender files any lawsuit against the other predicated on this Guaranty, the prevailing party in such action shall be entitled to recover its reasonable attorneys' fees and costs.

16. Every provision of this Guaranty is intended to be severable. In the event any term or provision hereof is declared to be illegal or invalid by a court of competent jurisdiction, such illegality or invalidity shall not affect the balance of the terms and provisions hereof, which terms and provisions shall remain binding and enforceable.

17. Time is of the essence under this Guaranty and any amendment, modification, or revision of this Guaranty shall be in writing and executed by the parties.

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18. Any notice which any party hereto may be required or may desire to give hereunder shall be deemed to have been given when delivered by hand or three (3) days following mailing if mailed postage-prepaid by United States certified or registered mail, return receipt requested, addressed to such party at the address set forth below or to such other address as the party to be served with notice may have furnished in writing to the party seeking or desiring to serve notice, as a place for the service of notice:

To the Lender at:

Bank of the West
180 Montgomery Street
San Francisco, California 94104
ATTN: James M. Griffith or Carole A. Obley

To the Guarantor at:

KLA Instruments Corporation
160 Rio Robles
P.O. Box 49055
San Jose, CA 95161-9055
ATTN: Douglas D. Reed or Christopher Stoddart

19. This Guaranty shall bind the successors and assigns (including any successors or assigns by merger, consolidation, sale of assets, or other transfer of any kind) of the Guarantor and shall inure to the benefit of, and be enforceable by, the Lender, its successors, or assigns. As used herein, the singular shall include the plural, and the masculine shall include the feminine and neuter, and vice versa, if the context so requires.

20. This Guaranty shall be construed and governed in accordance with the laws of the State of California and Guarantor and Lender agree that the proper venue and jurisdiction for any actions filed for enforcement of any provision of their guarantee shall be either the State or Federal courts in the County of San Francisco.

21. The language in all parts of this Guaranty shall be in all cases construed simply, according to its fair meaning, regardless of which party drafted the particular language which is being construed.

IN WITNESS WHEREOF, the Guarantor has executed this Guaranty as of the day and year first above written.

KLA Instruments Corporation

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By: /s/ Chris Stoddart

Name Chris Stoddart

Title Treasurer

Date May 8, 1996

Accepted and Agreed:

Bank of the West

By: /s/ James M. Griffith

James M. Griffith
Vice President & Manager

Date May 10, 1996

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SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

Quarter Ended	Fiscal 1995				Fiscal 1996			
	Sept. 30	Dec. 31	March 31	June 30	Sept. 30	Dec. 31	March 31	June 30
(In millions, except per share amounts)								
NET SALES	\$ 83.2	\$ 104.7	\$ 118.1	\$ 136.4	\$ 149.1	\$ 165.8	\$ 187.5	\$ 192.5
Gross profit (% of net sales)	42.6 51.2%	56.3 53.8%	63.9 54.1%	75.0 55.0%	82.4 55.3%	90.4 54.5%	102.3 54.6%	103.2 53.6%
Engineering, research and development expense (% of net sales)	8.2 9.9%	8.8 8.4%	12.3 10.4%	16.0 11.7%	15.6 10.5%	18.0 10.9%	20.9 11.1%	20.1 10.4%
Selling, general and administrative expense (% of net sales)	16.5 19.8%	21.7 20.7%	21.6 18.3%	25.5 18.7%	27.9 18.7%	29.4 17.7%	33.7 18.0%	35.2 18.3%
Net income (% of net sales)	12.8 15.4%	1.0 (a) 1.0%	20.8 17.6%	24.0 17.6%	27.3 18.3%	29.8 18.0%	31.8 17.0%	32.0 16.6%
NET INCOME PER SHARE	\$ 0.27	\$ 0.02 (a)	\$ 0.43	\$ 0.47	\$ 0.52	\$ 0.57	\$ 0.61	\$ 0.61
Shares used in computing net income per share	47.8	48.2	48.6	51.0	52.4	52.4	52.2	52.4

(a) Includes a net charge of \$16.2 million or \$0.33 per share, for write-off of acquired in-process technology.

NET SALES
(in millions)
[FIGURE 1]

NET INCOME
(in millions)
[FIGURE 2]

MANAGEMENT'S FINANCIAL COMMENTARY

Fiscal 1996 will be recalled as the peak year in a cycle which began in 1992. KLA grew faster than the equipment industry during this period even though the industry was quite strong. This incrementally faster growth occurred because the semiconductor industry began the first steps toward a more sophisticated approach to process control, a natural step in the evolution of the industry. Mature process industries, such as oil refining and chemical production, use complex measurements and feedback and feed forward systems to benchmark and control the manufacturing processes tightly. These industries spend upwards of 15% to 18% of their capital on the process control systems which ensure high yields with few variations. In contrast, the semiconductor processes are comparatively immature; measurements are difficult to make and feedback loops are just getting started. Correlations between measurements and known problems are still primitive. In this environment, the industry is spending about 7% of capital on process control -- a much lower level than the mature industries -- but it is rising rapidly. KLA has the good fortune to be the clear leader in this process control segment of the semiconductor industry -- a segment which can get growth both from new fabs and from outfitting older fabs, to upgrade their capabilities.

Now the industry is experiencing a significant slowing in the rate of new fab construction and expenditures which, will adversely affect our aggregate bookings and ultimately lead to lower revenues. Fortunately for KLA, many of our businesses are driven by factors other than the rate of new fab construction. For example, the RAPID (Reticle Inspection Systems) is experiencing a strong resurgence in orders and shipments because the mask shops, both captive and merchant, must acquire the new technology contained in the KLA 351 in order to compete effectively and produce masks and reticles for next generation devices. Their old tools are "out of gas," and the entire industry segment is re-tooling -- a trend which is driving RAPID's business.

Similarly, our linewidth metrology business, part of our Metrology Group, appears to have the position of "best of breed" in comparison to competitive products. As a result, that business is growing despite the industry softness because the product superiority is resulting in gains in market share. Additionally, our SEMSpec product line is beginning to grow because the manufacturers of 256Mb DRAMS and 1 Gigabit DRAMS realize that this Electron Beam technology is necessary for the development of the pilot lines

for those devices.

As we enter a period of adjustment in the supply of manufacturing capacity, KLA is well positioned with leading-edge technology products that enjoy competitive advantages and result in either the leading market share, or the prospect of obtaining the leading share. Finally, products that enhance the yield of fabs enjoy incremental demand from recently completed and older fabs where the customers obtain excellent returns on their investment by adopting more sophisticated methods of process control.

ANNUAL RESULTS OF OPERATIONS

Earnings per share in fiscal 1996 was a record \$2.31 compared to the previous year's \$1.53 (prior to the \$16.2 million after-tax write-off resulting from the Metrologix acquisition) and \$0.68 in fiscal 1994. Sales increased 57% in fiscal 1996 compared with increases of 82% and 46% in fiscal 1995 and 1994, respectively. The dollar sales increase in fiscal 1996 was primarily attributable to the continued success of the 2100 series product line manufactured by the Wafer Inspection Business Unit (WISARD), which grew at a strong pace, but slightly lower than in fiscal 1995. By year end more than 137 fabs had multiple 2100 series products installed or on order, compared to 88 fabs at the end of fiscal 1995.

RAPID recorded the highest percentage growth in sales, reflecting the industry's re-tooling requirements described above and the enthusiasm for its STARlight (Simultaneous Transmitted and Reflected Light) systems. KLA believes that this new measurement capability redefined the standard of acceptability between mask makers and fab users and spawned demand from both to verify the quality of the tooling used to make IC devices. This verification technology, introduced in fiscal 1995, is the first of several important new products in the pipeline for this business unit over the next several years.

The 82% sales increase in fiscal 1995 was primarily attributable to rising demand for WISARD's 2100 series product.

International sales as a percentage of total sales were 68%, 69% and 65% in fiscal years 1996, 1995 and 1994, respectively.

Gross margins were 54%, 54% and 45% in fiscal years 1996, 1995 and 1994, respectively. While the gross margin ratio remained flat year to year in fiscal 1996. RAPID improved sharply from a lower base level, because of volume efficiencies, while WISARD experienced a small decline. WISARD's margin reduction resulted from the introduction of the KLA 2135. Overall margins were also negatively affected by spending in KLA's start-up businesses, particularly E-Beam Metrology and SEMSpec, and by higher installation and warranty costs. The gross margin improvements in fiscal years 1995 and 1994 were due to improving manufacturing efficiencies in WISARD as the sales volume grew, the mix of business effect of WISARD's rising share of KLA's total revenues, and the absorption of fixed overhead costs by overall higher sales volumes.

Engineering, research and development expenses were 11%, 10% and 9% of revenue in fiscal 1996, 1995 and 1994, respectively. Expenses of \$74.6 million in fiscal 1996 increased 65% over fiscal 1995 expenses of \$45.3 million. A large part of the increase in fiscal 1996 was due to new initiatives in the WISARD Division during the year, including the introduction of the 2135 inspection tool and improved software applications. Other areas of concentrated investment include E-Beam Metrology

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and the development of advanced wafer inspection systems; in both cases, these investments are expected to help fuel growth into the next century. In fiscal 1995, these expenses doubled over fiscal 1994 with WISARD and RAPID being the main drivers for this growth.

Selling, general and administrative costs were 18%, 19% and 20% in fiscal years 1996, 1995 and 1994, respectively. The percentage decrease in fiscal 1996 is attributable in equal parts to administration costs growing more slowly than revenue and to a decrease in the percentage of external commission expenses due to a higher proportion of direct sales. However, these improvements were partially offset by an increase in sales expense related in part to the introduction of KLA's key account organization in fiscal 1996. In fiscal 1995, decreases in sales and administration expenses as a percentage of sales were partially offset by increases in profit-sharing expenses resulting directly from the continued improvement in KLA's financial performance.

The provision for income taxes on pretax income was 36%, 34% and 25% in fiscal 1996, 1995 and 1994, respectively. KLA's tax rate increased from fiscal 1995 to fiscal 1996 as a result of the expiration of the federal Research and Development tax credit on June 30, 1995 and a lower benefit from the release of the valuation reserves against deferred tax assets. KLA's tax rate increased from fiscal 1994 to fiscal 1995 as a result of a greater percentage of worldwide earnings being taxable in the U.S. in fiscal 1995 than in prior years. In fiscal 1994, the income tax rate was lower than the statutory U.S. tax rate primarily due to tax advantages in Switzerland that resulted in a lower net foreign tax rate and as a result of recognizing deferred tax assets that were previously reserved. Additionally, the fiscal 1994 rate was reduced by the utilization of \$1.9 million in foreign tax credits.

The IRS is currently auditing the Company's federal income tax returns for fiscal years 1985 to 1992. During fiscal 1996, the Company received a notice of proposed tax deficiency for such years and filed a tax protest letter with the IRS in response to the IRS notice. Management believes sufficient taxes have been provided in prior years and that the ultimate outcome of the IRS audit will not have a material adverse impact on the Company's financial position or results of operations.

LIQUIDITY AND CAPITAL RESOURCES

Cash, cash equivalents, short term investments and marketable securities increased by \$16.7 million in fiscal 1996. This increase was due primarily to \$64.7 million generated from operations and \$14.9 million from the after-tax impact of stock option and stock purchase plans, offset by a \$21.3 million cash payment to repay debt and \$39.1 million in capital expenditures. In fiscal 1995, cash, cash equivalents, short term investments and marketable securities increased by \$105.6 million, with \$22.3 million from operations, \$90.7 million raised in a secondary public offering in May 1995, and \$24.7 million from the after-tax impact of stock option and stock purchase plans. This was partially offset by a \$14.2 million cash payment to purchase Metrologix and \$19.0 million in capital expenditures. Cash provided by operations in fiscal 1996 and fiscal 1995 was substantially less than reported earnings due to the working capital investment required to support the rise in revenues; in fiscal 1996, accounts receivable and inventories increased by \$74.2 million and \$52.6 million respectively.

[Photo of Robert J. Boehlke, Vice President, Finance and Administration and Chief Financial Officer.]

Capital expenditures totaled \$39.1 million in fiscal 1996, compared with depreciation charges of approximately \$16.3 million, and represented a 106% increase over the fiscal 1995 amount. The major uses of capital were the facility expansion at KLA's main campus, investments in tooling for greater manufacturing capacity and purchases of equipment and software for improved information systems. Under current market forecasts, capital expenditures for fiscal 1997 are expected to be greater than depreciation but less than the fiscal 1996 amount. Fiscal 1995 had capital expenditures of \$19.0 million and \$10.6 million of depreciation charges.

During fiscal 1996, KLA moved the reticle inspection business unit into a new, leased 105,000 square-foot facility constructed at its main campus site. The Company also moved into an additional 120,000 square feet of office and manufacturing space in two buildings on the San Jose campus. The lessor of these three buildings funded \$31.2 million to acquire, construct and improve these three buildings.

KLA believes that its current level of liquid assets, borrowing facilities, working capital and cash expected to be generated from operations will be sufficient to fund its growth through at least fiscal 1997. The current policy of KLA is not to pay dividends.

BUSINESS RISKS AND UNCERTAINTIES

The Company's future results will depend on its ability to continuously introduce new products and enhancements to its customers as demands for higher productivity and specifications of semiconductor test equipment change or increase. Due to the risks inherent in transitioning to new products, the Company must accurately forecast demand in both volume and configuration and also manage the transition from older products. The Company's results could be affected by the ability of competitors to introduce new products which have technological or pricing advantages. Results also will be affected by strategic decisions made by management regarding whether to continue particular product

lines, and by volume, mix and timing of orders received during a period, fluctuations in foreign exchange rates, and changing conditions in both the semiconductor industry and key semiconductor markets around the world. As a result, the Company's operating results may fluctuate, especially when measured on a quarterly basis.

 This Annual Report includes a number of forward-looking statements including, but not limited to, statements with respect to the Company's future financial performance, operating results, plans and objectives. Actual results may differ materially from those currently anticipated depending upon a variety of factors some of which are itemized in the "Business Risks and Uncertainties" section above.

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SELECTED FINANCIAL DATA (UNAUDITED)

	1992	1993	1994	1995	1996
----- (In thousands, except per share amounts)					
YEARS ENDED JUNE 30,					
Net sales	\$155,963	\$167,236	\$243,737	\$442,416	\$694,867
Restructuring charges (recovery)	8,158	(718)	-	-	-
Income (loss) from continuing operations	(16,610)	6,961	30,188	58,618	120,884
Net income (loss)	(13,810)	6,961	30,188	58,618	120,884
Income (loss) per share from continuing operations	(0.45)	0.18	0.68	1.20	2.31
Net income (loss) per share	(0.38)	0.18	0.68	1.20	2.31
Shares used in computing net income (loss) per share	36,902	39,414	44,088	48,870	52,329
AT JUNE 30,					
Cash, cash equivalents and marketable securities	23,711	52,362	139,126	244,753	261,411
Working capital	83,961	93,611	212,873	228,026	324,356
Total assets	188,457	199,089	321,570	546,296	712,772
Long-term debt	24,000	20,000	20,000	--	--
Stockholders' equity	103,032	114,050	227,382	403,969	537,249

CONSOLIDATED STATEMENT OF OPERATIONS

Years ended June 30,	1994	1995	1996
----- (In thousands, except per share amounts)			
Net sales	\$ 243,737	\$ 442,416	\$ 694,867
Costs and expenses:			
Cost of sales	133,028	204,618	316,573
Engineering, research and development	22,435	45,252	74,616
Selling, general and administrative	48,192	85,255	126,174
Write-off of acquired in-process technology	--	25,240	--
	203,655	360,365	517,363
Income from operations	40,082	82,051	177,504
Interest income and other, net	2,174	9,127	12,754
Interest expense	(2,005)	(2,364)	(1,364)
Income before income taxes	40,251	88,814	188,894
Provision for income taxes	10,063	30,196	68,010
Net income	\$ 30,188	\$ 58,618	\$ 120,884
Net income per share	\$ 0.68	\$ 1.20	\$ 2.31
Shares used in computing net income per share	44,088	48,870	52,329

See accompanying notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEET

ASSETS

AT JUNE 30,	1995	1996

(In thousands, except per share amount)		
Current assets:		
Cash and cash equivalents	\$ 92,059	\$ 109,404
Short-term investments	26,681	14,279
Accounts receivable, net of allowances of \$2,196 and \$3,121	129,274	203,470
Inventories	79,759	132,377
Deferred income taxes	18,155	27,246
Other current assets	14,949	6,783

Total current assets	360,877	493,559
Land, property and equipment, net	49,004	71,825
Marketable securities	126,013	137,728
Other assets	10,402	9,660

Total assets	\$ 546,296	\$ 712,772
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LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities:		
Notes payable	\$ 4,458	\$ 3,111

Current portion of long-term debt	20,000	--
Accounts payable	19,376	27,330
Income taxes payable	22,797	34,595
Other current liabilities	66,220	104,167

Total current liabilities	132,851	169,203

Deferred income taxes	9,476	6,320

Commitments and contingencies, Note 4		
Stockholders' equity:		
Preferred Stock \$.001 par value, 1,000 shares authorized, none issued and outstanding	--	--
Common Stock, \$.001 par value, 75,000 shares authorized, 50,160 and 51,030 shares issued and outstanding	50	51
Capital in excess of par value	262,991	277,892
Retained earnings	138,893	259,777
Treasury stock	(581)	(581)
Net unrealized gain (loss) on investments	1,241	(131)
Cumulative translation adjustment	1,375	241

Total stockholders' equity	403,969	537,249

Total liabilities and stockholders' equity	\$ 546,296	\$ 712,772
=====		

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

	Common Stock and Capital in Excess of Par Value		Retained Earnings	Treasury Stock		Net Unrealized Gain (Loss) on Investments	Cumulative Translation Adjustment
	Shares	Amount		Shares	Amount		

(In thousands)							
Balance at June 30, 1993	39,006	\$ 64,658	\$ 50,087	(110)	\$ (581)	\$ --	\$ (114)

Exercise of stock options	1,708	6,960					
Tax benefit on exercise of stock options		5,232					
Shares sold in stock purchase plan	414	1,965					
Shares sold in stock							

offering	4,600	68,566	30,188				
Net income							421
Translation adjustment							
Balance at June 30, 1994	45,728	147,381	80,275	(110)	(581)	--	307
Exercise of stock options	1,256	5,271					
Tax benefit on exercise of stock options		15,427					
Shares sold in stock purchase plan	176	3,995					
Shares sold in stock offering	3,000	90,967					
Net income			58,618				
Net unrealized gain on investments						1,241	
Translation adjustment							1,068
Balance at June 30, 1995	50,160	263,041	138,893	(110)	(581)	1,241	1,375
Exercise of stock options	444	2,077					
Tax benefit on exercise of stock options		5,231					
Shares sold in stock purchase plan	536	7,594					
Net income			120,884				
Net unrealized loss on investments						(1,372)	
Translation adjustment							(1,134)
Balance at June 30, 1996	51,140	\$277,943	\$259,777	(110)	\$ (581)	\$ (131)	\$ 241

See accompanying notes to consolidated financial statements.

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CONSOLIDATED STATEMENT OF CASH FLOWS

YEARS ENDED JUNE 30,	1994	1995	1996
			(In thousands)
Cash flows from operating activities:			
Net income	\$ 30,188	\$ 58,618	\$ 120,884
Adjustments required to reconcile net income to cash provided by operations:			
Depreciation and amortization	10,734	10,642	16,267
Write-off of acquired in-process technology	--	16,154	--
Deferred income taxes	(2,053)	(9,591)	(12,247)
Changes in assets and liabilities:			
Accounts receivable	(26,149)	(54,462)	(74,196)
Inventories	(10,776)	(23,112)	(52,618)
Other assets	(139)	(18,313)	8,908
Accounts payable	2,937	6,509	7,954
Income taxes payable	3,063	11,199	11,798
Other current liabilities	3,483	24,692	37,947
Cash provided by operations	11,288	22,336	64,697
Cash flows from investing activities:			
Capital expenditures	(5,809)	(19,009)	(39,089)
Purchases of available for sale securities	--	(329,729)	(456,286)
Sales and maturities of available for sale securities	--	178,276	455,602
Investment in Metrologix	--	(14,182)	--
Cash used for investing activities	(5,809)	(184,644)	(39,773)
Cash flows from financing activities:			
Short-term borrowings, net	2,141	(1,487)	(1,347)
Payment of current portion of long term debt	(4,000)	--	(20,000)
Sales of common stock / tax benefit of options exercised	82,723	115,660	14,902
Cash provided by (used for) financing activities	80,864	114,173	(6,445)
Effect of exchange rate changes	421	1,068	(1,134)
Increase (decrease) in cash and cash equivalents	86,764	(47,067)	17,345
Cash and cash equivalents at beginning of year	52,362	139,126	92,059
Cash and cash equivalents at end of year	\$ 139,126	\$ 92,059	\$ 109,404
Cash paid during the year for:			
Interest	\$ 2,007	\$ 2,361	\$ 1,163
Income taxes	3,369	22,715	63,645

See accompanying notes to consolidated financial statements.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and all of its subsidiaries. All significant intercompany accounts and transactions have been eliminated. Subsidiaries with accounts denominated in foreign currencies have been translated principally using the local currencies as the functional currencies. Accordingly, the assets and liabilities of these subsidiaries are translated at the rates of exchange on the balance sheet date, income and expense items are translated at average rates of exchange for the year, and the resulting translation gains or losses are included in stockholders' equity. Foreign currency transaction gains and losses have not been material and are included in interest income and other, net.

MANAGEMENT ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

CASH EQUIVALENTS AND INVESTMENTS

Cash equivalents consist of highly liquid investments with a maturity date at acquisition of three months or less. Cash and cash equivalents are stated at cost, plus accrued interest, which approximates market value.

The Company's investments in debt and equity securities are classified as available for sale. Investments classified as available for sale are measured at market value and net unrealized gains and losses are recorded as a separate component of stockholders' equity until realized. Any gains or losses on sales of investments are computed by specific identification.

CONCENTRATION OF CREDIT RISK

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of investments, trade accounts receivable and financial instruments used in hedging activities.

The Company invests in a variety of financial instruments such as certificates of deposit, commercial paper, municipal debt and U.S. Government debt. The Company, by policy, limits the amount of credit exposure to any one financial institution or commercial issuer.

The Company sells its systems to semiconductor manufacturers throughout the world. The Company performs ongoing credit evaluations of its customers' financial condition and, generally, requires no collateral from its customers. The Company maintains an allowance for uncollectible accounts receivable based upon expected collectibility of all accounts receivable. The write-off of uncollectible amounts has been insignificant.

The Company is exposed to credit loss in the event of nonperformance by counterparties on the foreign exchange contracts used in hedging activities. The Company does not anticipate nonperformance by these counterparties.

FOREIGN EXCHANGE HEDGING

The Company enters into forward contracts to hedge against currency fluctuations that affect certain foreign currency denominated sales and purchase transactions. Because the impact of movements in currency exchange rates on forward contracts offsets the related impact on the underlying items being hedged, these financial instruments do not subject the Company to speculative risk that would otherwise result from changes in currency exchange rates. Unrealized gains and losses on these contracts are deferred and accounted for as part of the hedged transactions. Cash flows from these contracts are classified in the Statement of Cash Flows in the same category as the hedged transactions.

At June 30, 1995, the Company had forward contracts maturing throughout fiscal 1996 to sell and purchase approximately \$147.9 million and \$19.1 million, respectively, in foreign currency, primarily Japanese yen. At June 30, 1996, the Company had forward exchange contracts maturing throughout fiscal 1997 to sell and purchase approximately \$145.9 million and \$5.3 million, respectively, in foreign currency, primarily Japanese yen. Of these contracts, approximately \$91.1 million of contracts hedge foreign currency receivables and payables carried on the balance sheet as of June 30, 1996, and consequently the financial statements reflect the fair market value of the contracts and their underlying

transactions. Approximately \$58.0 million and \$2.1 million of the contracts hedge firm commitments for future sales and purchases, respectively, denominated in foreign currency. The fair market value of these contracts on June 30, 1996, based upon prevailing market rates on that date, was approximately \$55.0 million and \$2.1 million, respectively.

INVENTORIES

Inventories are stated at the lower of cost or market. Cost is determined using standard costs, which approximate actual costs on a first-in, first-out basis.

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NOTE 1 (CONTINUED)

PROPERTY AND EQUIPMENT

Property and equipment are recorded at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, which are 30 years for buildings, 10 years for building improvements, five years for furniture and fixtures, and three years for machinery and equipment. The life of the lease or the useful life, whichever is shorter, is used for the amortization of leasehold improvements.

REVENUE RECOGNITION

The Company recognizes sales of wafer inspection, metrology, reticle and photomask inspection systems upon acceptance at the Company's plant, which is when title transfers. Customers may observe and approve satisfactory completion of the tests. Sales of other systems are recognized upon shipment. A provision for the estimated future cost of system installation and warranty is recorded at the time revenue is recognized. Revenues from software licenses are recognized upon delivery of the software, provided that the Company does not have any significant on going obligations. Revenues from service contracts are recognized during the terms of the contracts on a straight-line basis.

RESEARCH AND DEVELOPMENT

The Company is actively engaged in significant product improvement and new product development efforts. Research and development expenses relating to possible future products aggregated approximately \$16.8, \$28.4 and \$52.8 million for fiscal 1994, 1995 and 1996, respectively.

INCOME TAXES

The Company accounts for income taxes under the liability method, which requires an adjustment to the provision for income taxes for the effect of changes in corporate tax rates.

Undistributed earnings of certain of the Company's foreign subsidiaries, for which no U.S. income taxes have been provided, aggregated approximately \$11.7 million at June 30, 1996. The amount of the unrecognized deferred tax expense related to this investment is estimated at approximately \$4.1 million at June 30, 1996.

NET INCOME PER SHARE

Net income per share is computed using the weighted average number of common and common equivalent shares outstanding during the respective periods, including the assumed net shares issuable upon exercise of stock options, when dilutive.

NOTE 2 DETAILS OF FINANCIAL STATEMENT COMPONENTS

	1995	1996
----- (In thousands)		
Inventories:		
Customer service spares	\$ 13,050	\$ 13,614
Systems raw materials	18,944	33,521
Work-in-process	26,863	47,012

Demonstration equipment	20,902	38,230
	\$ 79,759	\$ 132,377

Land, property and equipment:		
Land	\$ 10,502	\$ 10,502
Buildings and improvements	27,483	30,353
Machinery and equipment	41,203	60,059
Furniture and fixtures	5,542	9,487
Leasehold improvements	3,913	10,372
	88,643	120,773
Less accumulated depreciation and amortization	(39,639)	(48,948)
	\$ 49,004	\$ 71,825

Other current liabilities:		
Accrued compensation and benefits	\$ 27,574	\$ 43,109
Accrued warranty and installation	22,229	35,501
Unearned revenue	4,867	4,230
Other	11,550	21,327
	\$ 66,220	\$ 104,167
=====		

NOTE 3 INVESTMENTS

The amortized cost and estimated fair value of securities available for sale as of June 30, 1995 and 1996, are as follows:

	Gross Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value

JUNE 30, 1995	(In thousands)			
U.S. Treasuries	\$ 47,720	\$ 455	\$ 36	\$ 48,139
Municipal bonds	83,983	693	100	84,576
Corporate debt securities	43,638	705	--	44,343
Other	45,324	368	59	45,633
	220,665	2,221	195	222,691
Less cash equivalents	(70,021)	(12)	(36)	(69,997)
Less short-term investments	(26,614)	(77)	(10)	(26,681)
	\$ 124,030	\$ 2,132	\$ 149	\$ 126,013
=====				
JUNE 30, 1996				
U.S. Treasuries	\$ 19,739	\$ 82	\$ 290	\$ 19,531
Municipal bonds	129,255	464	284	129,435
Corporate debt securities	32,654	50	320	32,384
Other	52,383	533	449	52,467
	234,031	1,129	1,343	233,817
Less cash equivalents	(81,654)	(196)	(40)	(81,810)
Less short-term investments	(14,456)	(37)	(214)	(14,279)
	\$ 137,921	\$ 896	\$ 1,089	\$ 137,728
=====				

Unrealized gains and losses are presented in stockholders' equity, net of the tax effect.

The contractual maturities of securities classified as available for sale as of June 30, 1996, regardless of the consolidated balance sheet classification, are as follows:

	Estimated Fair Value

(In thousands)	
Due within one year	\$ 80,450
Due after one year through five years	64,558
Due after five years	88,809

	\$233,817
=====	

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. The realized gains and losses for the year ended June 30, 1995 and 1996, were not material to the Company's financial position or results of operations.

NOTE 4 COMMITMENTS AND CONTINGENCIES

The Company leases several facilities under operating leases expiring at various dates through fiscal 2025 with renewal options at fair market value for additional periods ranging up to ten years. In June 1995, the Company entered into a five-year operating lease for a building constructed on land owned by the Company in San Jose, California. Monthly rent payments for the building commenced on July 1, 1996, and will vary based on the London interbank offering rate (LIBOR). The Company may, at its option, purchase the building during the term of the lease for \$12.5 million. In August 1995, the Company entered into a five-year operating lease agreement for two buildings in San Jose, California. Monthly rent payments for the buildings commenced on May 1, 1996, and will vary based on the LIBOR rate. The Company may, at its option, purchase the buildings during the term of the lease for \$18.7 million. If the Company does not purchase any or all of the buildings at the end of their respective leases, the Company will guarantee the lessor 85% of the aforementioned purchase prices of the building or buildings not purchased. In addition, the lease agreements require the Company to maintain, among other items, minimum quick ratio, tangible net worth and profitability. As of June 30, 1996, the Company was in compliance with all of these covenants.

The aggregate minimum rental commitment under these lease agreements as of June 30, 1996, excluding property taxes, insurance and certain other costs to be paid by the Company, are approximately \$7.7, \$5.6, \$5.2, \$4.7, \$28.0 and \$3.8 million in fiscal 1997 through 2001 and thereafter, respectively. Total rental expense under all operating leases was \$2.5, \$3.5 and \$5.8 million in fiscal 1994, 1995 and 1996, respectively.

The Company is party to several claims and lawsuits arising in the ordinary course of business. While the outcome of these matters is not presently determinable, in the opinion of management, they are not expected to have a material effect on the financial position or the results of operations of the Company.

NOTE 5 STOCKHOLDERS' EQUITY

In April 1996, the Company adopted a plan to repurchase, at its discretion, up to \$20.0 million of KLA common stock on the open market, through October 1997. Shares repurchased by the Company may be reissued to employees under the Excess Profit Stock Plan or the Employee Stock Purchase Plan, or be used for other corporate purposes. Repurchases of common stock will be made using the Company's cash resources, at the prevailing market price.

A two for one stock split was declared by the Board of Directors on July 24, 1995. The stock split was in the form of a 100% stock dividend. The dividend was

paid on September 29, 1995, to stockholders of record on August 31, 1995. Financial information in this report has been adjusted to reflect the impact of the common stock split.

In May 1995, the Company raised approximately \$91 million, net of offering costs, in a public offering of 3,000,000 shares of common stock at \$31.75 per share.

In February 1994, the Company sold 4,600,000 shares of common stock at \$15.75 per share in a public offering resulting in \$68.6 million of proceeds to the Company, net of offering expenses.

In March 1989, the Company implemented a plan to protect stockholders' rights in the event of a proposed takeover of the Company. Under the plan, each share of the Company's outstanding common stock carries one Common Stock Purchase Right (Right). In April 1996, the Company amended the plan. The amendment reduces the stock ownership level at which the Rights become exercisable. As amended, the plan provides that if any person or group acquires 15% or more of the Company's common stock, each Right not owned by such person or group will entitle its holder to purchase, at the then-current exercise price, the Company's common stock having a value of twice that exercise price. The rights are redeemable by the Company and expire in April 2006.

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NOTE 6 EMPLOYEE BENEFIT PLANS

The Company has a profit sharing program, wherein a percentage of pretax profits, as determined by the Board of Directors, is accumulated and distributed quarterly to all employees who have completed a stipulated employment period. In addition, the Board may approve matching contributions to the Company's savings and investment plan, a qualified salary reduction plan under section 401(k) of the Internal Revenue Code. In April 1996, the Company adopted the Excess Profit Stock Plan. Under the plan, profit sharing distributions that exceed the 401(k) limits will be used to purchase shares of common stock. These shares then will become eligible for distribution to employees, after a two and one half year vesting period. The total charge to operations under the profit sharing and 401(k) programs aggregated approximately \$3.3, \$16.6 and \$26.5 million in fiscal 1994, 1995 and 1996, respectively.

Under the 1982 Stock Option Plan, as amended, 14,900,000 shares have been reserved for issuance to eligible employees and directors as either Incentive Stock Options (ISO's) or nonqualified options. Options under this plan are granted at prices determined by the Board of Directors, but not less than the fair market value on the date of grant, and expire ten years after the date of grant. Generally, options become exercisable within five years of the date of grant, vesting monthly after a waiting period of six to thirty months.

In October 1990, the Company adopted the 1990 Outside Directors Stock Option Plan to grant options to non-employee directors. This plan calls for an annual grant of 5,000 options, at fair market value, to each outside director. The options become exercisable at one fifty-fourth per month beginning six months from date of grant and expire ten years from grant date. A total of 200,000 shares have been reserved for issuance under this plan. These options carry exercise prices ranging from \$3.50 to \$46.56 per share, with 115,974 options outstanding at June 30, 1996.

In October 1989, the Company adopted the Supplemental Executive Benefit Plan (SEBP), a non-qualified deferred compensation plan. Under the terms of the plan, certain key executives may defer a portion of their salary and bonus into the plan. The Company may also elect to make contributions to certain participants' SEBP accounts. Amounts deferred or contributed into the plan are used to purchase variable life insurance policies which are funded by mutual funds managed by the insurance company issuing the policies. Participants direct the investment of their account balances among these mutual funds. Account balances appreciate based upon the performance of the funds selected by the participants. Distributions from the plan commence following a participant's retirement or termination of employment. At June 30, 1996, the Company had a deferred compensation liability under this plan of \$7.1 million, which will be funded by the Cash Surrender Value of insurance policies. At June 30, 1996, the Cash Surrender Value amounted to \$6.5 million.

Following is a summary of stock option and outside director plan transactions:

	Option Price	Stock Options Outstanding	Reserved Shares Available
Balance at June 30, 1993	\$ 3.50-10.63	5,577,230	841,932
Options granted	9.57-20.82	470,100	(470,100)
Options cancelled	3.50-15.88	(227,498)	227,498
Options exercised	3.50-15.88	(1,707,018)	
Balance at June 30, 1994	\$ 3.50-20.82	4,112,814	599,330
Options granted	2.35-30.63	2,659,536	(2,653,078)
Options cancelled	2.35-26.19	(392,492)	392,492
Options exercised	2.35-20.82	(1,256,576)	
Increase in reserved shares			3,200,000
Balance at June 30, 1995	\$ 2.35-30.63	5,123,282	1,538,744
Options granted	23.75-46.56	1,332,100	(1,332,100)
Options cancelled	3.50-46.56	(183,310)	183,310
Options exercised	2.35-26.00	(443,597)	
Increase in reserved shares			2,200,000
Balance at June 30, 1996	\$2.35-46.56	5,828,475	2,589,954

At June 30, 1996, options to purchase 1,536,016 shares of stock were exercisable under all option plans.

The Company has reserved 4,000,000 shares of common stock to be issued under the 1981 Employee Stock Purchase Plan. The Plan permits eligible employees to purchase common stock, through payroll deductions, at 85% of the lower of the fair market value of the common stock on the date at the beginning of the two-year offering period or the last day of the purchase period. Substantially all employees are eligible to participate in the Plan. At June 30, 1996, 297,411 shares were available for future issuance under the Plan.

NOTE 7 FINANCING ARRANGEMENTS

In May 1996, the Company entered into an agreement with a bank whereby the bank may extend up to \$3.0 million in loans to certain employees of the Company as specified by the Company. The loans are secured by second mortgages on the primary residences of borrowers and by a guaranty from the Company. Interest on borrowings is charged at the prime rate plus 1.00% per annum. As of June 30, 1996, there were no outstanding borrowings under this arrangement.

As of June 30, 1996, the Company had a \$15.0 million committed multicurrency line of credit with a bank, expiring December 31, 1996. The line of credit has a facility fee of 0.20% per annum. Interest on domestic and foreign borrowings is charged at the bank's reference rate and at the bank's offshore reference rate plus 0.75%, respectively. The agreement requires the Company to maintain, among other items, minimum quick ratio, tangible net worth and profitability. The agreement also restricts the amount of dividends that

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NOTE 7 (CONTINUED)

may be declared. As of June 30, 1996, the Company was in compliance with all of these covenants. As of June 30, 1996, approximately \$2.8 million had been borrowed at the related offshore interest rate of 7.57% per annum.

In August 1995, the Company repaid the \$20.0 million mortgage on its principal facility.

NOTE 8 RESEARCH AND DEVELOPMENT ARRANGEMENTS

The Company has, from time to time, entered into research and development arrangements with certain key customers and other entities to partially finance the development of new technology. In February 1996, the Company entered into such an agreement with SEMATECH. The agreement provides financing up to \$27.5 million through fiscal 2000. Payments are subject to the Company reaching predetermined milestones. In fiscal 1996, the Company received \$3.1 million related to this agreement, of which \$1.2 million was offset against gross engineering, research and development expenses and the remainder deferred. In fiscal 1994, 1995 and 1996, revenues of \$5.7, \$2.3 and \$4.4 million, respectively, have been recognized on all research and development contracts on the percentage of completion basis. These revenues are offset against gross

engineering, research and development expenses.

NOTE 9 METROLOGIX INC. ACQUISITION

In December 1994, the Company acquired Metrologix Inc. (Metrologix), a manufacturer of advanced electron beam measurement equipment for \$14.2 million in cash. This acquisition was accounted for as a purchase and the total acquisition cost of \$16.1 million has been allocated to assets acquired and liabilities assumed. A significant portion of the acquisition cost was allocated to acquired in-process technology which was written-off at the time of the acquisition, because further substantial research and development investments were necessary to complete the new product development then underway. This resulted in an after-tax charge of \$16.2 million (\$25.2 million pre-tax). The results of operations for Metrologix from the date of the acquisition to June 30, 1995, were immaterial.

NOTE 10 GEOGRAPHIC REPORTING

The Company is a leading manufacturer of yield monitoring and process control systems for the semiconductor manufacturing industry. The Company's sales and service operations are the principle revenue producing activities. For geographic reporting, sales are attributed to the geographic location of the sales and service organizations, and costs directly and indirectly incurred in generating sales are similarly assigned. Orders for Japanese sales are taken by a distributor and shipped from the United States. In fiscal years 1994, 1995 and 1996 related sales were \$77.8, \$148.0 and \$232.4 million, and related operating income was \$10.9, \$43.3 and \$72.2 million, respectively. During fiscal 1994, 1995 and 1996, no customer accounted for more than 10% of sales. The following is a summary of operations by geographic territories:

	1994	1995	1996
			(In thousands)
Net sales to unaffiliated customers:			
United States	\$ 84,493	\$ 138,926	\$ 220,607
Western Europe	37,854	47,862	80,220
Japan	79,820	159,253	244,319
Asia Pacific	41,570	96,375	149,721
	243,737	442,416	694,867
Intercompany sales between geographic areas:			
United States	39,998	60,861	87,693
Western Europe	7,595	12,178	14,950
Asia Pacific	6,832	9,846	17,732
	54,425	82,885	120,375
Consolidation eliminations	(54,425)	(82,885)	(120,375)
Net sales	\$ 243,737	\$ 442,416	\$ 694,867
Operating results:			
United States	\$ 15,407	\$ 31,777	\$ 55,616
Western Europe	9,234	8,567	24,463
Japan	11,166	46,583	75,863
Asia Pacific	14,544	39,463	46,514
	50,351	126,390	202,456
General corporate expenses	(10,269)	(44,339)	(24,952)
Operating profit	\$ 40,082	\$ 82,051	\$ 177,504
Identifiable assets:			
United States	\$ 95,041	\$ 147,557	\$ 227,916
Western Europe	19,853	24,361	36,545
Japan	38,444	71,854	79,206
Asia Pacific	24,264	45,380	78,666
	177,602	289,152	422,333
General corporate assets	143,968	257,144	290,439
Total assets	\$ 321,570	\$ 546,296	\$ 712,772

Transfers between geographic areas are accounted for at amounts that are generally above cost and consistent with rules and regulations of governing tax authorities. Such transfers are eliminated in the consolidated financial statements. Corporate assets consist primarily of cash and cash equivalents and other investments. Corporate expenses consist primarily of general, administrative and other expenses not attributable to geographic regions. Capital expenditures and depreciation expense have been primarily in the United States.

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NOTE 11 INCOME TAXES

The components of income before income taxes are comprised of the following:

	1994	1995	1996
			(In thousands)
Domestic	\$ 31,515	\$ 77,157	\$167,105
Foreign	8,736	11,657	21,789
	40,251	\$ 88,814	\$188,894

The provisions for income taxes are comprised of the following:

	1994	1995	1996
			(In thousands)
Federal:			
Currently payable	\$ 7,587	\$ 35,390	\$ 66,120
Deferred	(2,195)	(13,414)	(12,898)
	5,392	21,976	53,222
State:			
Currently payable	2,222	6,094	11,080
Deferred	--	(1,337)	(1,198)
	2,222	4,757	9,882
Foreign:			
Currently payable	2,307	2,245	2,979
Deferred	142	1,218	1,927
	2,449	3,463	4,906
Provision for income taxes	\$ 10,063	\$ 30,196	\$ 68,010

Actual current tax liabilities are lower than reflected above for fiscal years 1994, 1995 and 1996 by \$5.2, \$15.4 and \$5.2 million respectively, due to the stock option deduction benefits recorded as credits to capital in excess of par value.

The following is a reconciliation of the effective income tax rates and the United States statutory federal income tax rate:

	1994	1995	1996
Statutory federal income tax rate	35.0%	35.0%	35.0%

State income taxes, net of federal tax benefits	3.6	3.5	3.4
Effect of foreign operations at lower tax rates	(1.7)	(0.7)	(1.0)
Non-taxable FSC income	(1.5)	(2.6)	(2.6)
Foreign tax credit	(4.8)	(0.1)	--
Realized deferred tax assets previously reserved	(5.8)	(2.7)	(0.6)
Other	0.2	1.6	1.8

Effective tax rate	25.0%	34.0%	36.0%
=====			

Deferred tax assets (liabilities) at June 30, 1994, 1995 and 1996 are comprised of the following:

	1994	1995	1996

			(In thousands)

Deferred tax assets:			
Federal and state loss and credit carryforwards	\$ 4,696	\$ 2,804	\$ 3,034
State tax	--	1,096	2,281
Nondeductible reserves and other	18,651	24,611	36,044

	23,347	28,511	41,359

Deferred tax liabilities:			
Depreciation	(5,157)	(3,559)	(3,125)
Unremitted earnings of foreign subsidiaries not permanently reinvested	(6,327)	(8,319)	(10,634)
Other	(1,896)	(2,101)	(2,098)

	(13,380)	(13,979)	(15,857)

Deferred tax assets valuation allowance	(11,078)	(5,853)	(4,576)

Total net deferred tax assets (liabilities)	\$ (1,111)	\$ 8,679	\$ 20,926
=====			

The Company's subsidiary, Metrologix, has a federal net operating loss carryforward of approximately \$6.8 million as of June 30, 1996. It also has research and development tax credit carryovers of approximately \$0.5 million that will expire primarily in fiscal 2005 through 2008. These tax assets are subject to limitation as to their utilization under Internal Revenue Code Section 382 and other provisions.

The deferred tax assets valuation allowance at June 30, 1994, 1995 and 1996 is attributed to U.S. federal and state deferred tax assets. Management believes sufficient uncertainty exists with regards to the realizability of Metrologix's tax assets such that a valuation allowance of \$4.6 million has been retained at June 30, 1996. During fiscal 1994, 1995 and 1996, the Company realized \$2.3, \$7.5 and \$1.3 million, respectively, of deferred tax assets previously reserved, reducing the valuation allowance by corresponding amounts. In fiscal 1995, \$5.1 of the \$7.5 million that was realized was related to stock option deductions and accordingly was credited to capital in excess of par value.

The IRS is currently auditing the Company's federal income tax returns for fiscal years 1985 to 1992. The Company has received a notice of proposed tax deficiency for such years. The Company filed a tax protest letter with the IRS on June 10, 1996, in response to the IRS notice. Management believes sufficient taxes have been provided in prior years and that the ultimate outcome of the IRS audit will not have a material adverse impact on the Company's financial position or results of operations.

REPORT OF INDEPENDENT ACCOUNTANTS

TO THE STOCKHOLDERS AND
BOARD OF DIRECTORS OF
KLA INSTRUMENTS CORPORATION

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations, stockholders' equity and cash flows present fairly, in all material respects, the financial position of KLA Instruments Corporation and its subsidiaries at June 30, 1995 and 1996, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 1996, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Price Waterhouse

San Jose, California
August 7, 1996

COMMON STOCK

	1995		1996	
	High	Low	High	Low
First Quarter	25 7/8	18 5/8	47 1/8	38 1/2
Second Quarter	26 1/2	22 3/8	46 3/4	26 1/8
Third Quarter	32 1/2	23 1/4	35 1/4	21 3/4
Fourth Quarter	39 5/8	30	31 1/4	21 1/4

The Company's common stock is traded on the NASDAQ National Market System under the symbol "KLAC."

The Company has not paid cash dividends on its common stock and does not plan to pay cash dividends to its stockholders in the near future. The Company presently intends to retain its earnings to finance further growth of its business. As of June 30, 1996, the Company had approximately 1,167 stockholders of record.

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CORPORATE DIRECTORY

OFFICERS

Kenneth Levy
Chairman of the Board
Chief Executive Officer

Kenneth L. Schroeder
President
Chief Operating Officer

Robert J. Boehlke
Vice President, Finance
and Administration
Chief Financial Officer

Frank L. Brienzo
Vice President

Virginia J. DeMars
Vice President,
Human Resources

Gary E. Dickerson
Group Vice President

Samuel A. Harrell, Ph.D.
Senior Vice President

Michael W. Morrissey
Group Vice President

Neil Richardson, Ph.D.
Vice President

Magnus O.W. Ryde
Vice President

Arthur P. Schnitzer
Group Vice President

Christopher Stoddart
Treasurer

Bin-Ming Ben Tsai, Ph.D.
Vice President,
Chief Technical Officer

William Turner
Vice President,
Corporate Finance

Paul E. Kreutz, Esq.
Secretary

DIRECTORS

Kenneth Levy
Chairman of the Board
Chief Executive Officer

Kenneth L. Schroeder
President
Chief Operating Officer

Edward W. Barnholt
Senior Vice President
Hewlett-Packard

Leo J. Chamberlain
Private Investor

Robert E. Lorenzini
Chairman
SunPower Corporation

Yoshio Nishi, Ph.D.
Senior Vice President
Texas Instruments

Samuel Rubinovitz
Retired
Executive Vice President
EG&G, Inc.

Dag Tellefsen
General Partner
Glenwood Venture Management

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San Jose, California

GENERAL LEGAL COUNSEL

Gray Cary Ware & Freidenrich
Palo Alto, California

REGISTRAR AND TRANSFER AGENT

First National Bank of Boston
Boston, Massachusetts

Additional copies of this report, as well as copies of SEC Form 10K, for the year ended June 30, 1996, may be obtained from the Company without charge by writing to:

KLA Instruments Corporation
Attn: Investor Relations
P.O. Box 49055
San Jose, CA 95161-9055

EXHIBIT 21

LIST OF SUBSIDIARIES OF
KLA INSTRUMENTS CORPORATION

NAME - - - - -	STATE OR OTHER JURISDICTION OF INCORPORATION -----
KLA Building Corporation	California
KLA Instruments International Corporation	California
KLA International Corporation	California
KLA Management Corporation	California
KLA Instruments PCBI Corporation	California
KLA Instruments Limited	United Kingdom
KLA Instruments GmbH	Germany
KLA Instruments France, S.A.	France
KLA Japan Limited	Japan
KLA Instruments Sales Corporation	U.S. Virgin Islands
KLA Instruments, SLR	Italy
KLA Instruments (Israel) Corporation	Israel
KLA Holding Company Limited	Israel
KLA (Israel) Service Limited	Israel
KLA Instruments (Cayman) Limited	Cayman Islands
KLA Instruments KLINNIK Corporation	California
KLA Instruments, S.A.	Switzerland
KLA Instruments (Malaysia) SdnBdh	Malaysia
KLA Instruments (Singapore) PTE, Limited	Singapore
Metrologix, Inc.	Delaware

The aforesaid subsidiaries do business only under their own names.

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 33-15784, 2-71584, 2-75314, 33-26002, 33-42973, 33-42982, 33-42975 33-55362, 33-88662 and 333-03003) of KLA Instruments Corporation of our report dated August 7, 1996, appearing on page 24 of the 1996 Annual Report to Stockholders which is incorporated in this Annual Report on Form 10-K.

Price Waterhouse LLP

San Jose, California
September 26, 1996

<ARTICLE> 5

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED STATEMENT OF OPERATIONS, THE CONSOLIDATED BALANCE SHEET AND THE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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